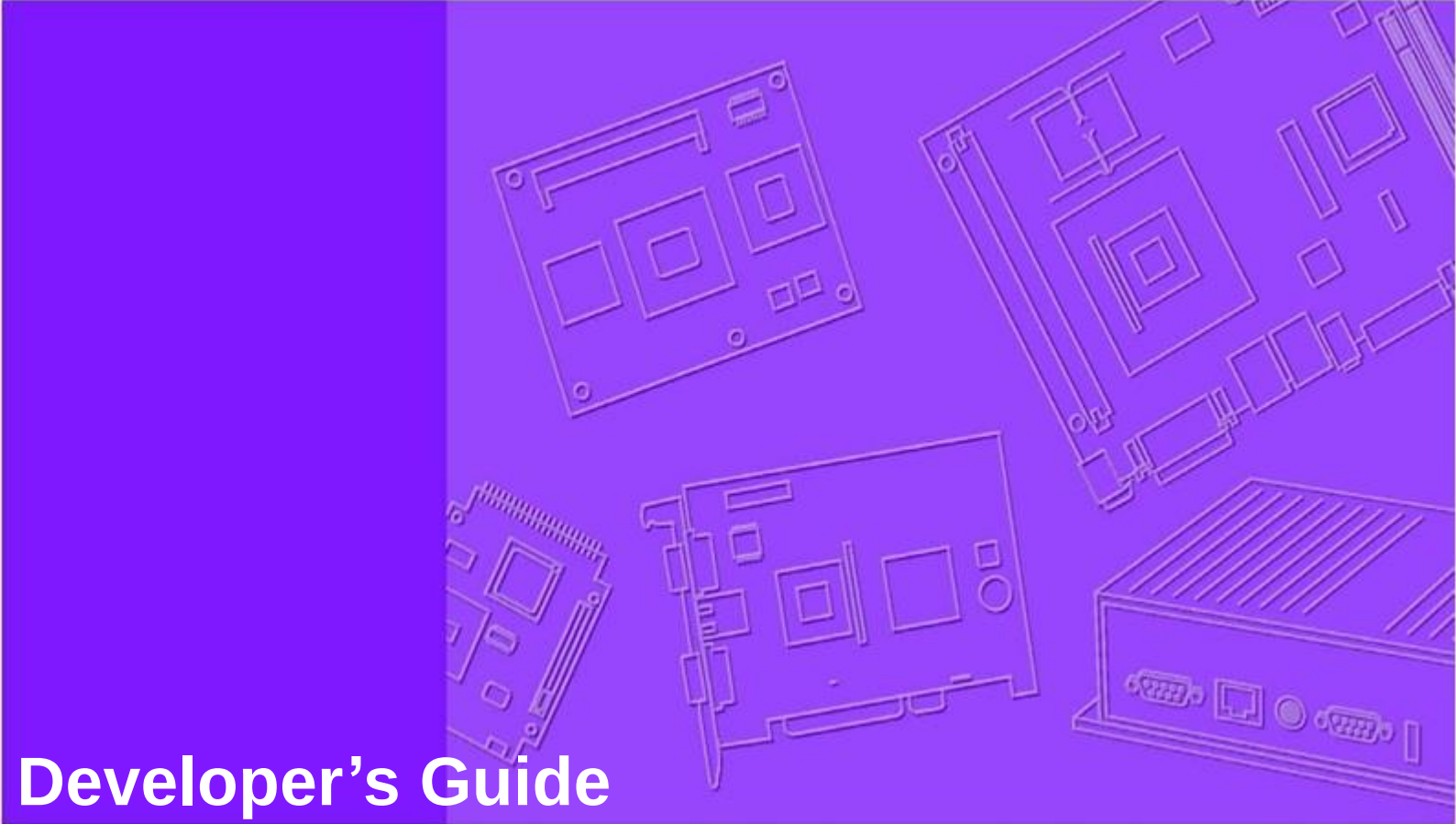




Developer's Guide

WISE-PaaS/RMM 3.1

Wireless IoT Sensing Embedded
Remote Monitoring and Management
RMM-Server Web Services (REST API)

ADVANTECH

Enabling an Intelligent Planet

Change Log:

Date	Version	Description / Major change
2014/07/18	V0.1	Rison Yeh, create draft document
2014/07/19	V0.2	Sephiroth, Add Charpter 4
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1. Introduction

The Remote Monitor and Management (RMM) exposes a comprehensive set of Web Service APIs for application integration purposes. The RMM REST API allows you to build applications that use Representational State Transfer HTTP calls to retrieve, modify, or publish platform data. For example through the APIs, you are able to access all the functionality of the Server or to control a device from your application built on top of the RMM.

The RMM platform conforms to standard REpresentational State Transfer (REST) protocol to expose its Application Programming Interfaces (API). REST has emerged over the past few years as a predominant Web service design model. REST-style architectures consist of clients and servers. Clients initiate requests to servers, while servers process requests and return appropriate responses. Requests and responses are built around the transfer of representations of resources. A resource can be essentially any coherent and meaningful concept that may be addressed. A representation of a resource is typically a document that captures the current or intended state of a resource.

RMM RESTful APIs expose the standard action types (**Create**, **Read**, **Update**, and **Delete**) over the platform objects. They are capable of retrieving a resource representation in XML format. You can use the REST HTTP Accept Header to specify the representation requested using the "application/xml" Media Types.

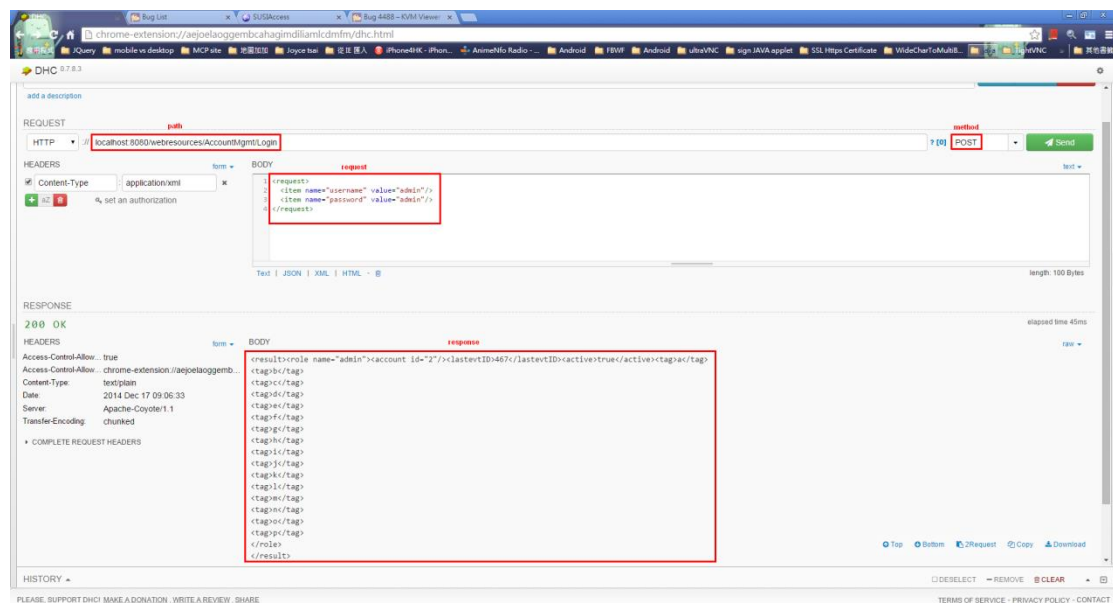
2. Writing Web Services Client Applications

The RMM server provides a REST-style API over HTTP (or HTTPS). Users can write HTTP clients in their preferred programming language that get data/services from the RMM server and use or display the data in the way that they desire. Examples of such clients include Web pages and programs written in a language such as Python or Java. These clients send requests to the server using standard HTTP requests. The HTTP requests that RMM server supports are GET, PUT, POST, and DELETE. The server supports basic HTTP authentication and only valid users can access the database. To reduce the authentication overhead of multiple requests, either use an HTTP library that caches cookies, or cache the cookies JSESSIONID and SID yourself.

2.1 In a Web Browser

Any GET request can be typed into the URL field of a web browser.

Some browser plug-ins (chrome plugin, **DHC - REST/HTTP API Client**) also allow other HTTP methods to be called.



2.2 Python

Python scripts can be written to send standard HTTP requests to the server. These scripts use Python libraries to handle connecting to the server, sending the request, and getting the reply.

Use **urllib2** to send request

Example:

GET:

```
import urllib2
import base64
username = 'NAME'
password = 'PWD'
url = 'http://localhost:8080/webresources/AccountMgmt/'
base64string = base64.encodestring('%s:%s' % (username, password))[:-1]
req = urllib2.Request(url)
req.add_header("Authorization", "Basic %s" % base64string)
req.add_header('Accept', 'application/xml')
OR
req.add_header('Accept', 'application/json')
response = urllib2.urlopen(req).read()
print(response)
```

POST:

```
import urllib2
import base64
import xml
username = 'NAME'
password = 'PWD'
url = 'http://localhost:8080/webresources/AccountMgmt/Login'
data = '<request><item name="username" value="admin"/><item name="password"
value="admin"/></request>'
base64string = base64.encodestring('%s:%s' % (username, password))[:-1]
req = urllib2.Request(url)
req.add_header("Authorization", "Basic %s" % base64string)
req.add_header('Content-Type', 'application/xml')
req.add_header('Accept', 'application/xml')
OR
req.add_header('Content-Type', 'application/json')
req.add_header('Accept', 'application/json')
response = urllib2.urlopen(req, data).read()
print(response)
```

2.3 C#

HTTP requests can be sent to the server through a C sharp program.

The key classes are [HttpRequest](#) and [HttpResponse](#) from System.Net.

Example:

GET:

```
static string HttpGet(string url)
{
    HttpRequest req = WebRequest.Create(url) as HttpRequest;
    req.Credentials = new System.Net.NetworkCredential("NAME", "PWD");
    string privilege = string.Format("{0}:{1}", acut, pwd);
    byte[] bytes =
System.Text.Encoding.GetEncoding("utf-8").GetBytes(privilege);
    req.Headers.Add("Authorization", Convert.ToBase64String(bytes));
    req.Accept = "application/xml";
                                OR
    req.Accept = "application/json";
    string result = null;
    using (HttpResponse resp = req.GetResponse() as HttpResponse)
    {
        StreamReader reader = new StreamReader(resp.GetResponseStream());
        result = reader.ReadToEnd();
    }
    return result;
}
```

POST:

```
static string HttpPost(string url)
{
    HttpRequest req = WebRequest.Create(new Uri(url)) as HttpRequest;
    req.Credentials = new System.Net.NetworkCredential("NAME", "PWD");
    req.Method = "POST";
    req.ContentType = "application/xml";
    req.Accept = "application/xml";
                                OR
    req.ContentType = "application/json";
    req.Accept = "application/json";
    string privilege = string.Format("{0}:{1}", acut, pwd);
    byte[] bytes =
System.Text.Encoding.GetEncoding("utf-8").GetBytes(privilege);
    req.Headers.Add("Authorization", Convert.ToBase64String(bytes));
```

```

        StringBuilder paramz = new StringBuilder();
        paramz.Append("<request><item name=\"username\" "
value=\"admin\"/><item name=\"password\" value=\"admin\"/></request>");

        byte[] formData = UTF8Encoding.UTF8.GetBytes(paramz.ToString());
        req.ContentLength = formData.Length;

        // Send Request:
        using (Stream post = req.GetRequestStream())
        {
            post.Write(formData, 0, formData.Length);
        }

        // Response:
        string result = null;
        using (HttpWebResponse resp = req.GetResponse() as HttpWebResponse)
        {
            StreamReader reader = new StreamReader(resp.GetResponseStream());
            result = reader.ReadToEnd();
        }
        return result;
    }
}

```

2.4 Java

HTTP requests can be sent to the server through a Java program.

use [java.net.URL](#) and [java.net.HttpURLConnection](#) to send request.

Example:

GET:

```

private static void HttpGet(String urlstr)
{
    String username = "NAME", password = "PWD";
    HttpURLConnection conn = null;
    String userPassword = username + ":" + password;
    String encoding = new
sun.misc.BASE64Encoder().encode(userPassword.getBytes());

    try{
        URL url = new URL(urlstr);
    }
}

```

```

conn = (HttpURLConnection)url.openConnection();
conn.setRequestMethod("GET");
conn.setRequestProperty("Accept", "application/xml");

OR

conn.setRequestProperty("Accept", "application/json");
conn.setRequestProperty("Authorization", "Basic " + encoding);
if (conn.getResponseCode() != 200)
{
    throw new RuntimeException("Failed : HTTP error code : "+
conn.getResponseCode());
}

BufferedReader br = new BufferedReader(new
InputStreamReader((conn.getInputStream())));

String output;
System.out.println("Output from Server .... \n");
while ((output = br.readLine()) != null) {
    System.out.println(output);
}

conn.disconnect();
}

catch(Exception e) {}
}

```

POST:

```

private static void HttpPOST(String urlstr)
{
    String username = "NAME", password = "PWD";
    HttpURLConnection conn = null;
    String userPassword = username + ":" + password;
    String encoding = new
sun.misc.BASE64Encoder().encode(userPassword.getBytes());

    try{
        URL url = new URL(urlstr);
        conn = (HttpURLConnection)url.openConnection();
        conn.setDoOutput(true);
        conn.setRequestMethod("POST");
        conn.setRequestProperty("Content-Type", "application/xml");
        conn.setRequestProperty("Accept", "application/xml");

```

OR

```

conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("Accept", "application/json");

conn.setRequestProperty("Authorization", "Basic " + encoding);
String input = "<request><item name=\"username\"
value=\"admin\"/><item name=\"password\" value=\"admin\"/></request>";
OutputStream outputStream = conn.getOutputStream();
outputStream.write(input.getBytes());
outputStream.flush();

if (conn.getResponseCode() != 200)
{
    throw new RuntimeException("Failed : HTTP error code : "+
conn.getResponseCode());
}

BufferedReader br = new BufferedReader(new
InputStreamReader((conn.getInputStream())));

String output;
System.out.println("Output from Server .... \n");
while ((output = br.readLine()) != null) {
    System.out.println(output);
}

conn.disconnect();
}

catch(Exception e){}

```

2.5 Javascript

use jQuery's [`\$.ajax\(\)`](#) to send request

Example:

```

$.ajax(
{
    type: post,
    url: 'http://localhost:8080/webresources/AccountMgmt/Login',
    data: '<request><item name="username" value="admin"></item name="password"
value="admin"></request>',
    contentType: 'application/xml',

```

OR

```

    contentType: 'application/json',
    dataType: 'text',
    error: function(xhr, exception)
    {
        //TODO
    },
    beforeSend: function(xhr)
    {
        xhr.setRequestHeader("Authorization", "Basic " + $.base64.encode(user + ":"
+ password));
    },
    success: function(response)
    {
    }
});

```

3. Web Services

3.1 URL Specification

RMM Web Services APIs are RESTful in nature. Every URL relates to a specific resource or list of resources.

URI: http://<hostname>/<resource path>

All REST APIs use CRUD Conventions as follows:

ACTION	Create	Read	Update	Delete
HTTP VERB	POST/PUT*	GET	PUT	DELETE

3.2 Return Error Code

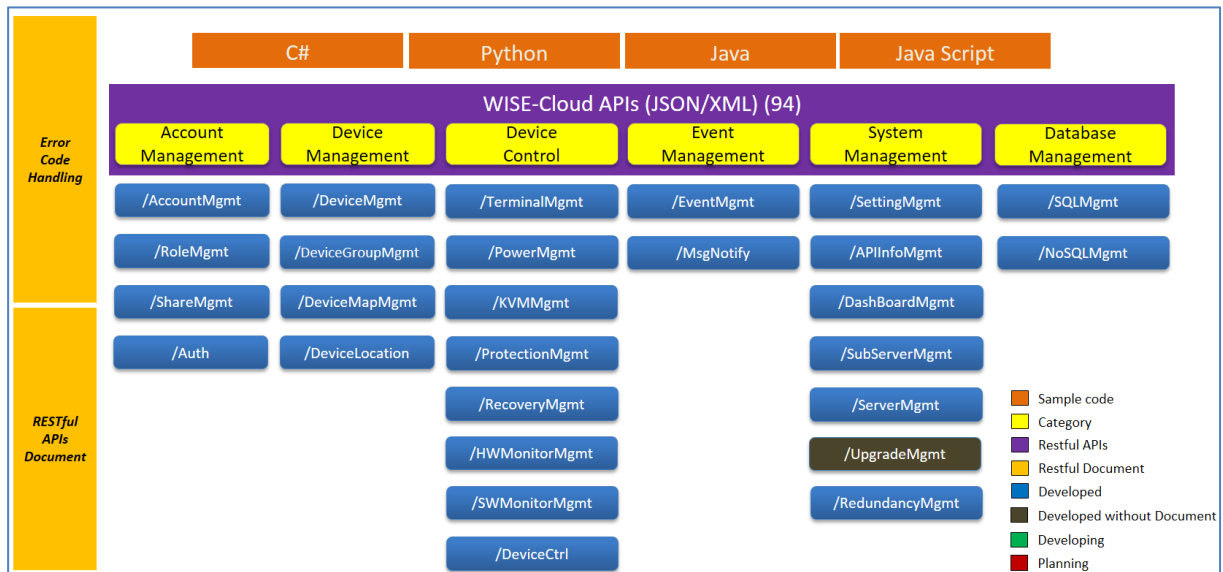
Catalog	Error Code	Description
Server Status	1001	Internal Sever Error
	1002	Management Server Connect Failed
	1003	MQTT Broker Connect Failed
	1004	SubServer Command Send Failed
	1005	Server Connection Lost
	1006	Server Not Master
	1007	Server Status Not Reday
Input Argument and Data	1051	Input Invalid XML
	1052	Input Invalid JSON
	1053	Input Argument Not NULL
	1054	Input Argument Over Length
	1055	Input Argument Type Error
	1056	Input Argument Error
Output Data	1101	Output Invalid JSON
	1102	Output Message In Process
	1103	Output Message Invalid
Server Limitation	1151	Server Not Allowed
	1152	Server Account Number Limitation
	1153	Server Role Number Limitation
	1154	Server Device Number Limitation
	1155	Server Group Number Limitation

	1156	Server Location Number Limitation
	1157	Server Layout Number Limitation
	1158	Server Schedule Limitation
	1159	Server License Error
	1160	SubServer Reported Limit
	1161	SubServer Loop Limit
	1162	SubServer Busy
	1163	Server Function Limit
FTP	1201	FTP Connect Failed
	1202	FTP Download Failed
Server File Access	1251	File Access Denied
	1252	File Not Found
	1253	File Invalid
	1254	File Name Existed
	1255	File Version Existed
	1256	File Version Exist Latest
	1257	File is Downloading
Database Access	1301	DB Exist Reserved Word
	1302	DB Foreign Key Reference Error
	1303	DB Object Existed
	1304	DB Object Not Found
	1305	Account Verification Failed
	1306	The parent map error, only support two-level structure
	1307	Threshold Rule Locking
	1308	Account Not Activated
	1309	Account is already Activated
Configuration Access	1351	Server Schedule Name Existed
	1352	Server Schedule Duplicate
	1353	Server No Enable Mail
Device Control	1401	Device API Not Support
Permission Check	1451	Device Not Belong to This Account
	1452	Device Not Belong to This Group
	1453	Map Not Belong to This Account
	1454	Account Cannot be Shared
	1455	Account Cannot Edit Others Account
	1456	Group Not Belong to This Account

Example:

```
<result>  
  <ErrorCode>1001</ErrorCode>  
  <Description>The input xml parsing error</Description>  
  <Field>username</Field>  
  <FieldValue></FieldValue>  
</result>
```

4. REST Resource



4.1 Account Management

4.1.1 Accounts

The following resources are applicable:

- /AccountMgmt
- /AccountMgmt/<primary-key>
- /AccountMgmt/getAccount/<name>
- /AccountMgmt/login
- /AccountMgmt/logout
- /AccountMgmt/editPwd
- /AccountMgmt/forgotPwd
- /AccountMgmt/fuzzySearch
- /AccountMgmt/registerAccount
- /AccountMgmt/activateAccount

Item	Description
<i>totalsize</i>	Number of items in the result.
<i>aid</i>	Account ID.
<i>username</i>	Account name.
<i>password</i>	Account password, but will not show real password.
<i>rid</i>	Account belong to Role's ID.
<i>rolename</i>	Account belong to Role's name.
<i>desc</i>	Account description.

email1	Account email which is unique and received, and used to send the password to this mail, if user forgot.
email2	Account email which be received for notification event.
phone	Account phone number which be received for notification event.
active	Determine the account pop-up change password. If the value is true, it's will show change password dialog on first login.
recvmail	Determine the account receive the mail notification.
recvsms	Determine the account receive the SMS notification.
ts	Account create time.
lasteventid	Represent the account already read the event by event id.
serverip	Server IP address.
lang	The language of user display.

Table 4.1.1 (a)

/AccountMgmt

GET

Retrieve all accounts information.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <aid>2</aid>
    <username>admin</username>
    <password>forUIShow</password>
    <rid>1</rid>
    <rolename>admin</rolename>
    <desc>System admin</desc>
    <email1>admin@mail.com</email1>
    <active>true</active>
    <recvmail>true</recvmail>
    <recvsms>false</recvsms>
    <ts>2013-02-04 12:00:00.000</ts>
    <lasteventid>28</lasteventid>
  </item>
</item>
```

```

<aid>16</aid>
<username>Kevin</username>
<password>forUIShow</password>
<rid>1</rid>
<rolename>admin</rolename>
<desc>Project Supervisor</desc>
<email1>kevin@advantech.com.tw</email1>
<email2>kevin@gmail.com</email2>
<phone>+886-910369369</phone>
<active>>false</active>
<recvmail>>true</recvmail>
<recvsms>>false</recvsms>
<ts>2015-02-11 16:16:20.203</ts>
<lasteventid>31</lasteventid>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "active" : true,
    "aid" : 2,
    "desc" : "System admin",
    "email1" : "admin@mail.com",
    "lasteventid" : 28,
    "password" : "forUIShow",
    "recvmail" : true,
    "recvsms" : false,
    "rid" : 1,
    "rolename" : "admin",
    "ts" : "2013-02-04 12:00:00.000",
    "username" : "admin"
  },
  { "active" : false,
    "aid" : 16,
    "desc" : "Project Supervisor",
    "email1" : "kevin@advantech.com.tw",
    "email2" : "kevin@gmail.com",
    "lasteventid" : 31,
    "password" : "forUIShow",
    "phone" : "+886-910369369",

```

```

        "recvmail" : true,
        "recvsms" : false,
        "rid" : 1,
        "rolename" : "admin",
        "ts" : "2015-02-11 16:16:20.203",
        "username" : "Kevin"
    }
    ],
    "totalsize" : 2
} }

```

POST

Add account information.

Required fields: username, pass, role_id, email1

Request Body: (media type: application/xml)

```

<request>
  <account>
    <item name="username" value="Kevin"/>
    <item name="password" value="123"/>
    <item name="role_id" value="1"/>
    <item name="desc" value="Project Supervisor"/>
    <item name="email1" value="kevin@advantech.com.tw"/>
    <item name="email2" value="kevin@gmail.com"/>
    <item name="phone" value="+886-910369369"/>
    <item name="recvmail" value="true"/>
    <item name="recvsms" value="false"/>
  </account>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <aid>17</aid>
  <ts>2015-02-11 16:21:56.272</ts>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "account" : { "item" : [ { "@name" : "username",
                                         "@value" : "Kevin"

```

```

    },
    { "@name" : "password",
      "@value" : "123"
    },
    { "@name" : "role_id",
      "@value" : "1"
    },
    { "@name" : "desc",
      "@value" : "Project Supervisor"
    },
    { "@name" : "email1",
      "@value" : "kevin@advantech.com.tw"
    },
    { "@name" : "email2",
      "@value" : "kevin@gmail.com"
    },
    { "@name" : "phone",
      "@value" : "+886-910369369"
    },
    { "@name" : "recvmail",
      "@value" : "true"
    },
    { "@name" : "recvsms",
      "@value" : "false"
    }
  ] } } }

```

Response Body: (media type: application/json)

```

{ "result" : { "aid" : 18,
               "ts" : "2015-02-11 16:23:55.537"
             } }

```



Edit account information.

Required fields: aid

Request Body: (media type: application/xml)

<request>

```

<account>
  <item name="aid" value="10"/>
  <item name="username" value="Kevin"/>
  <item name="password" value="Kevin"/>
  <item name="role_id" value="1"/>
  <item name="desc" value="Project Supervisor"/>
  <item name="email1" value="kevin@advantech.com.tw"/>
  <item name="email2" value="kevin@gmail.com"/>
  <item name="phone" value="+886-910369369"/>
  <item name="recvmail" value="true"/>
  <item name="recvsms" value="false"/>
</account>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "account" : { "item" : [ { "@name" : "aid",
    "@value" : "18"
  },
  { "@name" : "username",
    "@value" : "Kevin"
  },
  { "@name" : "password",
    "@value" : "Kevin"
  },
  { "@name" : "role_id",
    "@value" : "1"
  },
  { "@name" : "desc",
    "@value" : "Project Supervisor"
  },
  { "@name" : "email1",
    "@value" : "kevin@advantech.com.tw"
  },
  { "@name" : "email2",

```

```

        "@value" : "kevin@gmail.com"
    },
    { "@name" : "phone",
      "@value" : "+886-910369369"
    },
    { "@name" : "recvmail",
      "@value" : "true"
    },
    { "@name" : "recvsms",
      "@value" : "false"
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/AccountMgmt/<primary-key>

Primary-key: Account ID

Type: Long

GET

Retrieve specific account information by account ID.

Response Body: (media type: application/xml)

```

<result>
  <item>
    <aid>2</aid>
    <username>admin</username>
    <password>forUIShow</password>
    <rid>1</rid>
    <rolename>admin</rolename>
    <desc>System admin</desc>
    <email1>admin@mail.com</email1>
    <active>true</active>
    <recvmail>true</recvmail>
    <recvsms>false</recvsms>
    <ts>2013-02-04 12:00:00.000</ts>
    <lasteventid>28</lasteventid>
  </item>
</result>

```

```
</item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "active" : true,
    "aid" : 2,
    "desc" : "System admin",
    "email1" : "admin@mail.com",
    "lasteventid" : 28,
    "password" : "forUIShow",
    "recvmail" : true,
    "recvsms" : false,
    "rid" : 1,
    "rolename" : "admin",
    "ts" : "2013-02-04 12:00:00.000",
    "username" : "admin"
  } } }
```

PUT

Edit specific account information by account id. Not each item required, put the item that you want to modify.

Request Body: (media type: application/xml)

```
<request>
  <account>
    <item name="username" value="Kevin"/>
    <item name="password" value="Kevin"/>
    <item name="role_id" value="1"/>
    <item name="desc" value="Project Supervisor"/>
    <item name="email1" value="kevin@advantech.com.tw"/>
    <item name="email2" value="kevin@gmail.com"/>
    <item name="phone" value="+886-910369369"/>
    <item name="recvmail" value="true"/>
    <item name="recvsms" value="false"/>
  </account>
</request>
```

Response Body: (media type: application/xml)

```
<result>
```

```
    true
  </result>
```

Request Body: (media type: application/json)

```
{ "request" : { "account" : { "item" : [ { "@name" : "name",
                                           "@value" : "Kevin"
                                         },
                                         { "@name" : "pass",
                                           "@value" : ""
                                         },
                                         { "@name" : "role_id",
                                           "@value" : "1"
                                         },
                                         { "@name" : "desc",
                                           "@value" : "Project Supervisor"
                                         },
                                         { "@name" : "email1",
                                           "@value" : "kevin@advantech.com.tw"
                                         },
                                         { "@name" : "email2",
                                           "@value" : "kevin@gmail.com"
                                         },
                                         { "@name" : "phone",
                                           "@value" : "+886-910369369"
                                         },
                                         { "@name" : "recvmail",
                                           "@value" : "true"
                                         },
                                         { "@name" : "recvsms",
                                           "@value" : "false"
                                         }
                                       ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

DELETE

Delete specific account by account ID.

Response Body: (media type: application/xml)

```
{ "result" : true }
```

/AccountMgmt/getAccount/<name>

name: Account Name

Type: String

GET

Retrieve specific account information by account name.

Response Body: (media type: application/xml)

```
<result>
```

```
<item>
```

```
<aid>18</aid>
```

```
<username>Kevin</username>
```

```
<password>forUIShow</password>
```

```
<rid>1</rid>
```

```
<rolename>admin</rolename>
```

```
<desc>Project Supervisor</desc>
```

```
<email1>kevin@advantech.com.tw</email1>
```

```
<email2>kevin@gmail.com</email2>
```

```
<phone>+886-910369369</phone>
```

```
<active>>false</active>
```

```
<recvmail>>true</recvmail>
```

```
<recvsms>>false</recvsms>
```

```
<ts>2015-02-11 16:23:55.537</ts>
```

```
<lasteventid>34</lasteventid>
```

```
</item>
```

```
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "active" : false,  
    "aid" : 18,  
    "desc" : "Project Supervisor",  
    "email1" : "kevin@advantech.com.tw",  
    "email2" : "kevin@gmail.com",  
    "lasteventid" : 34,  
    "password" : "forUIShow",
```

```

    "phone" : "+886-910369369",
    "recvmail" : true,
    "recvsms" : false,
    "rid" : 1,
    "rolename" : "admin",
    "ts" : "2015-02-11 16:23:55.537",
    "username" : "Kevin"
  } } }

```

/AccountMgmt/login

POST

The API for account login, and return permission result.

Required fields: username, password

Request Body: (media type: application/xml)

```

<request>
  <item name="username" value="admin"/>
  <item name="password" value="admin"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <rolename="admin">
    <accountid="2"/>
    <lastevtID>28</lastevtID>
    <active>true</active>
    <tag>a</tag>
    <tag>b</tag>
    <tag>c</tag>
    <tag>d</tag>
    <tag>e</tag>
    <tag>f</tag>
    <tag>g</tag>
    <tag>h</tag>
    <tag>i</tag>
    <tag>j</tag>
    <tag>k</tag>
    <tag>l</tag>
  </rolename>
</result>

```

```
<tag>m</tag>
<tag>n</tag>
<tag>o</tag>
<tag>p</tag>
<tag>q</tag>
</role>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "username",
    "@value" : "admin"
  },
  { "@name" : "password",
    "@value" : "admin"
  }
] }}
```

Response Body: (media type: application/json)

```
{ "result" : { "role" : { "@name" : "admin",
    "account" : { "@id" : "2" },
    "active" : true,
    "lastevtID" : 28,
    "tag" : [ "a",
      "b",
      "c",
      "d",
      "e",
      "f",
      "g",
      "h",
      "i",
      "j",
      "k",
      "l",
      "m",
      "n",
      "o",
      "p",
      "q"
```

```

    ]
  }
}

```

Tag	Description
a	Add/Edit/Del Map, Device, Device State, Devicegroup
b	Add/Edit/Del HWMonitor Threshold Rule
c	Add/Edit/Del SWMonitor Threshold Rule
d	System SWMonitor Function
e	Remote Control Function
f	System Power Management Function
g	System Protection Function
h	System Backup Function
i	System Recovery Function
j	Edit Account Information
k	Receive notification from mail and SMS
l	Add/Edit/Del Account Role
m	Get/Set License,Upgrade,SMTP,SMS,Event
n	View All Event
o	Delete Event
p	Server MAnagement
q	SQL/NoSQL Management
r	Add/Edit/Del Dashboard
s	Set Device Upgrade

Table 4.1.1 (b)

/AccountMgmt/logout

POST

The API for account logout, and record this event.

Required fields: username

Request Body: (media type: application/xml)

```

<request>
  <item name="username" value="Kevin"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>

```

```
    true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : { "@name" : "username",
                          "@value" : "Kevin"
                        } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/AccountMgmt/editPwd

PUT

Allow user to change password.

Required fields: username, password, newpassword

Request Body: (media type: application/xml)

```
<request>
  <item name="username" value="Kevin"/>
  <item name="password" value="Kevin"/>
  <item name="newpassword" value="KevinPwd"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "username",
                          "@value" : "Kevin"
                        },
                      { "@name" : "password",
                          "@value" : "Kevin"
                        },
                      { "@name" : "newpassword",
                          "@value" : "KevinPwd"
                        }
                    ]
  }
```

```
]]}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/AccountMgmt/forgotPwd

POST

Send account password to account's e-mail.

Required fields: email

Request Body: (media type: application/xml)

```
<request>
  <item name="email" value="abc@gmail.com"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : { "@name" : "email",
                          "@value" : "abc@gmail.com"
                        } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/AccountMgmt/fuzzySearch

POST

Retrieve account information from condition

Clause: Each item is "**And**" operation in SQL query.

privilege - role name

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - aid, name, password, rid, description, email, email2, phone, active, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <clause>
    <item name="privilege" value="admin"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="desc"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <aid>18</aid>
    <username>Kevin</username>
    <password>forUIShow</password>
    <rid>1</rid>
    <rolename>admin</rolename>
    <desc>Project Supervisor</desc>
    <email1>kevin@advantech.com.tw</email1>
    <email2>kevin@gmail.com</email2>
    <phone>+886-910369369</phone>
    <active>false</active>
    <recvmail>true</recvmail>
    <recvsms>false</recvsms>
    <ts>2015-02-11 16:23:55.537</ts>
    <lasteventid>34</lasteventid>
  </item>
</item>
```

```

<aid>2</aid>
<username>admin</username>
<password>forUIShow</password>
<rid>1</rid>
<rolename>admin</rolename>
<desc>System admin</desc>
<email1>admin@mail.com</email1>
<active>true</active>
<recvmail>true</recvmail>
<recvsms>false</recvsms>
<ts>2013-02-04 12:00:00.000</ts>
<lasteventid>28</lasteventid>
</item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : { "@name" : "privilege",
                                     "@value" : "admin"
                                   } },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
                           "@value" : "desc"
                         } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
                                  "@value" : "10"
                                },
  { "@name" : "page no",
    "@value" : "1"
  }
  ] }
} }

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "active" : false,
                           "aid" : 18,
                           "desc" : "Project Supervisor",
                           "email1" : "kevin@advantech.com.tw",
                           "email2" : "kevin@gmail.com",
                           "lasteventid" : 34,

```

```

        "password" : "forUIShow",
        "phone" : "+886-910369369",
        "recvmail" : true,
        "recvsms" : false,
        "rid" : 1,
        "rolename" : "admin",
        "ts" : "2015-02-11 16:23:55.537",
        "username" : "Kevin"
    },
    { "active" : true,
      "aid" : 2,
      "desc" : "System admin",
      "email1" : "admin@mail.com",
      "lasteventid" : 28,
      "password" : "forUIShow",
      "recvmail" : true,
      "recvsms" : false,
      "rid" : 1,
      "rolename" : "admin",
      "ts" : "2013-02-04 12:00:00.000",
      "username" : "admin"
    }
  ],
  "totalsize" : 2
} }

```

/AccountMgmt/registerAccount

POST

The API is for registering a new account. If the new account is registered successfully, it will send the validation mail for activating the new account.

Required fields: username, password, email1, serverip and lang

Request Body: (media type: application/xml)

```
<request>
```

```
  <account>
```

```
    <item name="username" value="Kevin"/>
```

```

<item name="password" value="KevinPwd"/>
<item name="email1" value="kevin@advantech.com.tw"/>
<item name="email2" value="kevin@gmail.com"/>
<item name="desc" value="IPC Group1"/>
<item name="phone" value="+886-910369369"/>
<item name="serverip" value="http://127.0.0.1:8084/">
<item name="lang" value="en_us"/>
</account >
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "account" : { "item" : [ { "@name" : "username",
                                         "@value" : "Kevin"
                                       },
                                         { "@name" : "password",
                                         "@value" : "KevinPwd"
                                       },
                                         { "@name" : "email1",
                                         "@value" : "kevin@advantech.com.tw"
                                       },
                                         { "@name" : "email2",
                                         "@value" : "kevin@gmail.com"
                                       },
                                         { "@name" : "desc ",
                                         "@value" : "IPC Group1"
                                       },
                                         { "@name" : "phone",
                                         "@value" : "+886-910369369"
                                       },
                                         { "@name" : "serverip",
                                         "@value" : "http://127.0.0.1:8084/"
                                       },
                                         { "@name" : "lang",
                                         "@value" : "zh_tw"
                                       }
                                     ]
               }

```

```
}  
] ] ] }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/AccountMgmt/activateAccount

POST

The API is for activating the new account which not activated. The token can be obtained from validation mail.

Request Body: (media type: application/xml)

```
<request>  
  <account>  
    <token>c8rW9sprDKK1i96iR</token>  
  </account>  
</request>
```

Response Body: (media type: application/xml)

```
<result>  
  true  
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "account" : { "token" : "c8rW9sprDKK1i96iR" } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

4.1.2 Roles

The following resources are applicable:

- /RoleMgmt
- /RoleMgmt/<primary-key>

Item	Description
totalsize	Number of items in the result.
rid	Role ID.
rolename	Role name.

tag	Represent privilege of this role, please reference Table 4.1.1 (b).
privilege	Represent privilege of this role, please reference Table 4.1.1 (b).
ts	Role create time.

Table 4.1.2 (a)

/RoleMgmt

GET

Retrieve all roles information.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>3</totalsize>
  <item>
    <rid>1</rid>
    <rolename>admin</rolename>
    <tag>a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q</tag>
    <ts>2013-02-04 12:00:00.000</ts>
  </item>
  <item>
    <rid>2</rid>
    <rolename>device admin</rolename>
    <tag>a,b,c,d,e,f,g,h,i,j,k,m</tag>
    <ts>2013-02-04 12:00:00.000</ts>
  </item>
  <item>
    <rid>3</rid>
    <rolename>guest</rolename>
    <tag>j</tag>
    <ts>2013-02-04 12:00:00.000</ts>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : [ { "rid" : 1,
    "rolename" : "admin",
    "tag" : "a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q",
    "ts" : "2013-02-04 12:00:00.000"
  },
```

```

    { "rid" : 2,
      "rolename" : "system admin",
      "tag" : "a,b,c,d,e,f,g,h,i,j,k,m",
      "ts" : "2013-02-04 12:00:00.000"
    },
    { "rid" : 3,
      "rolename" : "guest",
      "tag" : "j",
      "ts" : "2013-02-04 12:00:00.000"
    }
  ],
  "totalsize" : 3
} }

```

POST

Add role information.

Required fields: name

Request Body: (media type: application/xml)

```

<request>
  <role>
    <item name="rolename" value="Manager"/>
    <item name="privilege" value="a,b,c,d,e"/>
  </role>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <rid>5</rid>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "role" : { "item" : [ { "@name" : "rolename",
                                     "@value" : "Manager"
                                   },
                                   { "@name" : "privilege",
                                     "@value" : "a,b,c,d,e"
                                   }
                                 ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : { "rid" : 5 } }
```

PUT

Edit role information.

Required fields: rid

Request Body: (media type: application/xml)

```
<request>
  <role>
    <item name="rid" value="6"/>
    <item name="rolename" value="Dev_Manager"/>
    <item name="privilege" value="a,b,c,d,e,f"/>
  </role>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "role" : { "item" : [ { "@name" : "rid",
                                     "@value" : "6"
                                   },
                                   { "@name" : "rolename",
                                     "@value" : "Dev_Manager"
                                   },
                                   { "@name" : "privilege",
                                     "@value" : "a,b,c,d,e,f"
                                   }
                                 ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/RoleMgmt/<Primary-key>

Primary-key: Role ID

Type: Long

GET

Retrieve specific role information by role ID.

Response Body: (media type: application/xml)

```
<result>
  <item>
    <rid>6</rid>
    <rolename>Dev_Manager</rolename>
    <tag>a,b,c,d,e,f</tag>
    <ts>2015-02-13 10:22:51.054</ts>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "rid" : 6,
    "rolename" : "Dev_Manager",
    "tag" : "a,b,c,d,e,f",
    "ts" : "2015-02-13 10:22:51.054"
  } } }
```

PUT

Edit specific role information by role ID.

Request Body: (media type: application/xml)

```
<request>
  <role>
    <item name="rolename" value="Dev_Manager"/>
    <item name="privilege" value="a,b,c,d,e,f"/>
  </role>
</request>
```

Response Body: (media type: application/xml)

```
<result>
```

```
true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "role" : { "item" : [ { "@name" : "rolename",
                                     "@value" : "Dev_Manager"
                                   },
                                   { "@name" : "privilege",
                                     "@value" : "a,b,c,d,e,f"
                                   }
                               ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

DELETE

Delete specific role by role ID.

Response Body: (media type: application/xml)

```
{ "result" : true }
```

4.1.3 Share

The following resources are applicable:

- /ShareMgmt
- /ShareMgmt/<primary-key>
- /ShareMgmt/getShareAccount
- /ShareMgmt/fuzzySearch

Item	Description
<i>totalsize</i>	Number of items in the result.
<i>sid</i>	Share ID.
<i>srcaccountid</i>	Source account ID.
<i>srcaccountname</i>	Source account name.
<i>srcrolename</i>	Source account's role name
<i>destaccountid</i>	Destination account ID.
<i>destaccountname</i>	Destination account name.
<i>destrolename</i>	Destination role name.

Table 4.1.3 (a)

/ShareMgmt

GET

Retrieve all account share information. The sources account's devices are share to destination account. Hence, the destination account can access these devices.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <sid>1</sid>
    <srcaccountid>2</srcaccountid>
    <srcaccountname>admin</srcaccountname>
    <srcrolename>admin</srcrolename>
    <destaccountid>18</destaccountid>
    <destaccountname>Kevin</destaccountname>
    <destrolename>admin</destrolename>
  </item>
  <item>
    <sid>2</sid>
    <srcaccountid>2</srcaccountid>
    <srcaccountname>admin</srcaccountname>
    <srcrolename>admin</srcrolename>
    <destaccountid>18</destaccountid>
    <destaccountname>Kevin</destaccountname>
    <destrolename>admin</destrolename>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : [ { "destaccountid" : 18,
  "destaccountname" : "Kevin",
  "destrolename" : "admin",
  "sid" : 1,
  "srcaccountid" : 2,
  "srcaccountname" : "admin",
  "srcrolename" : "admin"
},
```

```

    { "destaccountid" : 18,
      "destaccountname" : "Kevin",
      "destrolename" : "admin",
      "sid" : 2,
      "srcaccountid" : 2,
      "srcaccountname" : "admin",
      "srcrolename" : "admin"
    }
  ],
  "totalsize" : 2
} }

```

POST

Add share information, the source account's device are shared to destination account.

Required fields: *srcaccountname*, *destaccountname*

Request Body: (media type: application/xml)

```

<request>
  <item name="srcaccountname" value="admin"/>
  <item name="destaccountname" value="Kevin"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "item" : [ { "@name" : "srcaccountname",
                             "@value" : "admin"
                           },
                        { "@name" : "destaccountname",
                          "@value" : "Kevin"
                        }
                      ] } }

```

Response Body: (media type: application/json)

```

{ "result" : true }

```

/ShareMgmt/<primary-key>

Primary-key: Share ID Type: Long

DELETE

Delete specific share information by share ID.

Response Body: (media type: application/xml)

```
<result>
    true
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/ShareMgmt/getShareAccount

GET

Retrieve share information that who are shared to login account. The sources account's devices are share to destination account. Hence, the destination account can access these devices.

Response Body: (media type: application/xml)

```
<result>
    <totalsize>2</totalsize>
    <item>
        <sid>1</sid>
        <srcaccountid>2</srcaccountid>
        <srcaccountname>admin</srcaccountname>
        <srcrolename>admin</srcrolename>
        <destaccountid>10</destaccountid>
        <destaccountname>Kevin</destaccountname>
        <destrolename>admin</destrolename>
    </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "destaccountid" : 10,
    "destaccountname" : "Kevin",
    "destrolename" : "admin",
    "sid" : 1,
    "srcaccountid" : 2,
    "srcaccountname" : "admin",
    "srcrolename" : "admin"
  },
  "totalsize" : 2
} }
```

/ShareMgmt/fuzzySearch

POST

Retrieve share information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

accountid - source account id

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - sid, srcAcuntName, destAcuntName, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="accountid" value="2"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="srcAcuntName" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
```

</request>

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <sid>1</sid>
    <srcaccountid>2</srcaccountid>
    <srcaccountname>admin</srcaccountname>
    <srcrolename>admin</srcrolename>
    <destaccountid>18</destaccountid>
    <destaccountname>Kevin</destaccountname>
    <destrolename>admin</destrolename>
  </item>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : { "@name" : "accountid",
                                     "@value" : "2"
                                   } },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "srcAcuntName",
                           "@value" : "ASC"
                         } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
                                  "@value" : "10"
                                },
  { "@name" : "page no",
    "@value" : "1"
  }
  ] }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "destaccountid" : 18,
                          "destaccountname" : "Kevin",
                          "destrolename" : "admin",
                          "sid" : 1,
```

```

        "srcaccountid" : 2,
        "srcaccountname" : "admin",
        "srcrolename" : "admin"
    },
    "totalsize" : 1
} }

```

4.1.4 OAuth

Abstract:

The OAuth 2.0 authorization framework enables a third-party application to obtain limited access to an HTTP service, either on behalf of a resource owner by orchestrating an approval interaction between the resource owner and the HTTP service, or by allowing the third-party application to obtain access on its own behalf.

The following resources are applicable:

- [/Auth/token?<Query_Component>](#)
- [/Auth/revoke](#)
- [/Auth/authorize?<Query_Component>](#)
- [How to use token](#)

/Auth/token?<Query_Component>

Query_Comonent: Composed of grant_type, username and password

Type: String

POST

A http request is used to exchange user credentials for an access token.

URL: [/Auth/token?grant_type=password&username=johndoe&password=A3ddj3w](#)

Item	Description
grant_type	Must be password . (Resource Owner Password Credentials Grant Flow in RFC6749)
username	The username to authenticate.
password	The password to authenticate.
token	The access token

URL: [/Auth/token?grant_type=authorization_code&code=SpLxIOBeZQQYbYS6WxSbIA](#)
&redirect_uri=http://client.example.com/cb

Item	Description
grant_type	Must be authorization_code . (Authorization Code Grant Flow in RFC6749)
code	The auth code from “/Auth/ authorize?<Query_Component>”.
redirect_uri	Must be the same with “/Auth/ authorize?<Query_Component>”.

Response Body: (Success)

HTTP/1.1 200 OK

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

Cache-Control: no-store

Pragma: no-cache

```
{
  "access_token": "2YotnFZFEjr1zCsicMWpAA",
  "token_type": "Bearer",
  "expires_in": 3600,
}
```

Response Body: (unauthorized client)

HTTP/1.1 400 Bad Request

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

Cache-Control: no-store

Pragma: no-cache

```
{
  "error": "unauthorized_client"
}
```

Response Body: (unsupported grant_type)

HTTP/1.1 400 Bad Request

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

Cache-Control: no-store

Pragma: no-cache

```
{
  "error": "unsupported_grant_type"
}
```

Response Body: (invalid request)

HTTP/1.1 400 Bad Request

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

Cache-Control: no-store

Pragma: no-cache

```
{  
  "error": "invalid_request"  
}
```

/Auth/revoke

POST

Revoke an access token.

URL: */Auth/revoke*

Header	Value
Accesstoken	Bearer [token]

Response Body: (Success)

HTTP/1.1 200 OK

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

Cache-Control: no-store

Pragma: no-cache

Response Body: (Not authorized)

HTTP/1.1 400 Bad Request

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

Cache-Control: no-store

Pragma: no-cache

/Auth/authorize?<Query_Component>

Query_Component: Composed of response_type, client_id, state and redirect_uri

Type: String

GET

A http request is used to redirect to authorize page.

URL: */Auth/authorize?response_type=code&client_id=s6BhdRkqt3&state=xyz
&redirect_uri=http://client.example.com/cb*

Item	Description
<i>response_type</i>	code or token . (Authorization Code Grant Flow or Implicit Grant Flow in RFC6749)
<i>client_id</i>	Must be RMM .
<i>state</i>	Internal state.
<i>redirect_uri</i>	redirect uri

Response Body: (Success)

HTTP/1.1 302 Found

Cache-Control: no-store

Pragma: no-cache

Location: http://localhost:8080/oauth/authorization/?page_code=<page_code>

How to use token

When sending the access token in the "Accesstoken" request header field, the client uses the "Bearer" authentication scheme to transmit the access token.

For example:

GET /resource HTTP/1.1

Host: server.example.com

Accesstoken: Bearer 2YotnFZFEjr1zCsicMWpAA

4.2 Device Management

4.2.1 Devices

The following resources are applicable:

- [/DeviceMgmt](#)
- [/DeviceMgmt/<id>](#)
- [/DeviceMgmt/getDevByName/<name>](#)
- [/DeviceMgmt/getLocalDev/<subnet>](#)
- [/DeviceMgmt/getIAMTState/<id>](#)
- [/DeviceMgmt/getSensorInfo/<id>](#)
- [/DeviceMgmt/getGroupByID/<id>](#)
- [/DeviceMgmt/fuzzySearch](#)
- [/DeviceMgmt/groupFuzzySearch](#)
- [/DeviceMgmt/setIAMT](#)

Item	Description
------	-------------

<i>totalsize</i>	Number of items in the result.
<i>did</i>	Device ID.
<i>agentId</i>	Device agent ID.
<i>name</i>	Device name.
<i>status</i>	Device status which represent connected or disconnected.
<i>ip</i>	Device IP address.
<i>serial</i>	Device serial.
<i>accountid</i>	Device belong to Account's ID.
<i>accountname</i>	Device belong to Account's name.
<i>mapid</i>	Device belong to Map's ID.
<i>upgrade</i>	Determine device upgrade flag.
<i>hwState</i>	Device hardware state.
<i>hddState</i>	Device harddisk state.
<i>netState</i>	Device network state.
<i>swState</i>	Device software state.
<i>wolmode</i>	Device Wake on LAN mode.
<i>repeater</i>	Device Wake on LAN mode's repeater.
<i>groupid</i>	Device belong to group ID.
<i>groupname</i>	Device belong to group name.
<i>description</i>	Device description.
<i>lal</i>	Device longitude and latitude of Google/Baidu Map.
<i>address</i>	Device detail address.
<i>model</i>	Device model.
<i>osversion</i>	Device operation system version.
<i>biosversion</i>	Device BIOS version.
<i>agentversion</i>	Device agent version.
<i>latestWindowsAgentVer</i>	Latest windows agent version.
<i>latestLinuxAgentVer</i>	Latest linux agent version.
<i>icon</i>	
<i>lock</i>	Device lock status.
<i>cpuname</i>	Device CPU name.
<i>platformname</i>	Device platform name.
<i>memsize</i>	Device memory size.
<i>ts</i>	Device create time.
<i>powertime</i>	Device power time.
<i>mac</i>	Device MAC address.
<i>amtsupport</i>	Determine device support Intel AMT flag.

<i>KVMmode</i>	Device KVM mode.
<i>custPort</i>	Device custom KVM port.
<i>custPassword</i>	Device custom KVM password.
<i>protectInstall</i>	Determine McAfee installed flag.
<i>recoveryInstall</i>	Determine Acronis installed flag.

Table 4.2.1 (a)

/DeviceMgmt

GET

Retrieve all devices information.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <did>2</did>
    <agentId>0000000BAB39A520</agentId>
    <name>AC09</name>
    <status>Disconnected</status>
    <ip>172.22.13.41</ip>
    <serial>0000000BAB39A520</serial>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <mapid>1</mapid>
    <upgrade>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <wolmode>1</wolmode>
    <repeater></repeater>
    <groupid>1</groupid>
    <groupname>unassign</groupname>
    <description></description>
    <osversion>Windows 7 Service Pack 1 X64</osversion>
    <biosversion>(AC09X016.BIN)</biosversion>
    <agentversion>3.1.8.1432</agentversion>
    <latestagentversion>3.1.0</latestagentversion>
```

```
<icon>default</icon>
<lock>None</lock>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<platformname>EBC-AC09</platformname>
<memsize>8072744</memsize>
<autoReport>true</autoReport>
<reportInterval>1</reportInterval>
<agentType>IPC</agentType>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<ts>2015-06-23 13:35:50.334</ts>
<powertime></powertime>
<mac>00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20</mac>
<amtsupport>true</amtsupport>
<KVMmode>default</KVMmode>
<custPort>5900</custPort>
<custPassword></custPassword>
<protectInstall>true</protectInstall>
<recoveryInstall>true</recoveryInstall>
</item>
</result>
```

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "KVMmode" : "default",
    "accountid" : 2,
    "accountname" : "admin",
    "agentId" : "0000000BAB39A520",
    "agentType" : "IPC",
    "agentversion" : "3.1.8.1432",
    "amtsupport" : true,
    "autoReport" : true,
    "biosversion" : "(AC09X016.BIN)",
    "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
    "custPassword" : null,
    "custPort" : 5900,
    "description" : null,
    "did" : 2,
    "groupid" : 1,
    "groupname" : "unassign",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
        "handlerName" : "HDDMonitor"
    },
    { "aliasName" : "NetMonitor",
        "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
        "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
        "handlerName" : "SUSIControl"
    }
    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "icon" : "default",
    "ip" : "172.22.13.41",
    "latestagentversion" : "3.1.0",
    "lock" : "None",
    "mac" : "00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20",
    "mapid" : 1,
    "memsize" : 8072744,
    "name" : "AC09",

```

```

        "netState" : "Normal",
        "osversion" : "Windows 7 Service Pack 1 X64",
        "platformname" : "EBC-AC09",
        "powertime" : null,
        "protectInstall" : true,
        "recoveryInstall" : true,
        "repeater" : null,
        "reportInterval" : 1,
        "serial" : "0000000BAB39A520",
        "status" : "Disconnected",
        "swState" : "Normal",
        "ts" : "2015-06-23 13:35:50.334",
        "upgrade" : false,
        "wolmode" : 1
    },
    "totalsize" : 1
} }

```

PUT

Edit device information. Not each item required, put the item that you want to modify.

Required fields: agentId

Request Body: (media type: application/xml)

```

<request>
  <device>
    <item name="name" value="123456"/>
    <item name="agentId" value="0000545345435435"/>
    <item name="groupid" value="1"/>
    <item name="accountid" value="1"/>
    <item name="mapid" value="1"/>
    <item name="mainstate" value="1"/>
    <item name="wolmode" value="1"/>
    <item name="wolrepeater" value="1"/>
    <item name="description" value="description..."/>
    <item name="address" value="taipei city"/>
    <item name="model" value="ark-ds303"/>
    <item name="platformname" value=""/>
  </device>
</request>

```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "device" : { "item" : [ { "@name" : "name",
    "@value" : "123456"
  },
  { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "groupid",
    "@value" : "1"
  },
  { "@name" : "accountid",
    "@value" : "1"
  },
  { "@name" : "mapid",
    "@value" : "1"
  },
  { "@name" : "mainstate",
    "@value" : "1"
  },
  { "@name" : "wolmode",
    "@value" : "1"
  },
  { "@name" : "wolrepeater",
    "@value" : "1"
  },
  { "@name" : "description",
    "@value" : "description..."
  },
  { "@name" : "address",
    "@value" : "taipei city"
  },
  { "@name" : "model",
    "@value" : "ark-ds303"
  }
  ]
}
```

```

    },
    { "@name" : "platformname",
      "@value" : ""
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/DeviceMgmt/<id>

id: AgentID **Type:** String

GET

Retrieve specific device information by agent ID.

Response Body: (media type: application/xml)

```

<result>
  <totalsize>1</totalsize>
  <item>
    <did>2</did>
    <agentId>0000000BAB39A520</agentId>
    <name>AC09</name>
    <status>Disconnected</status>
    <ip>172.22.13.41</ip>
    <serial>0000000BAB39A520</serial>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <mapid>1</mapid>
    <upgrade>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <wolmode>1</wolmode>
    <repeater></repeater>
    <groupid>1</groupid>
    <groupname>unassign</groupname>
    <description></description>
  </item>
</result>

```

```

<osversion>Windows 7 Service Pack 1 X64</osversion>
<biosversion>(AC09X016.BIN)</biosversion>
<agentversion>3.1.8.1432</agentversion>
<latestagentversion>3.1.0</latestagentversion>
<icon>default</icon>
<lock>None</lock>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<platformname>EBC-AC09</platformname>
<memsize>8072744</memsize>
<autoReport>true</autoReport>
<reportInterval>1</reportInterval>
<agentType>IPC</agentType>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<ts>2015-06-23 13:35:50.334</ts>
<powertime></powertime>
<mac>00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20</mac>
<amtsupport>true</amtsupport>
<KVMmode>default</KVMmode>
<custPort>5900</custPort>
<custPassword></custPassword>
<protectInstall>true</protectInstall>
<recoveryInstall>true</recoveryInstall>

```

```
</item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "KVMmode" : "default",
    "accountid" : 2,
    "accountname" : "admin",
    "agentId" : "0000000BAB39A520",
    "agentType" : "IPC",
    "agentversion" : "3.1.8.1432",
    "amtsupport" : true,
    "autoReport" : true,
    "biosversion" : "(AC09X016.BIN)",
    "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
    "custPassword" : null,
    "custPort" : 5900,
    "description" : null,
    "did" : 2,
    "groupid" : 1,
    "groupname" : "unassign",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
        "handlerName" : "HDDMonitor"
      },
      { "aliasName" : "NetMonitor",
        "handlerName" : "NetMonitor"
      },
      { "aliasName" : "ProcessMonitor",
        "handlerName" : "ProcessMonitor"
      },
      { "aliasName" : "SUSIControl",
        "handlerName" : "SUSIControl"
      }
    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "icon" : "default",
    "ip" : "172.22.13.41",
    "latestagentversion" : "3.1.0",
    "lock" : "None",
```

```

    "mac" : "00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20",
    "mapid" : 1,
    "memsize" : 8072744,
    "name" : "AC09",
    "netState" : "Normal",
    "osversion" : "Windows 7 Service Pack 1 X64",
    "platformname" : "EBC-AC09",
    "powertime" : null,
    "protectInstall" : true,
    "recoveryInstall" : true,
    "repeater" : null,
    "reportInterval" : 1,
    "serial" : "0000000BAB39A520",
    "status" : "Disconnected",
    "swState" : "Normal",
    "ts" : "2015-06-23 13:35:50.334",
    "upgrade" : false,
    "wolmode" : 1
  },
  "totalsize" : 1
} }

```

PUT

Edit specific device information by agent ID. Not each item required, put the item that you want to modify.

Request Body: (media type: application/xml)

```

<request>
  <device>
    <item name="name" value="123456"/>
    <item name="groupid" value="1"/>
    <item name="accountid" value="1"/>
    <item name="mapid" value="1"/>
    <item name="mainstate" value="1"/>
    <item name="wolmode" value="1"/>
    <item name="wolrepeater" value="1"/>
    <item name="description" value="description..."/>
    <item name="address" value="taipei city"/>
    <item name="model" value="ark-ds303"/>
  </device>
</request>

```

```
<item name="platformname" value=""/>
</device>
</request>
```

Response Body: (media type: application/xml)

```
<result>
    true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "device" : { "item" : [ { "@name" : "name",
    "@value" : "123456"
  },
  { "@name" : "groupid",
    "@value" : "1"
  },
  { "@name" : "accountid",
    "@value" : "1"
  },
  { "@name" : "mapid",
    "@value" : "1"
  },
  { "@name" : "mainstate",
    "@value" : "1"
  },
  { "@name" : "wolmode",
    "@value" : "1"
  },
  { "@name" : "wolrepeater",
    "@value" : "1"
  },
  { "@name" : "description",
    "@value" : "description..."
  },
  { "@name" : "address",
    "@value" : "taipei city"
  },
  { "@name" : "model",
    "@value" : "ark-ds303"
  }
    ]
  }
}
```

```

    },
    { "@name" : "platformname",
      "@value" : ""
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/DeviceMgmt/getDevByName/<name>

name: Device Name Type: String

GET

Retrieve device information by device name.

Response Body: (media type: application/xml)

```

<result>
  <totalsize>1</totalsize>
  <item>
    <did>2</did>
    <agentId>0000000BAB39A520</agentId>
    <name>AC09</name>
    <status>Disconnected</status>
    <ip>172.22.13.41</ip>
    <serial>0000000BAB39A520</serial>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <mapid>1</mapid>
    <upgrade>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <wolmode>1</wolmode>
    <repeater></repeater>
    <groupid>1</groupid>
    <groupname>unassign</groupname>
  </item>
</result>

```

```

<description></description>
<osversion>Windows 7 Service Pack 1 X64</osversion>
<biosversion>(AC09X016.BIN)</biosversion>
<agentversion>3.1.8.1432</agentversion>
<latestagentversion>3.1.0</latestagentversion>
<icon>default</icon>
<lock>None</lock>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<platformname>EBC-AC09</platformname>
<memsize>8072744</memsize>
<autoReport>true</autoReport>
<reportInterval>1</reportInterval>
<agentType>IPC</agentType>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<ts>2015-06-23 13:35:50.334</ts>
<powertime></powertime>
<mac>00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20</mac>
<amtsupport>true</amtsupport>
<KVMmode>default</KVMmode>
<custPort>5900</custPort>
<custPassword></custPassword>
<protectInstall>true</protectInstall>

```

```
<recoveryInstall>true</recoveryInstall>
</item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "KVMmode" : "default",
    "accountid" : 2,
    "accountname" : "admin",
    "agentId" : "0000000BAB39A520",
    "agentType" : "IPC",
    "agentversion" : "3.1.8.1432",
    "amtsupport" : true,
    "autoReport" : true,
    "biosversion" : "(AC09X016.BIN)",
    "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
    "custPassword" : null,
    "custPort" : 5900,
    "description" : null,
    "did" : 2,
    "groupid" : 1,
    "groupname" : "unassign",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
        "handlerName" : "HDDMonitor"
      },
      { "aliasName" : "NetMonitor",
        "handlerName" : "NetMonitor"
      },
      { "aliasName" : "ProcessMonitor",
        "handlerName" : "ProcessMonitor"
      },
      { "aliasName" : "SUSIControl",
        "handlerName" : "SUSIControl"
      }
    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "icon" : "default",
    "ip" : "172.22.13.41",
    "latestagentversion" : "3.1.0",
```

```

    "lock" : "None",
    "mac" : "00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:39:A5:20",
    "mapid" : 1,
    "memsize" : 8072744,
    "name" : "AC09",
    "netState" : "Normal",
    "osversion" : "Windows 7 Service Pack 1 X64",
    "platformname" : "EBC-AC09",
    "powertime" : null,
    "protectInstall" : true,
    "recoveryInstall" : true,
    "repeater" : null,
    "reportInterval" : 1,
    "serial" : "0000000BAB39A520",
    "status" : "Disconnected",
    "swState" : "Normal",
    "ts" : "2015-06-23 13:35:50.334",
    "upgrade" : false,
    "wolmode" : 1
  },
  "totalsize" : 1
} }

```

/DeviceMgmt/getIAMTState/<id>

id: AgentID Type: String

GET

Retrieve Intel AMT status for specific device by agent ID.

Response Body: (media type: application/xml)

```

<result>
  <amtState>on</amtState>   Note[1]
</result>

```

Response Body: (media type: application/json)

```
{ "result" : { "amtState" : "on" } }
```

Note [1]: Status of Intel AMT, on/off/s3/s4/unknown

/DeviceMgmt/getSensorInfo/<id>

id: AgentID Type: String

GET

Retrieve the latest (last reported) device handlers and sensors information.

Response Body: (media type: application/json)

```
{
  "result":{
    <handler_name1>:<infoSpec1>,
    <handler_name2>:<infoSpec2>,
    <handler_name3>:<infoSpec3>,
  }
}
```

Response Body: (media type: application/xml)

```
<result>
  <handler_name1>infoSpec1</handler_name1>
  <handler_name2>infoSpec2</handler_name2>
  <handler_name3>infoSpec3</handler_name3>
</result>
```

/DeviceMgmt/getGroupByID/<id>

id: Group ID Type: Long

GET

Retrieve group information for specific group by group ID.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <id>2</id>
    <name>Linkou</name>
```

```

<totaldev>2</totaldev>
<swErrDev>0</swErrDev>
<hwErrDev>0</hwErrDev>
<upgradedev>0</upgradedev>
<latestWindowsAgentVer>3.0.16</latestWindowsAgentVer>
<latestLinuxAgentVer>
  <Linux name="openSUSE 12.3 (i586)" version="3.0.16.3654"/>
</latestLinuxAgentVer>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "hwErrDev" : 0,
    "id" : 2,
    "latestLinuxAgentVer" : { "Linux" : { "@name" : "openSUSE 12.3 (i586)",
      "@version" : "3.0.16.3654"
    } },
    "latestWindowsAgentVer" : "3.0.16",
    "name" : "Linkou",
    "swErrDev" : 0,
    "totaldev" : 2,
    "upgradedev" : 0
  },
  "totalsize" : 1
} }

```

/DeviceMgmt/fuzzySearch

POST

Retrieve device information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group ID

account_id - account ID

map_id - map ID

devicestate - Normal, Error, HW_Error, HW_Normal, HDD_Error, HDD_Normal, NET_Error,

NET_Normal, SW_Error, SW_Normal

Like - condition: Each value within space is "OR" operation in SQL query.

Like - field: *name,ip, serial, description, address, model, platformname, cpuname, os_version, bios_version, agent_version, lock, accountname*

Orderby: Order by which field and in DESCending or ASCending.

Field - agentid, name, ip, serial, description, address, model, osversion, biosversion, agentversion, cpuname, platformname, memsize, ts, acuntName

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="zh-TW"/>
  <clause>
    <item name="group_id" value="1"/>
    <item name="account_id" value="2"/>
  </clause>
  <like>
    <item name="condition1" value=""/>
    <item name="field" value="name"/>
    <item name="field" value="hwstate"/>
    <item name="field" value="swstate"/>
    <item name="field" value="maintainstate"/>
  </like>
  <orderby>
    <item name="name" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="20"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <did>4</did>
    <agentId>0000068B1FEBF1AE</agentId>
```

```

<name>imx6qwise3310</name>
<status>Connected</status>
<ip>172.22.12.219</ip>
<serial>0000068B1FEBF1AE</serial>
<accountid>2</accountid>
<accountname>admin</accountname>
<mapid>5</mapid>
<upgrade>>false</upgrade>
<hwState>Normal</hwState>
<hddState>Normal</hddState>
<netState>Normal</netState>
<swState>Normal</swState>
<groupid>1</groupid>
<groupname>unassign</groupname>
<description></description>
<lal>0.50742574;0.55337079</lal>
<osversion>Poky (Yocto Project Reference Distro) 1.5.3 armv7l</osversion>
<biosversion></biosversion>
<agentversion>3.0.0.0</agentversion>
<latestagentversion>3.1.0</latestagentversion>
<icon>default</icon>
<lock>None</lock>
<cpuname>ARMv7 Processor rev 10 (v7l)</cpuname>
<platformname></platformname>
<memsize>1026060</memsize>
<autoReport>{"All":{}}</autoReport>
<reportInterval>0</reportInterval>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>

```

```

</handler>
<handler>
  <handlerName>SUSIControl</handlerName>
  <aliasName>SUSIControl</aliasName>
</handler>
<handler>
  <handlerName>IoTGW</handlerName>
  <aliasName>IoTGW</aliasName>
</handler>
</handlerList>
<agentType>IPC_IoTGW</agentType>
<IoTGW>
  <interface>
    <netInterface>/WSN/00170d0000602e11/Info/SenHubList</netInterface>
    <sensorHub>
      <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
      <did>5</did>
      <agentId>00170d00006062fb</agentId>
      <name>Motion</name>
      <status>Connected</status>
      <upgrade>false</upgrade>
      <hwState>Normal</hwState>
      <hddState>Normal</hddState>
      <netState>Normal</netState>
      <swState>Normal</swState>
      <autoReport>{"All":{}}</autoReport>
      <reportInterval>10</reportInterval>
      <agentType>SenHub</agentType>
    </sensorHub>
    <sensorHub>
      <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
      <did>6</did>
      <agentId>00170d0000606411</agentId>
      <name>CO2</name>
      <status>Connected</status>
      <upgrade>false</upgrade>
      <hwState>Normal</hwState>
      <hddState>Normal</hddState>
      <netState>Normal</netState>

```

```

        <swState>Normal</swState>
        <autoReport>{"All":{}}</autoReport>
        <reportInterval>10</reportInterval>
        <agentType>SenHub</agentType>
    </sensorHub>
</interface>
</IoTGW>
<ts>2015-10-06 17:01:53.201</ts>
<powertime></powertime>
<mac>5E:06:93:A3:41:EA;5E:06:93:A3:41:EA</mac>
<amtsupport>false</amtsupport>
<KVMmode>default</KVMmode>
<custPort>5900</custPort>
<custPassword></custPassword>
<kvmFunction>default, repeater</kvmFunction>
<terminalFunction>internal</terminalFunction>
<protectInstall>false</protectInstall>
<recoveryInstall>false</recoveryInstall>
</item>
<item>
    <did>3</did>
    <agentId>0000000BAB374520</agentId>
    <name>WIN-QFPAAQQ4BHP</name>
    <status>Disconnected</status>
    <ip>172.22.13.13</ip>
    <serial>0000000BAB374520</serial>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <mapid>1</mapid>
    <upgrade>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <groupid>1</groupid>
    <groupname>unassign</groupname>
    <description></description>
    <osversion>Windows 7 Service Pack 1 X64</osversion>
    <biosversion>(AC09X016.BIN)</biosversion>

```

```

<agentversion>3.1.15.2820</agentversion>
<latestagentversion>3.1.0</latestagentversion>
<icon>default</icon>
<lock>None</lock>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<platformname>EBC-AC09</platformname>
<memsize>8072744</memsize>
<autoReport>{"All":{}}</autoReport>
<reportInterval>0</reportInterval>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<agentType>IPC</agentType>
<ts>2015-10-02 16:38:09.852</ts>
<powertime></powertime>
<mac>00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:37:45:20;0A:00:27:00:00:00</mac>
<amtsupport>>false</amtsupport>
<KVMmode>default</KVMmode>
<custPort>5900</custPort>
<custPassword></custPassword>
<kvmFunction>default, repeater</kvmFunction>
<terminalFunction>internal</terminalFunction>
<protectInstall>>false</protectInstall>
<recoveryInstall>>false</recoveryInstall>

```

```
</item>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
    "@value" : "1"
  },
  { "@name" : "account_id",
    "@value" : "2"
  }
] },
  "lang" : { "@value" : "zh-TW" },
  "like" : { "item" : [ { "@name" : "condition",
    "@value" : ""
  },
  { "@name" : "field",
    "@value" : "name"
  },
  { "@name" : "field",
    "@value" : "hwstate"
  },
  { "@name" : "field",
    "@value" : "swstate"
  },
  { "@name" : "field",
    "@value" : "maintainstate"
  }
] },
  "orderby" : { "item" : { "@name" : "name",
    "@value" : "ASC"
  } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
    "@value" : "20"
  },
  { "@name" : "page no",
    "@value" : "1"
  }
] }
} }
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : [ { "IoTGW" : { "interface" : { "netInterface" :  
"/WSN/00170d0000602e11/Info/SenHubList",  
      "sensorHub" : [ { "agentId" : "00170d00006062fb",  
        "agentType" : "SenHub",  
        "autoReport" : "{\\"All\\":{}}",  
        "did" : 5,  
        "hddState" : "Normal",  
        "hwState" : "Normal",  
        "name" : "Motion",  
        "netState" : "Normal",  
        "reportInterval" : 10,  
        "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",  
        "status" : "Connected",  
        "swState" : "Normal",  
        "upgrade" : false  
      },  
      { "agentId" : "00170d0000606411",  
        "agentType" : "SenHub",  
        "autoReport" : "{\\"All\\":{}}",  
        "did" : 6,  
        "hddState" : "Normal",  
        "hwState" : "Normal",  
        "name" : "CO2",  
        "netState" : "Normal",  
        "reportInterval" : 10,  
        "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",  
        "status" : "Connected",  
        "swState" : "Normal",  
        "upgrade" : false  
      }  
    ]  
  } },  
  "KVMmode" : "default",  
  "accountid" : 2,  
  "accountname" : "admin",  
  "agentId" : "0000068B1FEBF1AE",  
  "agentType" : "IPC_IoTGW",
```

```

"agentversion" : "3.0.0.0",
"amtsupport" : false,
"autoReport" : {"All":{}}",
"biosversion" : null,
"cpuname" : "ARMv7 Processor rev 10 (v7l)",
"custPassword" : null,
"custPort" : 5900,
"description" : null,
"did" : 4,
"groupid" : 1,
"groupname" : "unassign",
"handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
                                "handlerName" : "HDDMonitor"
                              },
                              { "aliasName" : "NetMonitor",
                                "handlerName" : "NetMonitor"
                              },
                              { "aliasName" : "ProcessMonitor",
                                "handlerName" : "ProcessMonitor"
                              },
                              { "aliasName" : "SUSIControl",
                                "handlerName" : "SUSIControl"
                              },
                              { "aliasName" : "IoTGW",
                                "handlerName" : "IoTGW"
                              }
                            ] },
"hddState" : "Normal",
"hwState" : "Normal",
"icon" : "default",
"ip" : "172.22.12.219",
"kvmFunction" : "default, repeater",
"lal" : "0.50742574;0.55337079",
"latestagentversion" : "3.1.0",
"lock" : "None",
"mac" : "5E:06:93:A3:41:EA;5E:06:93:A3:41:EA",
"mapid" : 5,
"memsize" : 1026060,
"name" : "imx6qwise3310",

```

```

"netState" : "Normal",
"osversion" : "Poky (Yocto Project Reference Distro) 1.5.3 armv7l",
"platformname" : null,
"powertime" : null,
"protectInstall" : false,
"recoveryInstall" : false,
"reportInterval" : 0,
"serial" : "0000068B1FEBF1AE",
"status" : "Connected",
"swState" : "Normal",
"terminalFunction" : "internal",
"ts" : "2015-10-06 17:01:53.201",
"upgrade" : false
},
{ "KVMmode" : "default",
  "accountid" : 2,
  "accountname" : "admin",
  "agentId" : "0000000BAB374520",
  "agentType" : "IPC",
  "agentversion" : "3.1.15.2820",
  "amtsupport" : false,
  "autoReport" : "{\"All\":{\"}}",
  "biosversion" : "(AC09X016.BIN)",
  "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
  "custPassword" : null,
  "custPort" : 5900,
  "description" : null,
  "did" : 3,
  "groupid" : 1,
  "groupname" : "unassign",
  "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
    "handlerName" : "HDDMonitor"
  },
  { "aliasName" : "NetMonitor",
    "handlerName" : "NetMonitor"
  },
  { "aliasName" : "ProcessMonitor",
    "handlerName" : "ProcessMonitor"
  },
  },

```

```

        { "aliasName" : "SUSIControl",
          "handlerName" : "SUSIControl"
        }
      ],
      "hddState" : "Normal",
      "hwState" : "Normal",
      "icon" : "default",
      "ip" : "172.22.13.13",
      "kvmFunction" : "default, repeater",
      "latestagentversion" : "3.1.0",
      "lock" : "None",
      "mac" : "00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:37:45:20;0A:00:27:00:00:00",
      "mapid" : 1,
      "memsize" : 8072744,
      "name" : "WIN-QFPAAQQ4BHP",
      "netState" : "Normal",
      "osversion" : "Windows 7 Service Pack 1 X64",
      "platformname" : "EBC-AC09",
      "powertime" : null,
      "protectInstall" : false,
      "recoveryInstall" : false,
      "reportInterval" : 0,
      "serial" : "0000000BAB374520",
      "status" : "Disconnected",
      "swState" : "Normal",
      "terminalFunction" : "internal",
      "ts" : "2015-10-02 16:38:09.852",
      "upgrade" : false
    }
  ],
  "totalsize" : 2
}

```

/DeviceMgmt/groupFuzzySearch

POST

Retrieve group information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

account_id - account ID

Like - condition: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="account_id" value="2"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <gid>3</gid>
    <name>Linkou</name>
    <totaldev>1</totaldev>
    <swErrDev>0</swErrDev>
    <hwErrDev>0</hwErrDev>
    <upgradedev>0</upgradedev>
    <latestWindowsAgentVer>3.0.16</latestWindowsAgentVer>
    <latestLinuxAgentVer>
      <Linux name="openSUSE 12.3 (i586)" version="3.0.16.3654"/>
    </latestLinuxAgentVer>
  </item>
</result>
```

Note[1]

Note[1]

Request Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : { "@name" : "account_id",
                                     "@value" : "2"
                                   } },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
                           "@value" : "ASC"
                         } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
                                  "@value" : "10"
                                },
  { "@name" : "page no",
    "@value" : "1"
  }
  ] }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "gid" : 3,
  "hwErrDev" : 0,
  "latestLinuxAgentVer" : { "Linux" : { "@name" : "openSUSE 12.3 (i586)",
                                         "@version" : "3.0.16.3654"
                                       } },
  "latestWindowsAgentVer" : "3.0.16",
  "name" : "Linkou",
  "swErrDev" : 0,
  "totaldev" : 1,
  "upgradedev" : 0
},
  "totalsize" : 1
}
```

Note [1]: If total size is 1, the return result will contain "latestWindowsAgentVer" and "LatestLinuxAgentVer"

/DeviceMgmt/setIAMT

POST

Set device "PowerUp", "PowerDown", "PowerCycle", "PowerReset" by AMT action.

action: "PowerUp, PowerDown, PowerCycle, PowerReset"

Required fields: agentId

Request Body: (media type: application/xml)

```
<request>
  <item name="agentId" value="0000545345435435"/>
  <item name="action" value="PowerUp"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "PowerUp"
  }
] }}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

4.2.2 Device Groups

The following resources are applicable:

- [/DeviceGroupMgmt](#)
- [/DeviceGroupMgmt/<id>](#)
- [/DeviceGroupMgmt/getGroupByAccount/<id>](#)
- [/DeviceGroupMgmt/getGroupAndAccount](#)

Item	Description
<i>totalsize</i>	Number of items in the result.
<i>gid</i>	Group ID.
<i>name</i>	Group name.
<i>accountid</i>	Group belong to account's ID.
<i>accountname</i>	Group belong to account's name.
<i>description</i>	Group description.
<i>totaldev</i>	Number of device in this group.
<i>errordev</i>	Number of error device in this group.
<i>rootTotalDev</i>	Number of total device in this group's account, and these devices are not belong to any group.
<i>rootErrorDev</i>	Number of error device in this group's account, and these devices are not belong to any group.
<i>ts</i>	Group create time.

Table 4.2.2 (a)

/DeviceGroupMgmt

GET

Retrieve all device groups information.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <gid>1</gid>
    <name>unassign</name>
    <accountid>1</accountid>
    <accountname>unassign</accountname>
    <description>unassign</description>
    <totaldev>2</totaldev>
    <errordev>2</errordev>
    <connecteddev>0</connecteddev>
    <ts>2013-02-04 12:00:00.000</ts>
  </item>
  <item>
    <gid>5</gid>
    <name>Linkou</name>
```

```

<accountid>2</accountid>
<accountname>admin</accountname>
<description>Advantech New Building</description>
<totaldev>0</totaldev>
<errordev>0</errordev>
<connecteddev>0</connecteddev>
<ts>2015-02-16 09:45:12.915</ts>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "accountid" : 1,
    "accountname" : "unassign",
    "connecteddev" : 0,
    "description" : "unassign",
    "errordev" : 2,
    "gid" : 1,
    "name" : "unassign",
    "totaldev" : 2,
    "ts" : "2013-02-04 12:00:00.000"
  },
  { "accountid" : 2,
    "accountname" : "admin",
    "connecteddev" : 0,
    "description" : "Advantech New Building",
    "errordev" : 0,
    "gid" : 5,
    "name" : "Linkou",
    "totaldev" : 0,
    "ts" : "2015-02-16 09:45:12.915"
  }
],
  "totalsize" : 2
} }

```

POST

Add device group information.

Required fields: name, accountid

Request Body: (media type: application/xml)

```
<request>
  <group>
    <item name="name" value="Linkou"/>
    <item name="accountid" value="2"/>
    <item name="description" value="Advantech New Building"/>
  </group>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <gid>5</gid>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "group" : { "item" : [ { "@name" : "name",
                                         "@value" : "Linkou-1"
                                       },
                                         { "@name" : "accountid",
                                         "@value" : "2"
                                       },
                                         { "@name" : "description",
                                         "@value" : " Advantech New Building"
                                       }
                                       ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "gid" : 6 } }
```



Edit device information

Required fields: gid

Request Body: (media type: application/xml)

```
<request>
  <group>
    <item name="gid" value="5"/>
    <item name="accountid" value="1"/>
    <item name="name" value="Adv-SunnyBuilding"/>
  </group>
</request>
```

```

        <item name="description" value=" Adv-SunnyBuilding "/>
    </group>
</request>

```

Response Body: (media type: application/xml)

```

<result>
    true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "group" : { "item" : [ { "@name" : "Gid",
                                         "@value" : "5"
                                     },
                                     { "@name" : "accountid",
                                         "@value" : "1"
                                     },
                                     { "@name" : "name",
                                         "@value" : "Adv-SunnyBuilding"
                                     },
                                     { "@name" : "description",
                                         "@value" : " Adv-SunnyBuilding "
                                     }
                                   ] } } }

```

Response Body: (media type: application/json)

```

{ "result" : { "gid" : 6 } }

```

/DeviceGroupMgmt/<id>

id: Group ID Type: Long

GET

Retrieve specific device groups information by group ID.

Response Body: (media type: application/xml)

```

<result>
    <totalsize>1</totalsize>
    <item>

```

```

<gid>5</gid>
<name>Adv-SunnyBuilding</name>
<accountid>1</accountid>
<accountname>unassign</accountname>
<description> Adv-SunnyBuilding </description>
<totaldev>0</totaldev>
<errordev>0</errordev>
<connecteddev>0</connecteddev>
<ts>2015-02-16 09:45:12.915</ts>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "accountid" : 1,
    "accountname" : "unassign",
    "connecteddev" : 0,
    "description" : " Adv-SunnyBuilding ",
    "errordev" : 0,
    "gid" : 5,
    "name" : "Adv-SunnyBuilding",
    "totaldev" : 0,
    "ts" : "2015-02-16 09:45:12.915"
  },
  "totalsize" : 1
} }

```

PUT

Edit device group information by group ID. Not each item required, put the item that you want to modify.

Request Body: (media type: application/xml)

```

<request>
  <group>
    <item name="accountid" value="1"/>
    <item name="name" value="Adv-SunnyBuilding"/>
    <item name="description" value="Adv-SunnyBuilding "/>
  </group>
</request>

```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "group" : { "item" : [ { "@name" : "accountid",
    "@value" : "1"
  },
  { "@name" : "name",
    "@value" : "Adv-SunnyBuilding"
  },
  { "@name" : "description",
    "@value" : "Adv-SunnyBuilding "
  }
] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

DELETE

Delete specific device group by group ID.

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/DeviceGroupMgmt/getGroupByAccount/<id>

id: Account ID Type: Long

GET

Retrieve device groups information from specific account.

Response Body: (media type: application/xml)

```

<result>
  <totalsize>1</totalsize>
  <item>
    <gid>3</gid>
    <name>Linkou</name>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <description></description>
    <totaldev>0</totaldev>
    <errordev>0</errordev>
    <ts>2014-08-04 10:52:17</ts>
  </item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "accountid" : 2,
    "accountname" : "admin",
    "description" : null,
    "errordev" : 0,
    "gid" : 3,
    "name" : "Linkou",
    "totaldev" : 0,
    "ts" : "2014-08-04 10:52:17"
  },
  "totalsize" : 1
} }

```

/DeviceGroupMgmt/getGroupAndAccount

GET

Retrieve device groups and account information from login account.

Response Body: (media type: application/xml)

```

<result>
  <Account>
    <type>self</type>      Note[1]
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <description>System admin</description>
  </Account>
</result>

```

```

    <rootTotalDev>1</rootTotalDev>
    <rootErrorDev>1</rootErrorDev>
  </Account>
  <Account>
    <type>share</type>
    <accountid>18</accountid>
    <accountname>Kevin</accountname>
    <description>Project Supervisor</description>
    <rootTotalDev>0</rootTotalDev>
    <rootErrorDev>0</rootErrorDev>
  </Account>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "Account" : [ { "accountid" : 2,
    "accountname" : "admin",
    "description" : "System admin",
    "rootErrorDev" : 1,
    "rootTotalDev" : 1,
    "type" : "self"
  },
  { "accountid" : 18,
    "accountname" : "Kevin",
    "description" : "Project Supervisor",
    "rootErrorDev" : 0,
    "rootTotalDev" : 0,
    "type" : "share"
  }
] } }

```

Note[1]: The type value is represent the account belong itself or other account shared.

4.2.3 Device Map

The following resources are applicable:

- [/DeviceMapMgmt](#)
- [/DeviceMapMgmt/<id>](#)
- [/DeviceMapMgmt/getMapAndAccount](#)
- [/DeviceMapMgmt/getDeviceByMap](#)

Item	Description
<i>totalsize</i>	Number of items in the result.
<i>mid</i>	Map ID
<i>name</i>	Map name.
<i>filename</i>	Map image file name.
<i>parent_mid</i>	Parent map ID. Support two-level map structure. The root map ID is 2, represents Google map or Baidu. Another map ID 1, is unassigned map, indicate the device default map. First level map we called "location", the "layout" is under location. <pre> Root--- ---Location 1 --- Layout 1 ---Location 2 </pre>
<i>accountid</i>	Map belong to account's ID.
<i>accountname</i>	Map belong to account's name.
<i>lal</i>	Map longitude and latitude.
<i>address</i>	Map detail address.
<i>totaldev</i>	Number of device in this map.
<i>errordev</i>	Number of error device in this map.
<i>ts</i>	Map create time.

/DeviceMapMgmt

GET

Retrieve all device maps information, that belong to login account.

Response Body: (media type: application/xml)

```

<result>
  <total>1</total>
  <item>
    <mid>4</mid>
    <name>Linkou</name>
    <filename>eMap_1432343.png</filename>
    <parent_mid>2</parent_mid>
    <accountid>2</accountid>
    <accountname>admin</accountname>
  
```

```

<lal>25.057;121.382</lal>
<address>No. 27, Wende Road, Guishan Township, Taoyuan City 33371, Taiwan, R.O.C.</address>
<totaldev>1</totaldev>
<errordev>0</errordev>
<ts>2013-02-24 12:58:03.000</ts>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "accountid" : 2,
    "accountname" : "admin",
    "address" : "No. 27, Wende Road, Guishan Township, Taoyuan City 33371, Taiwan, R.O.C.",
    "errordev" : 0,
    "filename" : "eMap_1432343.png",
    "lal" : "25.057;121.382",
    "mid" : 4,
    "name" : "Linkou",
    "parent_mid" : 2,
    "totaldev" : 1,
    "ts" : "2013-02-24 12:58:03.000"
  },
  "total" : 1
} }

```

POST

Add device map information.

Required fields: name, filename, accountid, parent_mid

Request Body: (media type: application/xml)

```

<request>
  <map>
    <item name="name" value="Advantech Headquarters"/>
    <item name="filename" value="location.png"/>
    <item name="accountid" value="2"/>
    <item name="parent_mid" value="2"/>
    <item name="lal" value="25.05894500000000014;121.38345700000000213"/>
    <item name="address" value="No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan, R.O.C."/>
  </map>

```

</request>

Response Body: (media type: application/xml)

```
<result>
  <mid>5</mid>
  <filename>location.png</filename>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "map" : { "item" : [ { "@name" : "name",
                                     "@value" : "Advantech Headquarters"
                                   },
                                   { "@name" : "filename",
                                     "@value" : "location.png"
                                   },
                                   { "@name" : "accountid",
                                     "@value" : "2"
                                   },
                                   { "@name" : "parent_mid",
                                     "@value" : "2"
                                   },
                                   { "@name" : "lal",
                                     "@value" : "25.0589450000000014;121.38345700000000213"
                                   },
                                   { "@name" : "address",
                                     "@value" : "No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan,
                                     R.O.C."
                                   }
                                 ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "filename" : "location.png",
               "mid" : 5
             } }
```

PUT

Edit device map information. Not each item required, put the item that you want to modify.

Required fields: mid

Request Body: (media type: application/xml)

```
<request>
  <map>
    <item name="mid" value="4"/>
    <item name="name" value="Advantech Linkou"/>
    <item name="filename" value="eMap_ck02cvesv5lp.png"/>
    <item name="parent_mid" value="2"/>
    <item name="lal" value="25.0589450000000014;121.38345700000000213"/>
    <item name="address" value="No.27, Wende Rd., Guishan Township, Taoyuan County 333, Taiwan
(R.O.C.)"/>
  </map>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <filename>eMap_ck02cvesv5lp.png</filename>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "map" : { "item" : [ { "@name" : "mid",
    "@value" : "4"
  },
  { "@name" : "name",
    "@value" : "Advantech Linkou"
  },
  { "@name" : "filename",
    "@value" : "eMap_ck02cvesv5lp.png"
  },
  { "@name" : "parent_mid",
    "@value" : "2"
  },
  { "@name" : "lal",
    "@value" : "25.0589450000000014;121.38345700000000213"
  },
  { "@name" : "address",
    "@value" : "No.27, Wende Rd., Guishan Township, Taoyuan County 333, Taiwan (R.O.C.)"
  }
] } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "filename" : "eMap_ck02cvesv5lp.png" } }
```

/DeviceMapMgmt/<id>

id: Map ID

Type: Long

GET

Retrieve specific device map information.

Response Body: (media type: application/xml)

```
<result>
```

```
  <total>1</total>
```

```
  <item>
```

```
    <mid>6</mid>
```

```
    <name>Advantech Headquarters</name>
```

```
    <filename>eMap_843yydwlcwyw.png</filename>
```

```
    <parent_mid>2</parent_mid>
```

```
    <accountid>2</accountid>
```

```
    <accountname>admin</accountname>
```

```
    <lal>25.0589450000000014;121.38345700000000213</lal>
```

```
    <address>No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan,
```

```
R.O.C.</address>
```

```
    <totaldev>0</totaldev>
```

```
    <errordev>0</errordev>
```

```
    <ts>2015-02-24 13:22:30.398</ts>
```

```
  </item>
```

```
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "accountid" : 2,
```

```
    "accountname" : "admin",
```

```
    "address" : "No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491, Taiwan,
```

```
R.O.C.",
```

```
    "errordev" : 0,
```

```
    "filename" : "eMap_843yydwlcwyw.png",
```

```
    "lal" : "25.0589450000000014;121.38345700000000213",
```

```
    "mid" : 6,
```

```
    "name" : "Advantech Headquarters",
```

```

        "parent_mid" : 2,
        "totaldev" : 0,
        "ts" : "2015-02-24 13:22:30.398"
    },
    "total" : 1
} }

```

DELETE

Delete specific device map by map id.

Response Body: (media type: application/xml)

```

<result>
    true
</result>

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/DeviceMapMgmt/getMapAndAccount

GET

Retrieve device maps and account information from login account.

Response Body: (media type: application/xml)

```

<result>
  <item>
    <type>self</type>      Note[1]
    <mid>5</mid>
    <name>Sunny Building</name>
    <filename>eMap_ao05l0lr5b8m.png</filename>
    <parent_mid>2</parent_mid>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <lal>25.0722858165312026;121.5771357674905175</lal>
    <address>No.33, Lane 365, Yang Guang St., Neihu Dist., Taipei, 11491, Taiwan, R.O.C.</address>
    <rootTotalDev>0</rootTotalDev>
    <rootErrorDev>0</rootErrorDev>
  </item>
</result>

```

```

    <totaldev>0</totaldev>
    <errordev>0</errordev>
    <ts>2014-08-25 10:34:15</ts>
  </item>
  <item>
    <type>share</type>    Note[1]
    <mid>4</mid>
    <name>Advantech Linkou</name>
    <filename>eMap_ck02cvesv5lp.png</filename>
    <parent_mid>2</parent_mid>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <lal>25.0589450000000014;121.3834570000000213</lal>
    <address>No.27, Wende Rd., Guishan Township, Taoyuan County 333, Taiwan (R.O.C.)</address>
    <rootTotalDev>0</rootTotalDev>
    <rootErrorDev>0</rootErrorDev>
    <totaldev>1</totaldev>
    <errordev>0</errordev>
    <ts>2014-08-25 10:20:56</ts>
  </item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "accountid" : 2,
    "accountname" : "admin",
    "address" : "No.33, Lane 365, Yang Guang St., Neihu Dist., Taipei, 11491, Taiwan, R.O.C.",
    "errordev" : 0,
    "filename" : "eMap_ao05l0lr5b8m.png",
    "lal" : "25.0722858165312026;121.5771357674905175",
    "mid" : 5,
    "name" : "Sunny Building",
    "parent_mid" : 2,
    "rootErrorDev" : 0,
    "rootTotalDev" : 0,
    "totaldev" : 0,
    "ts" : "2014-08-25 10:34:15",
    "type" : "self"
  },
  { "accountid" : 2,

```

```

    "accountname" : "admin",
    "address" : "No.27, Wende Rd., Guishan Township, Taoyuan County 333, Taiwan (R.O.C.)",
    "errordev" : 0,
    "filename" : "eMap_ck02cvesv5lp.png",
    "lal" : "25.05894500000000014;121.38345700000000213",
    "mid" : 4,
    "name" : "Advantech Linkou",
    "parent_mid" : 2,
    "rootErrorDev" : 0,
    "rootTotalDev" : 0,
    "totaldev" : 1,
    "ts" : "2014-08-25 10:20:56",
    "type" : "share"
  }
] } }

```

Note [1]: The type value is represent the map belongs itself or other account shared.

/DeviceMapMgmt/getDeviceByMap

POST

Retrieve devices that under the specific map.

Request Body: (media type: application/xml)

```

<request>
  <item name="mapid" value="4"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <item>
    <mapid>5</mapid>
    <mapname>Layout 1</mapname>
    <totaldev>1</totaldev>
    <errordev>0</errordev>
  </item>
</result>

```

Request Body: (media type: application/json)

```
{ "request" : { "item" : { "@name" : "mapid",  
    "@value" : "4"  
  } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "errordev" : 0,  
    "mapid" : 5,  
    "mapname" : "Layout 1",  
    "totaldev" : 1  
  } } }
```

4.2.4 Device Location

The following resources are applicable:

- [/DeviceLocation/getLastDeviceLoc](#)
- [/DeviceLocation/getLastDeviceLoc<query component>](#)
- [/DeviceLocation/getHistDeviceLoc](#)
- [/DeviceLocation/getHistDeviceLoc<query component>](#)
- [/DeviceLocation/setDeviceLoc](#)

Item	Description
<i>totalsize</i>	Number of items in the result.
<i>agentId</i>	Device agent ID.
<i>handler</i>	Device handler.
<i>sensorId</i>	Device sensor ID.
<i>gpsSystem</i>	The coordinate system of map. - WGS-84 (World Geodetic System) - GCJ-02 (For Google Map) - BD-09 (For Baidu Map)
<i>amount</i>	The amount of point on map locus.
<i>beginTS</i>	The begin time of points of map locus.
<i>endTS</i>	The end time of points of map locus.

/DeviceLocation/getLastDeviceLoc

POST

Get the last location of device.

Request Body: (media type: application/xml)

```
<request>
  <agentid>0000000BAB869241</agentid>
  <handler>SUSIControl</handler>
  <gpsSystem>GCJ-02</gpsSystem>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <Alt>789.789</Alt>
  <Lat>123.123</Lat>
  <Lon>456.456</Lon>
</result>
```

Request Body: (media type: application/json)

```
{
  "request": {
    "agentid": "0000000BAB869241",
    "handler": "SUSIControl",
    "gpsSystem": "GCJ-02"
  }
}
```

Response Body: (media type: application/json)

```
{
  "result": {
    "Alt": "789.789",
    "Lat": "123.123",
    "Lon": "456.456"
  }
}
```

/DeviceLocation/getLastDeviceLoc<query component>

query component format:

?handler=<hdr>&agentId=<id>&gpsSystem=< gps>

hdr: handler Type: String

id: agentId Type: String

gps: gpsSystem Type: String

GET

The difference with post method is query component in url can't accept more than a request object.

Request URL:

/DeviceLocation/getLastDeviceLoc?handler=SUSIControl&agentId=0000000BAB869241&gpsSystem=GCJ-02

Response Body: (media type: application/xml)

```
<result>
  <Alt>789.789</Alt>
  <Lat>123.123</Lat>
  <Lon>456.456</Lon>
</result>
```

Response Body: (media type: application/json)

```
{
  "result": {
    "Alt": "789.789",
    "Lat": "123.123",
    "Lon": "456.456"
  }
}
```

/DeviceLocation/getHistDeviceLoc

POST

Get the history record of location of device.

Request Body: (media type: application/xml)

```
<request>
  <agentid>0000000BAB869241</agentid>
  <handler>SUSIControl</handler>
  <amount>3</amount>
  <beginTS>2015-06-27 12:06:00</beginTS>
  <endTS>2015-07-27 12:06:00</endTS>
  <gpsSystem>GCJ-02</gpsSystem>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <location>
    <Util>2015-06-27T12:06:00.000Z</Util>
    <Alt>49985.63362997166</Alt>
    <Lat>50092.736422759444</Lat>
    <Lon>49714.10206953817</Lon>
  </location>
  <location>
    <Util>2015-07-12T12:06:00.000Z</Util>
    <Alt>50129.33144736503</Alt>
    <Lat>49994.4407578988</Lat>
    <Lon>50159.02337814304</Lon>
  </location>
  <location>
    <Util>2015-07-27T12:06:00.000Z</Util>
    <Alt>50243.63373689647</Alt>
    <Lat>50126.507354961075</Lat>
    <Lon>50055.8210036162</Lon>
  </location>
  <totalsize>3</totalsize>
</result>
```

Request Body: (media type: application/json)

```
{
  "request": {
    "agentid": "0000000BAB869241",
    "handler": "SUSIControl",
    "amount": 3,
    "beginTS": "2015-06-27 12:06:00",
    "endTS": "2015-07-27 12:06:00",
    "gpsSystem": "GCJ-02"
  }
}
```

Response Body: (media type: application/json)

```
{
  "result": {
    "location": [
      {
        "Util": "2015-06-27T12:06:00.000Z",
```

```

        "Alt": "49985.63362997166",
        "Lat": "50092.736422759444",
        "Lon": "49714.10206953817"
    },
    {
        "Util": "2015-07-12T12:06:00.000Z",
        "Alt": "50129.33144736503",
        "Lat": "49994.4407578988",
        "Lon": "50159.02337814304"
    },
    {
        "Util": "2015-07-27T12:06:00.000Z",
        "Alt": "50243.63373689647",
        "Lat": "50126.507354961075",
        "Lon": "50055.8210036162"
    }
],
"totalsize": 3
}
}

```

/DeviceLocation/getHistDeviceLoc<query component>

query component format:

?handler=<hdr>&agentId=<id>&amount=<strAmount>&gpsSystem=<gps>&beginTS=<strBeginTS>&endTS=strEndTS

hdr: handler	Type: String
id: agentId	Type: String
amount: strAmount	Type: String
gps: gpsSystem	Type: String
strBeginTS: BeginTS	Type: String
strEndTS: endTS	Type: String

GET

The difference with post method is query component in url can't accept more than a request object.

Request URL: /DeviceLocation/getLastDeviceLoc?handler=SUSIControl&agentId=

0000000BAB869241&amount=3&gpsSystem=GCJ-02&begins=2015-06-27 12:06:00&endTS=2015-07-27
12:06:00

Response Body: (media type: application/xml)

```
<result>
  <location>
    <Util>2015-06-27T12:06:00.000Z</Util>
    <Alt>49985.63362997166</Alt>
    <Lat>50092.736422759444</Lat>
    <Lon>49714.10206953817</Lon>
  </location>
  <location>
    <Util>2015-07-12T12:06:00.000Z</Util>
    <Alt>50129.33144736503</Alt>
    <Lat>49994.4407578988</Lat>
    <Lon>50159.02337814304</Lon>
  </location>
  <location>
    <Util>2015-07-27T12:06:00.000Z</Util>
    <Alt>50243.63373689647</Alt>
    <Lat>50126.507354961075</Lat>
    <Lon>50055.8210036162</Lon>
  </location>
  <totalsize>3</totalsize>
</result>
```

Response Body: (media type: application/json)

```
{
  "result": {
    "location": [
      {
        "Util": "2015-06-27T12:06:00.000Z",
        "Alt": "49985.63362997166",
        "Lat": "50092.736422759444",
        "Lon": "49714.10206953817"
      },
      {
        "Util": "2015-07-12T12:06:00.000Z",
        "Alt": "50129.33144736503",
        "Lat": "49994.4407578988",
        "Lon": "50159.02337814304"
      }
    ]
  }
}
```

```

    },
    {
        "Util": "2015-07-27T12:06:00.000Z",
        "Alt": "50243.63373689647",
        "Lat": "50126.507354961075",
        "Lon": "50055.8210036162"
    }
],
"totalsize": 3
}

```

/DeviceLocation/setDeviceLoc

POST

Set the location of device.

Request Body: (media type: application/xml)

```

<request>
  <agentid>0000000BAB869241</agentid>
  <handler>SUSIControl</handler>
  <gpsSystem>GCJ-02</gpsSystem>
  <sensorId>
    <n>/GPS/Device/TPV/ALT</n>
    <v>789.789</v>
  </sensorId>
  <sensorId>
    <n>/GPS/Device/TPV/Lon</n>
    <v>456.456</v>
  </sensorId>
  <sensorId>
    <n>/GPS/Device/TPV/Lat</n>
    <v>123.123</v>
  </sensorId>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```
{
  "request": {
    "agentid": "0000000BAB869241",
    "handler": "SUSIControl",
    "gpsSystem": "GCJ-02",
    "sensorId": [
      {
        "n": "/GPS/Device/TPV/ALT",
        "v": "789.789"
      },
      {
        "n": "/GPS/Device/TPV/Lon",
        "v": "456.456"
      },
      {
        "n": "/GPS/Device/TPV/Lat",
        "v": "123.123"
      }
    ]
  }
}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

4.3 Device Control

4.3.1 Device Control

The following resources are applicable:

- [/DeviceCtl/startRegularReport](#)
- [/DeviceCtl/startRegularReportRT](#)
- [/DeviceCtl/getRegularReportParams/<id>](#)
- [/DeviceCtl/getSensorID](#)
- [/DeviceCtl/getSensorID<query component>](#)
- [/DeviceCtl/getMaxHistData](#)
- [/DeviceCtl/getMaxHistData<query component>](#)
- [/DeviceCtl/getMinHistData](#)
- [/DeviceCtl/getMinHistData<query component>](#)
- [/DeviceCtl/getAccHistData](#)

- **/DeviceCtl/getAccHistData<query component>**
- [/DeviceCtl/getAvgHistData](#)
- **/DeviceCtl/getAvgHistData<query component>**
- [/DeviceCtl/getHistData](#)
- **/DeviceCtl/getHistData**
- [/DeviceCtl/getDeviceData](#)
- **/DeviceCtl/getDeviceData**
- [/DeviceCtl/getDeviceDataRT](#)
- [/DeviceCtl/getDeviceDataRT](#)
- [/DeviceCtl/setDeviceData](#)

/DeviceCtl/startRegularReport

POST

Set device start report hardware, software or sensor information automatically, the report interval unit is second based.

Required fields: agentid

Request Body: (media type: application/xml)

```
<request>
  <agentid>0000AAAABBBB0001</agentid>
  <intervalTime>10</intervalTime>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "agentid" : "0000AAAABBBB0001",
               "intervalTime" : 10
             } }
```

Response Body: (media type: application/json)

```
{ "result" : "true" }
```

/DeviceCtl/stopRegularReport

POST

Set device stop report hardware, software or sensor information.

Required fields: agentid

Request Body: (media type: application/xml)

```
<request>
  <agentid>0000AAAABBBB0001</agentid>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "agentid" : "0000AAAABBBB0001" } }
```

Response Body: (media type: application/json)

```
{ "result" : "true" }
```

/DeviceCtl/getRegularReportParams/<id>

id: AgentID Type: Long

GET

Retrieve the device current report status and parameters.

Response Body: (media type: application/xml)

```
<result>
  <autoReport>false</autoReport>
  <intervalTime>10</intervalTime>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "autoReport" : false,
```

```
"intervalTime" : 10
}}
```

/DeviceCtl/startRegularReportRT

POST

Set device start upload hardware, software or sensor information automatically, the report interval and timeout unit is second based.

Required fields: agentid, handlerName

Request Body: (media type: application/xml)

```
<request>
  <agentid>000090FBA61A5C26</agentid>
  <intervalTime>1</intervalTime>
  <timeout>10</timeout>
  <handlerName>NetMonitor</handlerName>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "agentid" : "000090FBA61A5C26",
  "handlerName" : "NetMonitor",
  "intervalTime" : 1,
  "timeout" : 10
} }
```

Response Body: (media type: application/json)

```
{ "result" : "true" }
```

/DeviceCtl/getSensorID

POST

Retrieve the sensor IDs of device handler.

Request Body: (media type: application/xml)

```
<request>
  <agentId>0000000BAB39A520</agentId>
  <handler>SUSIControl</handler>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <handler>SUSIControl</handler>
  <itemList>
    <item>
      <name>Backlight</name>
      <sensorID>/Backlight/Backlight 1/Backlight</sensorID>
    </item>
    <item>
      <name>Firmware version</name>
      <sensorID>/Platform Information/Firmware version</sensorID>
    </item>
    <item>
      <name>BIOS revision</name>
      <sensorID>/Platform Information/BIOS revision</sensorID>
    </item>
    <item>
      <name>Running time (hours)</name>
      <sensorID>/Platform Information/Running time (hours)</sensorID>
    </item>
    <item>
      <name>12V</name>
      <sensorID>/Hardware Monitor/Voltage/12V</sensorID>
    </item>
    <item>
      <name>Level</name>
      <sensorID>/GPIO/GPIO04/Level</sensorID>
    </item>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "agentId" : "0000000BAB39A520",
```

```

    "handler" : "SUSIControl"
  } }

```

Response Body: (media type: application/json)

```

{ "result" : { "handler" : "SUSIControl",
  "itemList" : { "item" : [ { "name" : "/Backlight/Backlight 1/Backlight",
    "sensorID" : "/Backlight/Backlight 1/Backlight",
    "unit" : "ON/OFF"
  },
  { "name" : "/GPIO/GPIO04/Level",
    "sensorID" : "/GPIO/GPIO04/Dir",
    "unit" : "H/L"
  },
  { "name" : "/Hardware Monitor/Fan Speed/System",
    "sensorID" : "/Hardware Monitor/Fan Speed/System",
    "unit" : "RPM"
  },
  { "name" : "/GPIO/GPIO01/Level",
    "sensorID" : "/GPIO/GPIO01/Dir",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO02/Level",
    "sensorID" : "/GPIO/GPIO02/Dir",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO00/Level",
    "sensorID" : "/GPIO/GPIO00/Level",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO03/Level",
    "sensorID" : "/GPIO/GPIO03/Dir",
    "unit" : "H/L"
  }
  ] }
} }

```

/DeviceCtl/getSensorID<query component>

query component format:

?handler=<hdr>&agentId=<id>

hdr: handler Type: String

id: agentId Type: String

GET

The difference with post method is query component in url can't accept more than a request object.

Request URL:

/DeviceCtl/getSensorID?handler=SUSIControl&agentId=0000000BAB39A520

Response Body: (media type: application/xml)

```
<result>
  <handler>SUSIControl</handler>
  <itemList>
    <item>
      <name>Backlight</name>
      <sensorID>/Backlight/Backlight 1/Backlight</sensorID>
    </item>
    <item>
      <name>Firmware version</name>
      <sensorID>/Platform Information/Firmware version</sensorID>
    </item>
    <item>
      <name>BIOS revision</name>
      <sensorID>/Platform Information/BIOS revision</sensorID>
    </item>
    <item>
      <name>Running time (hours)</name>
      <sensorID>/Platform Information/Running time (hours)</sensorID>
    </item>
    <item>
      <name>12V</name>
      <sensorID>/Hardware Monitor/Voltage/12V</sensorID>
    </item>
    <item>
      <name>Level</name>
      <sensorID>/GPIO/GPIO04/Level</sensorID>
    </item>
  </itemList>
</result>
```

```

    </item>
  </itemList>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "handler" : "SUSIControl",
  "itemList" : { "item" : [ { "name" : "/Backlight/Backlight 1/Backlight",
    "sensorID" : "/Backlight/Backlight 1/Backlight",
    "unit" : "ON/OFF"
  },
  { "name" : "/GPIO/GPIO04/Level",
    "sensorID" : "/GPIO/GPIO04/Dir",
    "unit" : "H/L"
  },
  { "name" : "/Hardware Monitor/Fan Speed/System",
    "sensorID" : "/Hardware Monitor/Fan Speed/System",
    "unit" : "RPM"
  },
  { "name" : "/GPIO/GPIO01/Level",
    "sensorID" : "/GPIO/GPIO01/Dir",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO02/Level",
    "sensorID" : "/GPIO/GPIO02/Dir",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO00/Level",
    "sensorID" : "/GPIO/GPIO00/Level",
    "unit" : "H/L"
  },
  { "name" : "/GPIO/GPIO03/Level",
    "sensorID" : "/GPIO/GPIO03/Dir",
    "unit" : "H/L"
  }
] }
} }

```

/DeviceCtl/getMaxHistData

POST

Retrieve the maximum of device sensors value from range of date.

if range of date over then year, it will group by years.

if range of date less than year and over month, it will group by months.

if range of date less than month, and over than day, it will group by days

if range of date less than day, and over than hour, it will group by hours.

if range of date less than hour, and over than minute, it will group by 5 minutes.

if range of date less than minute, and over than second, it will group by seconds.

Required fields: beginTs, endTs, agentId, handler, sensorId (support multi-sensorId)

Request Body: (media type: application/xml)

```
<request>
  <beginTs>2015-03-20 14:56:00</beginTs>
  <endTs>2015-04-20 15:05:00</endTs>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.906</val>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "beginTs" : "2015-03-20 14:56:00",
               "endTs" : "2015-04-20 15:05:00",
               "item" : { "agentId" : "0000000BAB39A520",
                           "handler" : "SUSIControl",
                           "sensorId" : [ "/Hardware Monitor/Voltage/12V",
                                           "/Hardware Monitor/Voltage/5V Standby"
                                         ]
                         }
               }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
                                "unitVal" : "2015-05",
                                "val" : 5.0140000000000002
                              },
                              { "sensorId" : "/Hardware Monitor/Voltage/12V",
                                "unitVal" : "2015-05",
                                "val" : 11.9060000000000001
                              }
                            ],
  "unit" : "Month"
}
```

/DeviceCtl/getMaxHistData<query component>

query component format:

?handler=<hdr>&agentId=<id>&beginTs=<strBeginTs>&endTs=<strEndTs>&sensorId=<strSensorIds>

hdr: handler	Type: String
id: agentId	Type: String
strBeginTs: BeginTs	Type: String
strEndTs: endTs	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request

object. Otherwise, the <strSensorIds> format is “sensorID1|sensorID2|...”, and every sensorID is separated by “|”.

Request URL:

```
/DeviceCtl/getMaxHistData?handler=SUSIControl&agentId=0000000BAB39A520&beginTs=2015-03-20
14:56:00&endTs=2015-04-20 15:05:00 &sensorId=/Hardware Monitor/Voltage/12V|/Hardware
Monitor/Voltage/5V Standby
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.906</val>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
    "unitVal" : "2015-05",
    "val" : 5.0140000000000002
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "unitVal" : "2015-05",
    "val" : 11.9060000000000001
  }
],
  "unit" : "Month"
} }
```

/DeviceCtl/getMinHistData

POST

Retrieve the minimum of device sensors value from range of date.

if range of date over then year, it will group by years.

if range of date less than year and over month, it will group by months.

if range of date less than month, and over than day, it will group by days

if range of date less than day, and over than hour, it will group by hours.

if range of date less than hour, and over than minute, it will group by 5 minutes.

if range of date less than minute, and over than second, it will group by seconds.

Request Body: (media type: application/xml)

```
<request>
  <beginTs>2015-03-20 14:56:00</beginTs>
  <endTs>2015-04-20 15:05:00</endTs>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.876</val>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "beginTs" : "2015-03-20 14:56:00",
               "endTs" : "2015-04-20 15:05:00",
               "item" : { "agentId" : "0000000BAB39A520",
                          "handler" : "SUSIControl",
                          "sensorId" : [ "/Hardware Monitor/Voltage/12V",
                                         "/Hardware Monitor/Voltage/5V Standby"
                                      ]
                        }
    }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
                                "unitVal" : "2015-05",
                                "val" : 5.0140000000000002
                              },
                      { "sensorId" : "/Hardware Monitor/Voltage/12V",
                        "unitVal" : "2015-05",
                        "val" : 11.875999999999999
                      }
    ],
  "unit" : "Month"
}
```

/DeviceCtl/getMinHistData<query component>

query component format:

?handler =<hdr>&agentId=<id>

&beginTs=<strBeginTs>&endTs=<strEndTs>& sensorId=<strSensorIds>

hdr: handler	Type: String
id: agentId	Type: String
strBeginTs: BeginTs	Type: String
strEndTs: endTs	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is "sensorID1|sensorID2|...", and every

sensorID is separated by “|”.

Request URL:

```
/DeviceCtl/getMinHistData?handler=SUSIControl&agentId=0000000BAB39A520&beginTs=2015-03-20
14:56:00&endTs=2015-04-2015:05:00&sensorId=/Hardware Monitor/Voltage/12V|Hardware
Monitor/Voltage/5V Standby
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.876</val>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
    "unitVal" : "2015-05",
    "val" : 5.0140000000000002
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "unitVal" : "2015-05",
    "val" : 11.875999999999999
  }
],
  "unit" : "Month"
} }
```

/DeviceCtl/getAccHistData

POST

Retrieve the accumulate of device sensors value from range of date.

if range of date over then year, it will group by years.

if range of date less than year and over month, it will group by months.

if range of date less than month, and over than day, it will group by days

if range of date less than day, and over than hour, it will group by hours.

if range of date less than hour, and over than minute, it will group by 5 minutes.

if range of date less than minute, and over than second, it will group by seconds.

Request Body: (media type: application/xml)

```
<request>
  <beginTs>2015-03-20 14:56:00</beginTs>
  <endTs>2015-04-20 15:05:00</endTs>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>15.042000000000002</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>35.658</val>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "beginTs" : "2015-03-20 14:56:00",
               "endTs" : "2015-04-20 15:05:00",
               "item" : { "agentId" : "0000000BAB39A520",
                          "handler" : "SUSIControl",
                          "sensorId" : [ "/Hardware Monitor/Voltage/12V",
                                         "/Hardware Monitor/Voltage/5V Standby"
                                      ]
                        }
               }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
                                "unitVal" : "2015-05",
                                "val" : 15.042000000000002
                              },
                              { "sensorId" : "/Hardware Monitor/Voltage/12V",
                                "unitVal" : "2015-05",
                                "val" : 35.658000000000001
                              }
                            ],
  "unit" : "Month"
}
```

/DeviceCtl/getAccHistData<query component>

query component format:

/?handler=<hdr>&agentId=<id>&beginTs=<strBeginTs>&endTs=<strEndTs>&sensorId=<strSensorIds>

hdr: handler	Type: String
id: agentId	Type: String
strBeginTs: BeginTs	Type: String
strEndTs: endTs	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is "sensorID1|sensorID2|...", and every

sensorID is separated by “|”.

Request URL:

```
/DeviceCtl/getAccHistData?handler=SUSIControl&agentId=0000000BAB39A520&beginTs=2015-03-20
14:56:00&endTs=2015-04-2015:05:00&sensorId=/Hardware Monitor/Voltage/5V Standby|/Hardware
Monitor/Voltage/5V Standby
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>15.042000000000002</val>
  </itemList>
  <itemList>
    <val>35.658</val>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
    "unitVal" : "2015-05",
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>

    "val" : 15.042000000000002
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "unitVal" : "2015-05",
    "val" : 35.658000000000001
  }
],
  "unit" : "Month"
} }
```

/DeviceCtl/getAvgHistData

POST

Retrieve the average of device sensors value from range of date.

if range of date over then year, it will group by years.

if range of date less than year and over month, it will group by months.

if range of date less than month, and over than day, it will group by days

if range of date less than day, and over than hour, it will group by hours.

if range of date less than hour, and over than minute, it will group by 5 minutes.

if range of date less than minute, and over than second, it will group by seconds.

Request Body: (media type: application/xml)

```
<request>
  <beginTs>2012-03-20 14:56:00</beginTs>
  <endTs>2015-04-20 15:05:00</endTs>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.886000000000001</val>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "beginTs" : "2012-03-20 14:56:00",
  "endTs" : "2015-04-20 15:05:00",
  "item" : { "agentId" : "0000000BAB39A520",
```

```

    "handler" : "SUSIControl",
    "sensorId" : [ "/Hardware Monitor/Voltage/12V",
                  "/Hardware Monitor/Voltage/5V Standby"
                ]
  }
}

```

Response Body: (media type: application/json)

```

{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
                                "unitVal" : "2015-05",
                                "val" : 5.0140000000000002
                              },
                              { "sensorId" : "/Hardware Monitor/Voltage/12V",
                                "unitVal" : "2015-05",
                                "val" : 11.8860000000000001
                              }
                            ],
  "unit" : "Month"
}

```

/DeviceCtl/getAvgHistData<query component>

query component format:

?handler=<hdr>&agentId=<id>&beginTs=<strBeginTs>&endTs=<strEndTs>&sensorId=<strSensorIds>

hdr: handler	Type: String
id: AgentId	Type: String
strBeginTs: BeginTs	Type: String
strEndTs: endTs	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is "sensorID1|sensorID2|...", and every sensorID is separated by "|".

Request URL:

/DeviceCtl/getAccHistData?handler = SUSIControl&agentId= 0000000BAB39A520&beginTs=2015-03-20

14:56:00&endTs=2015-04-2015:05:00&sensorId=/Hardware Monitor/Voltage/12V |/Hardware Monitor/Voltage/5V Standby

Response Body: (media type: application/xml)

```
<result>
  <unit>Month</unit>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/5V Standby</sensorId>
    <val>5.014</val>
  </itemList>
  <itemList>
    <unitVal>2015-05</unitVal>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <val>11.886000000000001</val>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/5V Standby",
    "unitVal" : "2015-05",
    "val" : 5.0140000000000002
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "unitVal" : "2015-05",
    "val" : 11.886000000000001
  }
],
  "unit" : "Month"
} }
```

/DeviceCtl/getHistData

POST

Retrive the history of device sensors value before end date. The maximum number of value is 100.

Request Body: (media type: application/xml)

```

<request>
  <endTs>2015-10-02 16:50:00:000</endTs>
  <amount>100</amount>
  <item>
    <agentId>0000000BAB374520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
  </item>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:18:226</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:20:854</ts>
    <val>11.906000000000001</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:30:862</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:40:867</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:50:868</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>

```

```
<ts>2015-10-02 08:46:22:049</ts>
<val>11.875999999999999</val>
</itemList>
<totalSize>6</totalSize>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "amount" : 100,
  "endTs" : "2015-10-02 16:50:00:000",
  "item" : { "agentId" : "0000000BAB374520",
    "handler" : "SUSIControl",
    "sensorId" : [ "/Hardware Monitor/Voltage/12V" ]
  }
} }
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:38:18:226",
  "val" : 11.875999999999999
},
{ "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:38:20:854",
  "val" : 11.9060000000000001
},
{ "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:38:30:862",
  "val" : 11.875999999999999
},
{ "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:38:40:867",
  "val" : 11.875999999999999
},
{ "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:38:50:868",
  "val" : 11.875999999999999
},
{ "sensorId" : "/Hardware Monitor/Voltage/12V",
  "ts" : "2015-10-02 08:46:22:049",
  "val" : 11.875999999999999
} ]
}
```

```

    }
  ],
  "totalsize" : 6
}}

```

/DeviceCtl/getHistData<query component>

query component format:

?handler=<hdr>&agentId=<id>&endTs=<strEndTs>&amount=<strAmount>&sensorId=<strSensorIds>

hdr: handler	Type: String
id: agentId	Type: String
strAmount: amount	Type: String
strEndTs: endTs	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is "sensorID1|sensorID2|...", and every sensorID is separated by "|".

Request URL:

/DeviceCtl/getAccHistData?handler=SUSIControl&agentId=0000000BAB39A520&amount=100&endTs=2015-04-2015:05:00&sensorId=/Hardware Monitor/Voltage/12V

Response Body: (media type: application/xml)

```

<result>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:18:226</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:20:854</ts>
    <val>11.906000000000001</val>
  </itemList>
  <itemList>

```

```

    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:30:862</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:40:867</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:38:50:868</ts>
    <val>11.875999999999999</val>
  </itemList>
  <itemList>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
    <ts>2015-10-02 08:46:22:049</ts>
    <val>11.875999999999999</val>
  </itemList>
  <totalsize>6</totalsize>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "ts" : "2015-10-02 08:38:18:226",
    "val" : 11.875999999999999
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "ts" : "2015-10-02 08:38:20:854",
    "val" : 11.906000000000001
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "ts" : "2015-10-02 08:38:30:862",
    "val" : 11.875999999999999
  },
  { "sensorId" : "/Hardware Monitor/Voltage/12V",
    "ts" : "2015-10-02 08:38:40:867",
    "val" : 11.875999999999999
  },
  ]
}

```

```

    { "sensorId" : "/Hardware Monitor/Voltage/12V",
      "ts" : "2015-10-02 08:38:50:868",
      "val" : 11.875999999999999
    },
    { "sensorId" : "/Hardware Monitor/Voltage/12V",
      "ts" : "2015-10-02 08:46:22:049",
      "val" : 11.875999999999999
    }
  ],
  "totalsize" : 6
} }

```

/DeviceCtl/getDeviceData

POST

Retreive the latest sensor or handler data reported data from database, depend on sensorId existed.

Request Body: (media type: application/xml)

```

<request>
  <agentId>0000AAAAABBBB0001</agentId>
  <handler>SUSIControl</handler>
  <sensorId>/Hardware Monitor/Voltage/V33</sensorId>
  <sensorId>/Hardware Monitor/Fan Speed/CPU</sensorId>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <itemList>
    <ts>Tue Dec 30 17:00:00 CST 2014</ts>
    <sensorId>/Hardware Monitor/Voltage/V33</sensorId>
    <v>18.2</v>
  </itemList>
  <itemList>
    <ts>Tue Dec 30 17:00:00 CST 2014</ts>
    <sensorId>/Hardware Monitor/Fan Speed/CPU</sensorId>
    <bv>true</bv>
  </itemList>

```

</result>

Request Body: (media type: application/json)

```
{ "request" : { "agentId" : "0000AAAABBBB0001",  
  "handler" : "SUSIControl",  
  "sensorId" : [ "/Hardware Monitor/Voltage/V33",  
    "/Hardware Monitor/Fan Speed/CPU"  
  ]  
}}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/V33",  
  "ts" : "Tue Dec 30 17:00:00 CST 2014",  
  "v" : 18.199999999999999  
},  
  { "bv" : true,  
    "sensorId" : "/Hardware Monitor/Fan Speed/CPU",  
    "ts" : "Tue Dec 30 17:00:00 CST 2014"  
  }  
] }}
```

/DeviceCtl/getDeviceData<query component>

query component format:

?handler=<hdr>&agentId=<id>&sensorId=<strSensorIds>

hdr: handler	Type: String
id: agentId	Type: String
sensorId: strSensorIds	Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is "sensorID1|sensorID2|...", and every sensorID is separated by "|".

Request URL:

/DeviceCtl/getDeviceData?handler=SUSIControl&agentId=0000000BAB39A520&sensorId=/Hardware Monitor/Voltage/V33|/Hardware Monitor/Fan Speed/CPU

Response Body: (media type: application/xml)

```
<result>
  <itemList>
    <ts>Tue Dec 30 17:00:00 CST 2014</ts>
    <sensorId>/Hardware Monitor/Voltage/V33</sensorId>
    <v>18.2</v>
  </itemList>
  <itemList>
    <ts>Tue Dec 30 17:00:00 CST 2014</ts>
    <sensorId>/Hardware Monitor/Fan Speed/CPU</sensorId>
    <bv>true</bv>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "/Hardware Monitor/Voltage/V33",
                                "ts" : "Tue Dec 30 17:00:00 CST 2014",
                                "v" : 18.199999999999999
                              },
                              { "bv" : true,
                                "sensorId" : "/Hardware Monitor/Fan Speed/CPU",
                                "ts" : "Tue Dec 30 17:00:00 CST 2014"
                              }
                            ] } }
```

/DeviceCtl/getDeviceDataRT

POST

Retrieve device sensor value in real-time.

Request Body: (media type: application/xml)

```
<request>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>/Hardware Monitor/Voltage/5V</sensorId>
    <sensorId>/Hardware Monitor/Voltage/12V</sensorId>
  </item>
```

</request>

Response Body: (media type: application/xml)

```
<result>
  <itemList>
    <sensorId>SUSIControl/Hardware Monitor/Voltage/12V</sensorId>
    <v>12.288</v>
    <statusCode>200</statusCode>
  </itemList>
  <itemList>
    <sensorId>SUSIControl/Hardware Monitor/Voltage/5V</sensorId>
    <v>5.056</v>
    <statusCode>200</statusCode>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : { "agentId" : "0000000BAB39A520",
    "handler" : "SUSIControl",
    "sensorId" : [ " /Hardware Monitor/Voltage/5V",
    "/ Hardware Monitor/Voltage/12V"
  ]
}
}}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "SUSIControl/Hardware Monitor/Voltage/5V",
    "statusCode" : 200,
    "v" : 5.056
  },
  { "sensorId" : "SUSIControl/Hardware Monitor/Voltage/12V",
    "statusCode" : 200,
    "v" : 12.288
  }
] }}
```

/DeviceCtl/getDeviceDataRT<query component>

query component format:

?handler=<hdr>&agentId=<id>&sensorId=<strSensorIds>

hdr: handler Type: String
id: agentId Type: String
sensorId: strSensorIds Type: String

GET

The difference with post method is query component in url can't accept more than a request object. Otherwise, the <strSensorIds> format is “sensorID1|sensorID2|...”, and every sensorID is separated by “|”.

Request URL:

/DeviceCtl/getDeviceDataRT?handler=SUSIControl&agentId=0000000BAB39A520&sensorId=/Hardware Monitor/Voltage/5V|Hardware Monitor/Voltage/12V

Response Body: (media type: application/xml)

```
<result>
  <itemList>
    <sensorId>SUSIControl/Hardware Monitor/Voltage/12V</sensorId>
    <v>12.288</v>
    <statusCode>200</statusCode>
  </itemList>
  <itemList>
    <sensorId>SUSIControl/Hardware Monitor/Voltage/5V</sensorId>
    <v>5.056</v>
    <statusCode>200</statusCode>
  </itemList>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : [ { "sensorId" : "SUSIControl/Hardware Monitor/Voltage/5V",
    "statusCode" : 200,
    "v" : 5.056
  },
  { "sensorId" : "SUSIControl/Hardware Monitor/Voltage/12V",
    "statusCode" : 200,
    "v" : 12.288
  }
] }}
```

/DeviceCtl/setDeviceData

POST

Set value to device sensor in realtime.

Request Body: (media type: application/xml)

```
<request>
  <item>
    <agentId>0000000BAB39A520</agentId>
    <handler>SUSIControl</handler>
    <sensorId>
      <n>/Hardware Monitor/Voltage/12V</n>
      <v>12</v>
    </sensorId>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <itemList>
    <sensorId>SUSIControl/Hardware Monitor/Voltage/12V</sensorId>
    <statusCode>200</statusCode>
    <v>Success</v>
  </itemList>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : { "agentId" : "0000000BAB39A520",
                          "handler" : "SUSIControl",
                          "sensorId" : { "n" : "/Hardware Monitor/Voltage/12V",
                                          "v" : 12
                                        }
                        }
  }
}
```

Response Body: (media type: application/json)

```
{ "result" : { "itemList" : { "sensorId" : "SUSIControl/Hardware Monitor/Voltage/12V",
                             "statusCode" : 200,
                             "v" : "Success"
                           }
}
```

}}}

4.3.2 Hardware Monitor

The following resources are applicable:

- [/HWMonitorMgmt/getHWDData/<id>](#)
- [/HWMonitorMgmt/getHDDData/<id>](#)
- [/HWMonitorMgmt/getNetworkData/<id>](#)

/HWMonitorMgmt/getHWDData/<id>

id: Agent ID Type: String

GET

Retrieve hardware monitor information of values for specific agent ID.

Response Body: (media type: application/json)

```
{ "result" : { "SUSIControl" : { "Backlight" : { "Backlight 1" : { "bn" : "Backlight 1",  
    "e" : [ { "id" : 17106177,  
        "n" : "Brightness",  
        "v" : 90  
    },  
    { "id" : 17105921,  
        "n" : "Backlight",  
        "v" : 1  
    }  
  ],  
    "id" : 17105153  
  },  
    "bn" : "Backlight",  
    "id" : 327680  
  },  
    "GPIO" : { "GPIO00" : { "bn" : "GPIO00",  
    "e" : [ { "id" : 17039873,  
        "n" : "Dir",  
        "v" : 0  
    },  
    { "id" : 17040129,
```

```

        "n" : "Level",
        "v" : 1
    }
],
    "id" : 17039617
},
"GPIO01" : { "bn" : "GPIO01",
    "e" : [ { "id" : 17039874,
        "n" : "Dir",
        "v" : 0
    },
    { "id" : 17040130,
        "n" : "Level",
        "v" : 1
    }
],
    "id" : 17039618
},
"GPIO02" : { "bn" : "GPIO02",
    "e" : [ { "id" : 17039875,
        "n" : "Dir",
        "v" : 0
    },
    { "id" : 17040131,
        "n" : "Level",
        "v" : 1
    }
],
    "id" : 17039619
},
"GPIO03" : { "bn" : "GPIO03",
    "e" : [ { "id" : 17039876,
        "n" : "Dir",
        "v" : 0
    },
    { "id" : 17040132,
        "n" : "Level",
        "v" : 1
    }
]

```

```

    ],
    "id" : 17039620
  },
  "GPIO04" : { "bn" : "GPIO04",
    "e" : [ { "id" : 17039877,
      "n" : "Dir",
      "v" : 1
    },
    { "id" : 17040133,
      "n" : "Level",
      "v" : 1
    }
  ],
  "id" : 17039621
},
"GPIO05" : { "bn" : "GPIO05",
  "e" : [ { "id" : 17039878,
    "n" : "Dir",
    "v" : 1
  },
  { "id" : 17040134,
    "n" : "Level",
    "v" : 1
  }
],
  "id" : 17039622
},
"GPIO06" : { "bn" : "GPIO06",
  "e" : [ { "id" : 17039879,
    "n" : "Dir",
    "v" : 1
  },
  { "id" : 17040135,
    "n" : "Level",
    "v" : 1
  }
],
  "id" : 17039623
},

```

```

    "GPIO07" : { "bn" : "GPIO07",
      "e" : [ { "id" : 17039880,
        "n" : "Dir",
        "v" : 1
      },
      { "id" : 17040136,
        "n" : "Level",
        "v" : 1
      }
    ],
    "id" : 17039624
  },
  "bn" : "GPIO",
  "id" : 262144
},
"Hardware Monitor" : { "Fan Speed" : { "bn" : "Fan Speed",
  "e" : [ { "id" : 16909057,
    "n" : "CPU",
    "v" : 0
  },
  { "id" : 16909058,
    "n" : "System",
    "v" : 0
  }
],
  "id" : 131840
},
"Temperature" : { "bn" : "Temperature",
  "e" : [ { "id" : 16908547,
    "n" : "System",
    "v" : 0
  } ],
  "id" : 131328
},
"Voltage" : { "bn" : "Voltage",
  "e" : [ { "id" : 16908806,
    "n" : "12V",
    "v" : 11.906000000000001
  } ],

```

```

        { "id" : 16908807,
          "n" : "5V Standby",
          "v" : 5.0140000000000002
        },
        { "id" : 16908809,
          "n" : "CMOS Battery",
          "v" : 3.1779999999999999
        }
      ],
      "id" : 131584
    },
    "bn" : "Hardware Monitor",
    "id" : 131072
  },
  "Platform Information" : { "bn" : "Platform Information",
    "e" : [ { "id" : 16843010,
      "n" : "Boot up times",
      "v" : 1947
    },
    { "id" : 16843011,
      "n" : "Running time (hours)",
      "v" : 20699
    },
    { "id" : 16843778,
      "n" : "Board name",
      "sv" : "EBC-AC09"
    },
    { "id" : 16843781,
      "n" : "BIOS revision",
      "sv" : "(AC09X016.BIN)"
    },
    { "id" : 16843265,
      "n" : "Driver version",
      "sv" : "4.0.12800"
    },
    { "id" : 16843266,
      "n" : "Library version",
      "sv" : "4.0.12800"
    }
  ],

```

```

        { "id" : 16843267,
          "n" : "Firmware version",
          "sv" : "17.7.773"
        }
      ],
      "id" : 65536
    }
  } } }

```

/HWMonitorMgmt/getHDDData/<id>

id: Agent ID **Type:** String

GET

Retrieve hard disk information for specific agent ID.

Response Body: (media type: application/json)

```

{ "result" : { "HDDMonitor" : { "hddInfoList" : [ { "basm" : "R",
  "bextend" : "",
  "bn" : "WDC WD5000BEVT-22ZAT0",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "hddType",
    "sv" : "STDDisk"
  },
  { "n" : "hddName",
    "sv" : "WDC WD5000BEVT-22ZAT0"
  },
  { "n" : "hddIndex",
    "v" : 1
  },
  { "n" : "powerOnTime",
    "u" : "hour",
    "v" : 6008
  },
  { "n" : "hddHealthPercent",
    "u" : "percent",
    "v" : 60
  },
  }

```

```

        { "n" : "hddTemp",
          "u" : "celsius",
          "v" : 34
        }
      ],
      "ver" : 1
    },
    { "basm" : "R",
      "bextend" : "",
      "bn" : "SQF-S25M8-64G",
      "bst" : "",
      "btype" : "d",
      "e" : [ { "n" : "hddType",
                 "sv" : "SQFlash"
               },
              { "n" : "hddName",
                 "sv" : "SQFlash-SQF-S25M8-64G"
               },
              { "n" : "hddIndex",
                 "v" : 0
               },
              { "n" : "health",
                 "u" : "percent",
                 "v" : 100
               },
              { "n" : "powerOnTime",
                 "u" : "hour",
                 "v" : 0
               },
              { "n" : "eccCount",
                 "v" : 0
               },
              { "n" : "maxProgram",
                 "v" : 30000
               },
              { "n" : "averageProgram",
                 "v" : 0
               },
              { "n" : "enduranceCheck",

```

```

        "v" : 78
    },
    { "n" : "goodBlockRate",
      "u" : "percent",
      "v" : 52
    },
    { "n" : "maxReservedBlock",
      "v" : 0
    },
    { "n" : "currentReservedBlock",
      "v" : 0
    }
  ],
  "ver" : 1
}

],
"hddSmartInfoList" : [ { "BaseInfo" : { "basm" : "R",
    "bextend" : "",
    "bn" : "BaseInfo",
    "bst" : "",
    "btype" : "d",
    "e" : [ { "n" : "hddType",
      "sv" : "STDDisk"
    },
    { "n" : "hddName",
      "sv" : "WDC WD5000BEVT-22ZAT0"
    },
    { "n" : "hddIndex",
      "v" : 1
    }
  ]
}
],
"CalibrationRetryCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "CalibrationRetryCount",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 11
  }

```

```

    },
    { "n" : "flags",
      "v" : 0
    },
    { "n" : "worst",
      "v" : 0
    },
    { "n" : "value",
      "v" : 100
    },
    { "n" : "vendorData",
      "sv" : "000000000000"
    }
  ]
},
"CurrentPendingSectorCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "CurrentPendingSectorCount",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 197
  },
    { "n" : "flags",
      "v" : 0
    },
    { "n" : "worst",
      "v" : 0
    },
    { "n" : "value",
      "v" : 184
    },
    { "n" : "vendorData",
      "sv" : "000000000537"
    }
  ]
},
"LoadCycleCount" : { "basm" : "R",
  "bextend" : "",

```

```

    "bn" : "LoadCycleCount",
    "bst" : "",
    "btype" : "d",
    "e" : [ { "n" : "type",
               "v" : 193
             },
            { "n" : "flags",
               "v" : 0
             },
            { "n" : "worst",
               "v" : 0
             },
            { "n" : "value",
               "v" : 59
             },
            { "n" : "vendorData",
               "sv" : "000000067D3F"
             }
          ]
  },
  "MultiZoneErrorRate" : { "basm" : "R",
    "bextend" : "",
    "bn" : "MultiZoneErrorRate",
    "bst" : "",
    "btype" : "d",
    "e" : [ { "n" : "type",
               "v" : 200
             },
            { "n" : "flags",
               "v" : 0
             },
            { "n" : "worst",
               "v" : 0
             },
            { "n" : "value",
               "v" : 100
             },
            { "n" : "vendorData",
               "sv" : "000000000000"
             }
          ]
  }

```

```

    }
  ]
},
"PowerCycleCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "PowerCycleCount",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 12
  },
  { "n" : "flags",
    "v" : 0
  },
  { "n" : "worst",
    "v" : 0
  },
  { "n" : "value",
    "v" : 100
  },
  { "n" : "vendorData",
    "sv" : "0000000000390"
  }
]
},
"PowerOnHoursPOH" : { "basm" : "R",
  "bextend" : "",
  "bn" : "PowerOnHoursPOH",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 9
  },
  { "n" : "flags",
    "v" : 0
  },
  { "n" : "worst",
    "v" : 0
  },
  {

```

```

        { "n" : "value",
          "v" : 92
        },
        { "n" : "vendorData",
          "sv" : "000000001778"
        }
      ]
    },
    "PoweroffRetractCount" : { "basm" : "R",
      "bextend" : "",
      "bn" : "PoweroffRetractCount",
      "bst" : "",
      "btype" : "d",
      "e" : [ { "n" : "type",
        "v" : 192
      },
        { "n" : "flags",
          "v" : 0
        },
        { "n" : "worst",
          "v" : 0
        },
        { "n" : "value",
          "v" : 200
        },
        { "n" : "vendorData",
          "sv" : "0000000001FC"
        }
      ]
    },
    "ReadErrorRate" : { "basm" : "R",
      "bextend" : "",
      "bn" : "ReadErrorRate",
      "bst" : "",
      "btype" : "d",
      "e" : [ { "n" : "type",
        "v" : 1
      },
        { "n" : "flags",

```

```

        "v" : 0
    },
    { "n" : "worst",
      "v" : 0
    },
    { "n" : "value",
      "v" : 195
    },
    { "n" : "vendorData",
      "sv" : "000000002B5B"
    }
  ]
},
"ReallocatedSectorsCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "ReallocatedSectorsCount",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 5
  },
    { "n" : "flags",
      "v" : 0
    },
    { "n" : "worst",
      "v" : 0
    },
    { "n" : "value",
      "v" : 200
    },
    { "n" : "vendorData",
      "sv" : "000000000000"
    }
  ]
},
"ReallocationEventCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "ReallocationEventCount",
  "bst" : "",

```

```

    "btype" : "d",
    "e" : [ { "n" : "type",
               "v" : 196
             },
            { "n" : "flags",
               "v" : 0
             },
            { "n" : "worst",
               "v" : 0
             },
            { "n" : "value",
               "v" : 200
             },
            { "n" : "vendorData",
               "sv" : "000000000000"
            }
          ]
  },
  "SeekErrorRate" : { "basm" : "R",
                      "bextend" : "",
                      "bn" : "SeekErrorRate",
                      "bst" : "",
                      "btype" : "d",
                      "e" : [ { "n" : "type",
                                "v" : 7
                              },
                             { "n" : "flags",
                                "v" : 0
                              },
                             { "n" : "worst",
                                "v" : 0
                              },
                             { "n" : "value",
                                "v" : 200
                              },
                             { "n" : "vendorData",
                                "sv" : "000000000000"
                              }
                           ]

```

```

    },
    "SpinRetryCount" : { "basm" : "R",
        "bextend" : "",
        "bn" : "SpinRetryCount",
        "bst" : "",
        "btype" : "d",
        "e" : [ { "n" : "type",
            "v" : 10
        },
        { "n" : "flags",
            "v" : 0
        },
        { "n" : "worst",
            "v" : 0
        },
        { "n" : "value",
            "v" : 100
        },
        { "n" : "vendorData",
            "sv" : "000000000000"
        }
    ]
},
    "SpinUpTime" : { "basm" : "R",
        "bextend" : "",
        "bn" : "SpinUpTime",
        "bst" : "",
        "btype" : "d",
        "e" : [ { "n" : "type",
            "v" : 3
        },
        { "n" : "flags",
            "v" : 0
        },
        { "n" : "worst",
            "v" : 0
        },
        { "n" : "value",
            "v" : 187
        }
    ]
}

```

```

    },
    { "n" : "vendorData",
      "sv" : "000000000661"
    }
  ]
},
"StartStopCount" : { "basm" : "R",
  "bextend" : "",
  "bn" : "StartStopCount",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 4
  },
  { "n" : "flags",
    "v" : 0
  },
  { "n" : "worst",
    "v" : 0
  },
  { "n" : "value",
    "v" : 98
  },
  { "n" : "vendorData",
    "sv" : "00000000086B"
  }
  ]
},
"Temperature" : { "basm" : "R",
  "bextend" : "",
  "bn" : "Temperature",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "type",
    "v" : 194
  },
  { "n" : "flags",
    "v" : 0
  },
  {

```

```

        { "n" : "worst",
          "v" : 0
        },
        { "n" : "value",
          "v" : 113
        },
        { "n" : "vendorData",
          "sv" : "000000000022"
        }
      ]
    },
    "UltraDMACRCErrCount" : { "basm" : "R",
      "bextend" : "",
      "bn" : "UltraDMACRCErrCount",
      "bst" : "",
      "btype" : "d",
      "e" : [ { "n" : "type",
        "v" : 199
      },
        { "n" : "flags",
          "v" : 0
        },
        {
          { "n" : "worst",
            "v" : 0
          },
          { "n" : "value",
            "v" : 200
          },
          { "n" : "vendorData",
            "sv" : "00000000007B"
          }
        ]
      ],
    },
    "UncorrectableSectorCount" : { "basm" : "R",
      "bextend" : "",
      "bn" : "UncorrectableSectorCount",
      "bst" : "",
      "btype" : "d",
      "e" : [ { "n" : "type",

```

```

        "v" : 198
      },
      { "n" : "flags",
        "v" : 0
      },
      { "n" : "worst",
        "v" : 0
      },
      { "n" : "value",
        "v" : 100
      },
      { "n" : "vendorData",
        "sv" : "000000000000"
      }
    ]
  },
  "bn" : "WDC WD5000BEVT-22ZAT0",
  "ver" : 1
}]
}}

```

/HWMonitorMgmt/getNetworkData/<id>

id: Agent ID **Type:** String

GET

Retrieve network information for specific agent ID.

Response Body: (media type: application/json)

```

{ "result" : { "NetMonitor" : { "netMonInfoList" : [ { "bn" : "eth0",
  "bt" : 1429062197,
  "bu" : "",
  "e" : [ { "n" : "adapterName",
    "sv" : "eth0"
  },
  { "n" : "adapterDescription",
    "sv" : ""
  },
  { "n" : "type",

```

```

        "sv" : "1"
    },
    { "n" : "index",
      "v" : 0
    },
    { "n" : "status",
      "sv" : "Disconnect"
    },
    { "n" : "speedMbps",
      "v" : 0
    },
    { "n" : "netUsage",
      "v" : 0
    },
    { "n" : "sendBytes",
      "v" : 0
    },
    { "n" : "sendThroughput",
      "v" : 0
    },
    { "n" : "recvBytes",
      "v" : 0
    },
    { "n" : "recvThroughput",
      "v" : 0
    }
  ],
  "ver" : 1
},
{ "bn" : "eth1",
  "bt" : 1429062197,
  "bu" : "",
  "e" : [ { "n" : "adapterName",
            "sv" : "eth1"
          },
    { "n" : "adapterDescription",
      "sv" : ""
    },
    { "n" : "type",

```

```

        "sv" : "1"
    },
    { "n" : "index",
      "v" : 1
    },
    { "n" : "status",
      "sv" : "Disconnect"
    },
    { "n" : "speedMbps",
      "v" : 0
    },
    { "n" : "netUsage",
      "v" : 0
    },
    { "n" : "sendBytes",
      "v" : 0
    },
    { "n" : "sendThroughput",
      "v" : 0
    },
    { "n" : "recvBytes",
      "v" : 0
    },
    { "n" : "recvThroughput",
      "v" : 0
    }
  ],
  "ver" : 1
}
] } } }

```

4.3.3 Software Monitor

The following resources are applicable:

- [/SWMonitorMgmt/getSWData/<id>](#)
- [/SWMonitorMgmt/resetProcess](#)
- [/SWMonitorMgmt/killProcess](#)

/SWMonitorMgmt/getSWData/<id>

id: Agent ID Type: String

GET

Retrieve software and operation system information for specific agent ID.

Response Body: (media type: application/json)

```
{ "result" : { "ProcessMonitor" : { "Process Monitor Info" : [ { "basn" : "R",
    "bextend" : "",
    "bn" : "30624-kscreenlocker_g",
    "bst" : "",
    "btype" : "d",
    "e" : [ { "n" : "Name",
        "sv" : "kscreenlocker_g"
      },
      { "n" : "PID",
        "v" : 30624
      },
      { "n" : "CPU Usage",
        "v" : 0
      },
      { "n" : "Mem Usage",
        "v" : 48620
      },
      { "n" : "IsActive",
        "v" : 1
      }
    ]
  },
  { "basn" : "R",
    "bextend" : "",
    "bn" : "1142-dbus-daemon",
    "bst" : "",
    "btype" : "d",
    "e" : [ { "n" : "Name",
        "sv" : "dbus-daemon"
      },
      {
```

```

    { "n" : "PID",
      "v" : 1142
    },
    { "n" : "CPU Usage",
      "v" : 0
    },
    { "n" : "Mem Usage",
      "v" : 1516
    },
    { "n" : "IsActive",
      "v" : 1
    }
  ]
},
{ "basm" : "R",
  "bextend" : "",
  "bn" : "1139-dbus-launch",
  "bst" : "",
  "btype" : "d",
  "e" : [ { "n" : "Name",
            "sv" : "dbus-launch"
          },
          { "n" : "PID",
            "v" : 1139
          },
          { "n" : "CPU Usage",
            "v" : 0
          },
          { "n" : "Mem Usage",
            "v" : 556
          },
          { "n" : "IsActive",
            "v" : 1
          }
        ]
},
{ "basm" : "R",
  "bextend" : "",
  "bn" : "1041-startkde",

```

```

        "bst" : "",
        "btype" : "d",
        "e" : [ { "n" : "Name",
                    "sv" : "startkde"
                  },
                  { "n" : "PID",
                    "v" : 1041
                  },
                  { "n" : "CPU Usage",
                    "v" : 0
                  },
                  { "n" : "Mem Usage",
                    "v" : 1232
                  },
                  { "n" : "IsActive",
                    "v" : 1
                  }
                ]
      }
    ],
    "System Monitor Info" : { "basm" : "R",
                              "bextend" : "",
                              "bn" : "System Monitor Info",
                              "bst" : "",
                              "btype" : "d",
                              "e" : [ { "n" : "CPU Usage",
                                          "v" : 35
                                        },
                                        { "n" : "totalPhysMemKB",
                                          "v" : 2007
                                        },
                                        { "n" : "availPhysMemKB",
                                          "v" : 245
                                        }
                                      ]
    }
  }
}
}
}

```

/SWMonitorMgmt/resetProcess

POST

Restart the specific process.

Required fields: *agentId*

Request Body: (media type: application/xml)

```
<request>
  <proc>
    <item name="agentId" value="XXX"/>
    <item name="prcID" value="5200"/>
    <item name="prcID" value="1368"/>
  </proc>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "proc" : { "item" : [ { "@name" : "agentId",
    "@value" : "XXX"
  },
  { "@name" : "prcID",
    "@value" : "5200"
  },
  { "@name" : "prcID",
    "@value" : "1368"
  }
] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SWMonitorMgmt/killProcess

POST

Kill the specific process.

Required fields: *agentId*

Request Body: (media type: application/xml)

```
<request>
  <proc>
    <item name="agentId" value="XXX"/>
    <item name="prcID" value="5200"/>
    <item name="prcID" value="1368"/>
  </proc>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "proc" : { "item" : [ { "@name" : "agentId",
                                     "@value" : "XXX"
                                   },
                                   { "@name" : "prcID",
                                     "@value" : "5200"
                                   },
                                   { "@name" : "prcID",
                                     "@value" : "1368"
                                   }
                                 ] } } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

4.3.4 Power On/Off

The following resources are applicable:

- [/PowerMgmt](#)

- [/PowerMgmt/addPowerSch](#)
- [/PowerMgmt/editPowerSch](#)
- [/PowerMgmt/delPowerSch/<name>](#)
- [/PowerMgmt/getPowerSch/<id>](#)
- [/PowerMgmt/checkSchName/<name>](#)
- [/PowerMgmt/fuzzySearch](#)
- [/PowerMgmt/groupFuzzySearch](#)
- [/PowerMgmt/getMacList/<id>](#)
- [/PowerMgmt/getLastBootupTime/<id>](#)
- [/PowerMgmt/getPowerTime/<id>](#)
- [/PowerMgmt/getGroupByID/<id>](#)
- [/PowerMgmt/getGroupAndAccount](#)

/PowerMgmt

POST

Set device to power on, power off, sleep, hibernate, reboot.

Required fields: *agentId* or *groupId*

action: ON - Power On

: S3 - Sleep

: S4 - Hibernate

: S5 - Power Off

: Reboot - Reboot

Request Body: (media type: application/xml)

<request>

<item name="agentId" value="xxx"/>

<item name="groupId" value="1"/>

<item name="action" value="ON "/>

</request>

Response Body: (media type: application/xml)

<result>

true

</result>

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "agentId",
```

```

        "@value" : "xxx"
    },
    { "@name" : "groupId",
      "@value" : "1"
    },
    { "@name" : "action",
      "@value" : "ON "
    }
  ] } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/PowerMgmt/addPowerSch

POST

Add power on, power off, sleep, hibernate, reboot schedule for device or group.

Required fields: *name, time, mode, action, devices {week, day or date depend on mode}*

action: Power On, Power Off, Sleep, Hibernate, Reboot

devices: agentId, or Group:Group Id

week, if mode is weekly, the value is 0 to 6, represent Sunday to Saturday.

day, if mode is monthly, the value is 1 to 31, represent day of month.

date, if mode is yearly, the value is 1~12/1~31, represent month/day

Request Body: (media type: application/xml)

[sleep action for daily mode for specific device]

```

<request>
  <schedule>
    <item name="name" value="Sch_1"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="daily"/>
    <item name="action" value="Sleep"/>
    <item name="devices" value="0000545345435435"/>
  </schedule>
</request>

```

[power on action for weekly mode for specific device]

```
<request>
```

```

<schedule>
  <item name="name" value="Sch_2"/>
  <item name="enable" value="true"/>
  <item name="time" value="08:00"/>
  <item name="mode" value="weekly"/>
  <item name="action" value="Power On"/>
  <item name="week" value="0;2;3;5;6"/>
  <item name="devices" value="0000545345435435"/>
</schedule>
</request>

```

[power off action for monthly mode for specific group]

```

<request>
  <schedule>
    <item name="name" value="Sch_3"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="monthly"/>
    <item name="action" value="Power Off"/>
    <item name="day" value="10"/>
    <item name="devices" value="Group:1"/>
  </schedule>
</request>

```

[hibernate action for yearly mode for specific group]

```

<request>
  <schedule>
    <item name="name" value="Sch_4"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="yearly"/>
    <item name="action" value="Power Off"/>
    <item name="date" value="2/14"/>
    <item name="devices" value="Group:2"/>
  </schedule>
</request>

```

Response Body: (media type: application/xml)

```

<result>

```

```
true
</result>
```

Request Body: (media type: application/json)

[sleep action for daily mode for specific device]

```
{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_1"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "daily"
    },
    { "@name" : "action",
      "@value" : "Sleep"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }
```

[power on action for weekly mode for specific device]

```
{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_2"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "weekly"
    },
    { "@name" : "action",
      "@value" : "Power On"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }
```

```

    { "@name" : "action",
      "@value" : "Power On"
    },
    { "@name" : "week",
      "@value" : "0;2;3;5;6"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }

```

[power off action for monthly mode for specific group]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_3"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "monthly"
    },
    { "@name" : "action",
      "@value" : "Power Off"
    },
    { "@name" : "day",
      "@value" : "10"
    },
    { "@name" : "devices",
      "@value" : "Group:1"
    }
  ] } } }

```

[hibernate action for yearly mode for specific group]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_4"
    },

```

```

    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "yearly"
    },
    { "@name" : "action",
      "@value" : "Power Off"
    },
    { "@name" : "date",
      "@value" : "2/14"
    },
    { "@name" : "devices",
      "@value" : "Group:2"
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/PowerMgmt/editPowerSch

PUT

Edit power on, power off, sleep, hibernate, reboot schedule for device or group.

Required fields: *name, enable, time, mode, action, devices {week, day or date depend on mode}*

action: Power On, Power Off, Sleep, Hibernate, Reboot

devices: agentId, or Group:Group Id

week, if mode is weekly, the value is 0 to 6, represent Sunday to Saturday.

day, if mode is monthly, the value is 1 to 31, represent day of month.

date, if mode is yearly, the value is 1~12/1~31, represent month/day

Request Body: (media type: application/xml)

[Edit schedule "Sch_1" to sleep action for daily mode for specific device]

<request>

```
<schedule>
  <item name="name" value="Sch_1"/>
  <item name="enable" value="true"/>
  <item name="time" value="08:00"/>
  <item name="mode" value="daily"/>
  <item name="action" value="Sleep"/>
  <item name="devices" value="0000545345435435"/>
</schedule>
</request>
```

[Edit schedule "Sch_2" to power on action for weekly mode for specific device]

```
<request>
  <schedule>
    <item name="name" value="Sch_2"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="weekly"/>
    <item name="action" value="Power On"/>
    <item name="week" value="0;2;3;5;6"/>
    <item name="devices" value="0000545345435435"/>
  </schedule>
</request>
```

[Edit "Sch_3" to power off action for monthly mode for specific group]

```
<request>
  <schedule>
    <item name="name" value="Sch_3"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="monthly"/>
    <item name="action" value="Power Off"/>
    <item name="day" value="10"/>
    <item name="devices" value="Group:1"/>
  </schedule>
</request>
```

[Edit "Sch_4" to hibernate action for yearly mode for specific group]

```
<request>
  <schedule>
```

```

<item name="name" value="Sch_4"/>
<item name="enable" value="true"/>
<item name="time" value="08:00"/>
<item name="mode" value="yearly"/>
<item name="action" value="Power Off"/>
<item name="date" value="2/14"/>
<item name="devices" value="Group:2"/>
</schedule>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

[Edit schedule "Sch_1" to sleep action for daily mode for specific device]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_1"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "daily"
    },
    { "@name" : "action",
      "@value" : "Sleep"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }

```

[Edit schedule "Sch_2" to power on action for weekly mode for specific device]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
"@value" : "Sch_2"
},
{ "@name" : "enable",
"@value" : "true"
},
{ "@name" : "time",
"@value" : "08:00"
},
{ "@name" : "mode",
"@value" : "weekly"
},
{ "@name" : "action",
"@value" : "Power On"
},
{ "@name" : "week",
"@value" : "0;2;3;5;6"
},
{ "@name" : "devices",
"@value" : "0000545345435435"
}
] } } }

```

[Edit "Sch_3" to power off action for monthly mode for specific group]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
"@value" : "Sch_3"
},
{ "@name" : "enable",
"@value" : "true"
},
{ "@name" : "time",
"@value" : "08:00"
},
{ "@name" : "mode",
"@value" : "monthly"
},
{ "@name" : "action",
"@value" : "Power Off"
},

```

```

    { "@name" : "day",
      "@value" : "10"
    },
    { "@name" : "devices",
      "@value" : "Group:1"
    }
  ] } } }

```

[Edit "Sch_4" to hibernate action for yearly mode for specific group]

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
                                           "@value" : "Sch_4"
                                         },
                                         { "@name" : "enable",
                                           "@value" : "true"
                                         },
                                         { "@name" : "time",
                                           "@value" : "08:00"
                                         },
                                         { "@name" : "mode",
                                           "@value" : "yearly"
                                         },
                                         { "@name" : "action",
                                           "@value" : "Power Off"
                                         },
                                         { "@name" : "date",
                                           "@value" : "2/14"
                                         },
                                         { "@name" : "devices",
                                           "@value" : "Group:2"
                                         }
                                       ] } } }
}

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/PowerMgmt/delPowerSch/<name>

name: Schedule Name

Type: String

DELETE

Delete the specific power schedule by schedule name.

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/PowerMgmt/getPowerSch/<id>

id: Agent ID or Group:<Group ID> Type: String

GET

Retrieve power schedule information for specific device.

Response Body: (media type: application/xml)

[id: 0000545345435435, and this device in Group 3]

```
<result>
  <OnOffSearch>
    <Schedule>
      <ScheduleType>GroupSch</ScheduleType>
      <name>SCH_15_18</name>
      <time>09:30</time>
      <mode>daily</mode>
      <action>Reboot</action>
      <enable>true</enable>
      <interval>1</interval>
      <devices total="1">
        <device>Group:3</device>
      </devices>
      <nextExcuteTime>2014-07-26 09:30</nextExcuteTime>
    </Schedule>
  </Schedule>
```

```

    <ScheduleType>DeviceSch</ScheduleType>
    <name>SCH_15_44</name>
    <time>09:30</time>
    <mode>daily</mode>
    <action>Hibernate</action>
    <enable>true</enable>
    <interval>1</interval>
    <devices total="1">
      <device>0000545345435435</device>
    </devices>
    <nextExcuteTime>2014-07-26 09:30</nextExcuteTime>
  </Schedule>
  <Schedule>
    <ScheduleType>DeviceSch</ScheduleType>
    <name>Sch_9</name>
    <time>08:00</time>
    <mode>yearly</mode>
    <action>Power Off</action>
    <enable>true</enable>
    <interval>1</interval>
    <date>2/14</date>
    <devices total="1">
      <device>0000545345435435</device>
    </devices>
    <nextExcuteTime>2015-02-14 08:00</nextExcuteTime>
  </Schedule>
  <total>3</total>
  <nextExcuteTime>2014-07-26 09:30</nextExcuteTime>
  <action>Hibernate</action>
</OnOffSearch>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "OnOffSearch" : { "Schedule" : [ { "ScheduleType" : "GroupSch",
    "action" : "Reboot",
    "devices" : { "@total" : "1",
      "device" : "Group:3"
    },
    "enable" : true,

```

```

        "interval" : 1,
        "mode" : "daily",
        "name" : "SCH_15_18",
        "nextExcuteTime" : "2014-07-26 09:30",
        "time" : "09:30"
    },
    { "ScheduleType" : "DeviceSch",
      "action" : "Hibernate",
      "devices" : { "@total" : "1",
                    "device" : "0000545345435435"
                  },
      "enable" : true,
      "interval" : 1,
      "mode" : "daily",
      "name" : "SCH_15_44",
      "nextExcuteTime" : "2014-07-26 09:30",
      "time" : "09:30"
    },
    { "ScheduleType" : "DeviceSch",
      "action" : "Power Off",
      "date" : "2/14",
      "devices" : { "@total" : "1",
                    "device" : "0000545345435435"
                  },
      "enable" : true,
      "interval" : 1,
      "mode" : "yearly",
      "name" : "Sch_9",
      "nextExcuteTime" : "2015-02-14 08:00",
      "time" : "08:00"
    }
  ],
  "action" : "Hibernate",
  "nextExcuteTime" : "2014-07-26 09:30",
  "total" : 3
} } }

```

Note[1]: Next execute time for above these schedules. If the execute time is same, the yearly mode priority is higher than monthly, weekly, daily. Device priority higher than group.

Response Body: (media type: application/xml)

[id: Group:3]

```
{ "result" : { "OnOffSearch" : { "Schedule" : { "ScheduleType" : "GroupSch",  
        "action" : "Reboot",  
        "devices" : { "@total" : "1",  
            "device" : "Group:3"  
        },  
        "enable" : true,  
        "interval" : 1,  
        "mode" : "daily",  
        "name" : "SCH_15_18",  
        "nextExcuteTime" : "2014-07-26 09:30",  
        "time" : "09:30"  
    },  
    "action" : "Reboot",  
    "nextExcuteTime" : "2014-07-26 09:30",  
    "total" : 1  
} } }
```

Response Body: (media type: application/json)

/PowerMgmt/checkSchName

POST

Check the specific schedule name already exist or not.

Required fields: *schName*

Request Body: (media type: application/xml)

```
<request>  
    <schName value="Sch_1"/>  
</request>
```

Response Body: (media type: application/xml)

```
<result>  
    true  
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "schName" : { "@value" : "Sch_1" } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "schNameExist" : true } }
```

/PowerMgmt/fuzzySearch

POST

Retrieve power on/off information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

connect - connected or disconnected represent device connected or disconnected

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
```

```
<lang value="en-US"/>
```

```
<clause>
```

```
<item name="group_id" value="1"/>
```

```
<item name="account_id" value="1"/>
```

```
<item name="connect" value="connected"/>
```

```
</clause>
```

```
<like value=""/>
```

```
<orderby>
```

```
<item name="ts" value="ASC"/>
```

```
</orderby>
```

```
<resultfilter>
```

```
<item name="page size" value="10"/>
```

```
<item name="page no" value="1"/>
```

```
</resultfilter>
```

</request>

Response Body: (media type: application/xml)

isrdagent - true/false: Determine the device be set repeater for WoL mode.

<result>

<totalsize>2</totalsize>

<item>

<oid>4</oid>

<type>device</type>

<name>imx6qwise3310</name>

<agentId>0000068B1FEBF1AE</agentId>

<serial>0000068B1FEBF1AE</serial>

<status>Connected</status>

<lock>None</lock>

<ts>2015-10-06 17:01:57.211</ts>

<groupname>unassign</groupname>

<groupid>1</groupid>

<powertime></powertime>

<osversion>Poky (Yocto Project Reference Distro) 1.5.3 armv7l</osversion>

<hwState>Normal</hwState>

<hddState>Normal</hddState>

<netState>Normal</netState>

<swState>Normal</swState>

<handlerList>

<handler>

<handlerName>HDDMonitor</handlerName>

<aliasName>HDDMonitor</aliasName>

</handler>

<handler>

<handlerName>NetMonitor</handlerName>

<aliasName>NetMonitor</aliasName>

</handler>

<handler>

<handlerName>ProcessMonitor</handlerName>

<aliasName>ProcessMonitor</aliasName>

</handler>

<handler>

<handlerName>SUSIControl</handlerName>

<aliasName>SUSIControl</aliasName>

```

</handler>
<handler>
  <handlerName>IoTGW</handlerName>
  <aliasName>IoTGW</aliasName>
</handler>
</handlerList>
<agentType>IPC_IoTGW</agentType>
<IoTGW>
  <interface>
    <netInterface>/WSN/00170d0000602e11/Info/SenHubList</netInterface>
    <sensorHub>
      <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
      <did>5</did>
      <agentId>00170d00006062fb</agentId>
      <name>Motion</name>
      <status>Connected</status>
      <upgrade>false</upgrade>
      <hwState>Normal</hwState>
      <hddState>Normal</hddState>
      <netState>Normal</netState>
      <swState>Normal</swState>
      <autoReport>{"All":{}}</autoReport>
      <reportInterval>10</reportInterval>
      <agentType>SenHub</agentType>
    </sensorHub>
  </interface>
  <sensorHub>
    <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
    <did>6</did>
    <agentId>00170d0000606411</agentId>
    <name>CO2</name>
    <status>Connected</status>
    <upgrade>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <autoReport>{"All":{}}</autoReport>
    <reportInterval>10</reportInterval>
    <agentType>SenHub</agentType>
  </sensorHub>
</IoTGW>

```

```

        </sensorHub>
    </interface>
</IoTGW>
<maclist>5E:06:93:A3:41:EA;5E:06:93:A3:41:EA</maclist>
<functionlist>restart</functionlist>
<amtsupport>>false</amtsupport>
<isrdagent>>false</isrdagent>
</item>
<item>
    <oid>3</oid>
    <type>device</type>
    <name>WIN-QFPAAQQ4BHP</name>
    <agentId>0000000BAB374520</agentId>
    <serial>0000000BAB374520</serial>
    <status>Disconnected</status>
    <lock>None</lock>
    <ts>2015-10-02 16:38:17.965</ts>
    <groupname>unassign</groupname>
    <groupid>1</groupid>
    <powertime></powertime>
    <osversion>Windows 7 Service Pack 1 X64</osversion>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <handlerList>
        <handler>
            <handlerName>HDDMonitor</handlerName>
            <aliasName>HDDMonitor</aliasName>
        </handler>
        <handler>
            <handlerName>NetMonitor</handlerName>
            <aliasName>NetMonitor</aliasName>
        </handler>
        <handler>
            <handlerName>ProcessMonitor</handlerName>
            <aliasName>ProcessMonitor</aliasName>
        </handler>
        <handler>
    
```

```

    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<agentType>IPC</agentType>
<maclist>00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:37:45:20;0A:00:27:00:00:00</maclist>
<amtsupport>false</amtsupport>
<functionlist>wol,shutdown,restart,suspend</functionlist>
<isrdagent>false</isrdagent>
</item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
    "@value" : "1"
  },
  { "@name" : "account_id",
    "@value" : "1"
  },
  { "@name" : "connect",
    "@value" : "active"
  }
] },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
    "@value" : "ASC"
  } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
    "@value" : "10"
  },
  { "@name" : "page no",
    "@value" : "1"
  }
] }
} }

```

Response Body: (media type: application/json)

isrdagent - true/false: Determine the device be set repeater for WoL mode.

```

{ "result" : { "item" : [ { "IoTGW" : { "interface" : { "netInterface" :
"/WSN/00170d0000602e11/Info/SenHubList",
        "sensorHub" : [ { "agentId" : "00170d00006062fb",
            "agentType" : "SenHub",
            "autoReport" : "{\\"All\\":{}}",
            "did" : 5,
            "hddState" : "Normal",
            "hwState" : "Normal",
            "name" : "Motion",
            "netState" : "Normal",
            "reportInterval" : 10,
            "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
            "status" : "Connected",
            "swState" : "Normal",
            "upgrade" : false
        },
        { "agentId" : "00170d0000606411",
            "agentType" : "SenHub",
            "autoReport" : "{\\"All\\":{}}",
            "did" : 6,
            "hddState" : "Normal",
            "hwState" : "Normal",
            "name" : "CO2",
            "netState" : "Normal",
            "reportInterval" : 10,
            "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
            "status" : "Connected",
            "swState" : "Normal",
            "upgrade" : false
        }
    ]
    } },
    "agentId" : "0000068B1FEBF1AE",
    "agentType" : "IPC_IoTGW",
    "amtsupport" : false,
    "functionlist" : "restart",
    "groupid" : 1,
    "groupname" : "unassign",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",

```

```

        "handlerName" : "HDDMonitor"
    },
    { "aliasName" : "NetMonitor",
      "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
      "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
      "handlerName" : "SUSIControl"
    },
    { "aliasName" : "IoTGW",
      "handlerName" : "IoTGW"
    }
  ] },
  "hddState" : "Normal",
  "hwState" : "Normal",
  "isrdagent" : false,
  "lock" : "None",
  "maclist" : "5E:06:93:A3:41:EA;5E:06:93:A3:41:EA",
  "name" : "imx6qwise3310",
  "netState" : "Normal",
  "oid" : 4,
  "osversion" : "Poky (Yocto Project Reference Distro) 1.5.3 armv7l",
  "powertime" : null,
  "serial" : "0000068B1FEBF1AE",
  "status" : "Connected",
  "swState" : "Normal",
  "ts" : "2015-10-06 17:01:57.211",
  "type" : "device"
},
{ "agentId" : "0000000BAB374520",
  "agentType" : "IPC",
  "amtsupport" : false,
  "functionlist" : "wol,shutdown,restart,suspend",
  "groupid" : 1,
  "groupname" : "unassign",
  "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
    "handlerName" : "HDDMonitor"
  }
  ]
}

```

```

    },
    { "aliasName" : "NetMonitor",
      "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
      "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
      "handlerName" : "SUSIControl"
    }
  ] },
  "hddState" : "Normal",
  "hwState" : "Normal",
  "isrdagent" : false,
  "lock" : "None",
  "maclist" : "00:D0:C9:12:34:92;00:D0:C9:12:34:91;00:0B:AB:37:45:20;0A:00:27:00:00:00",
  "name" : "WIN-QFPAAQQ4BHP",
  "netState" : "Normal",
  "oid" : 3,
  "osversion" : "Windows 7 Service Pack 1 X64",
  "powertime" : null,
  "serial" : "0000000BAB374520",
  "status" : "Disconnected",
  "swState" : "Normal",
  "ts" : "2015-10-02 16:38:17.965",
  "type" : "device"
}
],
"totalsize" : 2
}}

```

/PowerMgmt/groupFuzzySearch

POST

Retrieve power on/off information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="group_id" value="2"/>
    <item name="account_id" value="1"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

showstatus - false: no device in this group, without show group action status.

- onlyPowerOn: all devices are disconnected, hence show power on for group action.

- allPowerOn: all devices of group are connected, hence do not show power on in group action

- true: show all action (Power On, Power Off, Sleep, Hibernate, Reboot) for group.

```
<result>
  <totalsize>1</totalsize>
  <item>
    <type>group</type>
    <gid>1</gid>
    <name>Linkou</name>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <showstatus>onlyPowerOn</showstatus>
```

```

    <amtsupport>false</amtsupport>
  </item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
    "@value" : "2"
  },
  { "@name" : "account_id",
    "@value" : "1"
  }
] },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
    "@value" : "ASC"
  } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
    "@value" : "10"
  },
  { "@name" : "page no",
    "@value" : "1"
  }
] }
} }

```

Response Body: (media type: application/json)

showstatus - false: no device in this group, without show group action status.

- *onlyPowerOn: all devices are disconnected, hence show power on for group action.*
- *allPowerOn: all devices of group are connected, hence do not show power on in group action*
- *true: show all action (Power On, Power Off, Sleep, Hibernate, Reboot) for group.*

```

{ "result" : { "item" : { "accountid" : 2,
  "accountname" : "admin",
  "amtsupport" : false,
  "gid" : 1,
  "name" : "Linkou",
  "showstatus" : "onlyPowerOn",
  "type" : "group"
},

```

```
"totalsize" : 1
}}
```

/PowerMgmt/getMacList/<id>

id: Agent ID Type: String

GET

Retrieve MAC information for specific device.

Response Body: (media type: application/xml)

```
<result>
  <maclist>54:53:45:43:54:35</maclist>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "maclist" : "54:53:45:43:54:35" } }
```

/PowerMgmt/getLastBootupTime/<id>

id: Agent ID Type: String

GET

Retrieve last boot up time information for specific device.

Response Body: (media type: application/xml)

```
<result>
  <lastbootuptime>2015-02-13 11:25:46.764</lastbootuptime>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "lastbootuptime" : "2015-02-13 11:25:46.764" } }
```

/PowerMgmt/getPowerTime/<id>

id: Agent ID Type: String

GET

Retrieve power time information for specific device.

Response Body: (media type: application/xml)

```
<result>
  <agentid>0000545345435435</agentid>
  <powertime>1 22:3:20</powertime>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "agentid" : "0000545345435435",
               "powertime" : "1 22:3:20"
             } }
```

/PowerMgmt/getGroupByID/<id>

GET

Retrieve the power information with specific group ID.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <type>group</type>
    <gid>1</gid>
    <name>Linkou</name>
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <showstatus>onlyPowerOn</showstatus>
    <amtsupport>false</amtsupport>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
                                           "@value" : "2"
                                         } ],
               },
  },
```

```

        { "@name" : "account_id",
          "@value" : "1"
        }
      ],
      "lang" : { "@value" : "en-US" },
      "like" : { "@value" : "" },
      "orderby" : { "item" : { "@name" : "ts",
                                "@value" : "ASC"
                              } },
      "resultfilter" : { "item" : [ { "@name" : "page size",
                                       "@value" : "10"
                                     } ],
                        { "@name" : "page no",
                          "@value" : "1"
                        }
    ] }
  } }
} }

```

/PowerMgmt/getGroupAndAccount

GET

Retrieve device groups and account information from login account, only show devices with power handler.

Response Body: (media type: application/xml)

```

<result>
  <Account>
    <type>self</type>      Note[1]
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <description>System admin</description>
    <rootTotalDev>1</rootTotalDev>
    <rootErrorDev>1</rootErrorDev>
  </Account>
  <Account>
    <type>share</type>
    <accountid>18</accountid>
    <accountname>Kevin</accountname>
  </Account>
</result>

```

```

    <description>Project Supervisor</description>
    <rootTotalDev>0</rootTotalDev>
    <rootErrorDev>0</rootErrorDev>
  </Account>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "Account" : [ { "accountid" : 2,
    "accountname" : "admin",
    "description" : "System admin",
    "rootErrorDev" : 1,
    "rootTotalDev" : 1,
    "type" : "self"
  },
  { "accountid" : 18,
    "accountname" : "Kevin",
    "description" : "Project Supervisor",
    "rootErrorDev" : 0,
    "rootTotalDev" : 0,
    "type" : "share"
  }
] } }

```

Note[1]: The type value is represent the account belong itself or other account shared.

4.3.5 KVM Control

The following resources are applicable:

- [/KVMMgmt](#)
- [/KVMMgmt/<id>](#)
- [/KVMMgmt/getScreenshot](#)

/KVMMgmt

POST

Set KVM mode and password for specific device.

Required fields: *agentId, mode, {listenport, listenhost, repeaterport, repeaterhost, or repeaterid depended on mode}*

mode: the value is 1 to 3, represent KVM mode to normal, listen and repeater mode. The normal mode of KVM's port number is 5904.

listenport, listenhost: if mode is 2, these values are required to listen port and listen host.

repeaterport, repeaterid: if mode is 3, these values are required to repeater port, and repeater ID.

Request Body: (media type: application/xml)

[Normal mode]

```
<request>
  <item name="agentId" value="xxx"/>
  <item name="mode" value="1"/>
</request>
```

Response Body: (media type: application/xml)

[Agent's KVM mode is default]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>default</KVMmode>   Note[1]
  <port>5904</port>
  <password>mT8w53JS</password>
</result>
```

[Agent's KVM mode is customvnc]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>customvnc</KVMmode>   Note[1]
  <custPort>5906</custPort>
  <custPassword>custompwd</custPassword>
</result>
```

[Agent's KVM mode is disable]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>disable</KVMmode>   Note[1]
</result>
```

Request Body: (media type: application/json)

[Normal mode]

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "xxx"
  },
  { "@name" : "mode",
    "@value" : "1"
  }
] }}
```

Response Body: (media type: application/json)

[Agent's KVM mode is default]

```
{ "result" : { "IP" : "172.22.13.31",
  "KVMmode" : "default",
  "password" : "mT8w53JS",
  "port" : 5904
} }
```

[Agent's KVM mode is customvnc]

```
{ "result" : { "IP" : "172.22.13.31",
  "KVMmode" : "customvnc",
  "custPassword" : "custompwd",
  "custPort" : 5906
} }
```

[Agent's KVM mode is disable]

```
{ "result" : { "IP" : "172.22.13.31",
  "KVMmode" : "disable"
} }
```

Note[1]: KVMmode value is "default", "customvnc", "disable". This setting is adjusted from agent side.

default: User can use IP, port and password to connect.

customvnc: Use IP, custPort and custPassword to connect.

disable: Do not provide KVM function.

Request Body: (media type: application/xml)

[Listen mode]

<request>

```

<item name="agentId" value="xxx"/>
<item name="mode" value="2"/>
<item name="listenport" value="5500"/>
<item name="listenhost" value="172.x.x.x"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <IP>172.22.13.31</IP>
  <KVMmode>default</KVMmode>
  <port>5904</port>
  <password>mT8w53JS</password>
</result>

```

Request Body: (media type: application/json)

[Listen mode]

```

{ "request" : { "item" : [ { "@name" : "agentId",
                           "@value" : "xxx"
                         },
                        { "@name" : "mode",
                           "@value" : "2"
                         },
                        { "@name" : "listenport",
                           "@value" : "5500"
                         },
                        { "@name" : "listenhost",
                           "@value" : "172.x.x.x"
                         }
                      ] } }

```

Response Body: (media type: application/json)

```

{ "result" : { "IP" : "172.22.13.31",
               "KVMmode" : "default",
               "password" : "mT8w53JS",
               "port" : 5904
             } }

```

Request Body: (media type: application/xml)

[Repeater mode]

```
<request>
  <item name="agentId" value="xxx"/>
  <item name="mode" value="3"/>
  <item name="repeaterport" value="5500"/>
  <item name="repeaterid" value="1234"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>default</KVMmode>
  <port>5904</port>
  <password>mT8w53JS</password>
</result>
```

Request Body: (media type: application/json)

[Repeater mode]

```
{ "request" : { "item" : [ { "@name" : "agentId",
                             "@value" : "xxx"
                           },
                        { "@name" : "mode",
                          "@value" : "3"
                        },
                        { "@name" : "repeaterport",
                          "@value" : "5500"
                        },
                        { "@name" : "repeaterid",
                          "@value" : "1234"
                        }
                      ] } }
```

Response Body: (media type: application/json)

```
{ "result" : { "IP" : "172.22.13.31",
               "KVMmode" : "default",
               "password" : "mT8w53JS",
               "port" : 5904
             }
```

```
}}
```

/KVMgmt/<id>

id: Agent ID Type: String

GET

Retrieve KVM information for specific device.

Response Body: (media type: application/xml)

[Agent's KVM mode is default]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>default</KVMmode>
  <port>5904</port>
  <password>mT8w53JS</password>
</result>
```

[Agent's KVM mode is customvnc]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>customvnc</KVMmode>
  <custPort>5906</custPort>
  <custPassword>custompwd</custPassword>
</result>
```

[Agent's KVM mode is disable]

```
<result>
  <IP>172.22.13.31</IP>
  <KVMmode>disable</KVMmode>
</result>
```

Response Body: (media type: application/json)

[Agent's KVM mode is default]

```
{ "result" : { "IP" : "172.22.13.31",
               "KVMmode" : "default",
```

```
"password" : "mT8w53JS",  
"port" : 5904  
} }
```

[Agent's KVM mode is customvnc]

```
{ "result" : { "IP" : "172.22.13.31",  
              "KVMmode" : "customvnc",  
              "custPassword" : "custompwd",  
              "custPort" : 5906  
            } }
```

[Agent's KVM mode is disable]

```
{ "result" : { "IP" : "172.22.13.31",  
              "KVMmode" : "disable"  
            } }
```

/KVMgmt/getScreenshot/<id>

id: Agent ID **Type:** String

GET

Retrieve current screenshot for specific device.

Response Body: (media type: application/xml)

```
<result>  
  <path>/tmp/0000545345435435.jpg</path>      Note[1]  
  <login>true</login>      Note[2]  
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "login" : true,  
              "path" : "/tmp/0000545345435435.jpg"  
            } }
```

Note[1]: Relate path of web server.

Note[2]: Determine device login to operation system, currently. If device is not login, we cannot get the screen shot image and the path is empty.

4.3.6 Terminal

The following resources are applicable:

- [/TerminalMgmt](#)
- [/TerminalMgmt/getTerminalRes](#)

/TerminalMgmt

POST

Set command line to specific device.

Before sending the command to device, the unique "cmdid" is required to create for this session at first. After that, the command string can be accepted. Therefore, in this function need send twice. Otherwise, this session will be kept 30 seconds, if no received other command string or without get terminal result ([/TerminalMgmt/getTerminalRes](#)) for this session.

Required fields: *agentId*, *cmdid*, *cmdstr*

cmdid: the value is 0 to 30000, represent random id for each client.

cmdstr: command line string.

Request Body: (media type: application/xml)

Create unique command id (100) for this session

```
<request>
  <item name="agentid" value="0000545345435435"/>
  <item name="cmdid" value="100"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Create unique command id (100) for this session

```
{ "request" : { "item" : [ { "@name" : "agentid",
  "@value" : "0000545345435435"
},
{ "@name" : "cmdid",
  "@value" : "100"
}
}
}
```

```
]}}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send specific command string (ipconfig) for this session (100)

```
<request>
  <item name="agentid" value="0000545345435435"/>
  <item name="cmdid" value="100"/>
  <item name="cmdstr" value="ver"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send specific command string (ipconfig) for this session (100)

```
{ "request" : { "item" : [ { "@name" : "agentid",
  "@value" : "0000545345435435"
},
{ "@name" : "cmdid",
  "@value" : "100"
},
{ "@name" : "cmdstr",
  "@value" : "ver"
}
] }}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/TerminalMgmt/getTerminalRes

POST

Retrieve terminal command result for specific session.

Required fields: *agentId*, *cmdid*

cmdid: the value is 0 to 30000, represent random id for each client.

Request Body: (media type: application/xml)

Create unique command id (100) for this session

```
<request>
  <item name="agentid" value="0000545345435435"/>
  <item name="cmdid" value="100"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>ver
```

Microsoft Windows [版本 6.1.7601]

E:\CAgent\Bin\Debug>

```
</result>
```

Request Body: (media type: application/json)

Create unique command id (100) for this session

```
{ "request" : { "item" : [ { "@name" : "agentid",
    "@value" : "0000545345435435"
  },
  { "@name" : "cmdid",
    "@value" : "100"
  }
] } }
```

Response Body: (media type: application/json)

```
{ "result" : "ver\n\t\n\t\tMicrosoft Windows [版本 6.1.7601]\n\t\t\n\t\tE:\\CAgent\\Bin\\Debug>\n\t" }
```

4.3.7 Backup & Recovery

The following resources are applicable:

- [/RecoveryMgmt](#)
- [/RecoveryMgmt/<id>](#)
- [/RecoveryMgmt/addRecoverySch](#)
- [/RecoveryMgmt/editRecoverySch](#)
- [/RecoveryMgmt/delRecoverySch/<name>](#)
- [/RecoveryMgmt/getRecoverySch/<id>](#)

- [/RecoveryMgmt/checkSchName](#)
- [/RecoveryMgmt/fuzzySearch](#)
- [/RecoveryMgmt/groupFuzzySearch](#)
- [/RecoveryMgmt/getGroupByID/<id>](#)
- [/RecoveryMgmt/checkSN](#)
- [/RecoveryMgmt/getGroupAndAccount](#)

/RecoveryMgmt

POST

Set device to install/update Acronis, backup, recovery, activate.

Required fields: *agentId* or *groupId*, *action*

aszPercent {if *action* is *install*}, *companyName*, *acronisSN* {if *isActivate* is *true*, default is *false*, or *action* is *activate*}

action: *install*, *update*, *backup*, *recovery*, *activate*

if device not installed, the backup, recovery, activate are not work.

if device installed, but not activated, update is not work.

if device installed and expired, only activate can used.

isActivate: *True* or *False*, represent activate the Acronis. If the value is "*True*", the *companyName* and *acronis SN* items are required.

companyName: company name of Acronis

acronisSN: Serial number of Acronis

aszPercent: The value is 0 to 100%, represent create percentage of free space, if the size is smaller than current system used, the ASZ will create current system size.

Request Body: (media type: *application/xml*)

Send install command to device

<request>

<item name="agentId" value="0000545345435435"/>

<item name="action" value="install"/>

<item name="isActivate" value="True"/>

<item name="companyName" value="Advantech"/>

<item name="acronisSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>

<item name="aszPercent" value="20"/>

</request>

Response Body: (media type: *application/xml*)

<result>

```
true
</result>
```

Request Body: (media type: application/json)

Send install command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
                            "@value" : "0000545345435435"
                          },
                    { "@name" : "action",
                      "@value" : "install"
                    },
                    { "@name" : "isActivate",
                      "@value" : "True"
                    },
                    { "@name" : "companyName",
                      "@value" : "Advantech"
                    },
                    { "@name" : "acronisSN",
                      "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
                    },
                    { "@name" : "aszPercent",
                      "@value" : "20"
                    }
                ] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send backup command to device

```
<request>
  <item name="agentId" value="0000545345435435"/>
  <item name="action" value="backup"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send backup command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "backup"
  }
] }}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send recovery command to device

```
<request>
  <item name="agentId" value="0000545345435435"/>
  <item name="action" value="recovery"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send recovery command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "recovery"
  }
] }}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send activate command to device

```
<request>
  <item name="agentId" value="0000545345435435"/>
  <item name="action" value="activate"/>
  <item name="companyName" value="Advantech"/>
  <item name="acronisSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send activate command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "activate"
  },
  { "@name" : "companyName",
    "@value" : "Advantech"
  },
  { "@name" : "acronisSN",
    "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
  }
] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/RecoveryMgmt/<id>

id: Agent ID **Type:** String

Item	Description
<i>agentID</i>	Device agent ID.

<i>installed</i>	Determine Acronis installed.
<i>expired</i>	Determine Acronis expired.
<i>activated</i>	Determine Acronis activated.
<i>asz</i>	Determine Acronis ASZ existed.
<i>newversion</i>	Determine Acronis have new version.
<i>warningmsg</i>	Acronis warning message.
<i>actionmsg</i>	Acronis action message.

Table 4.3.6 (a)

GET

Retrieve the Acronis information for specific device.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <existInstaller>>false</existInstaller>
  <item>
    <type>device</type>
    <rid>3</rid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>>false</installed>
    <activated>>false</activated>
    <expired>>true</expired>
    <asz>>false</asz>
    <functionList>backup,recovery,remoteinstall,remoteupdate,remoteactivate</functionList>
    <newversion>>false</newversion>
    <name>WIN-QFPAAQQ4BHP</name>
    <agentId>0000000BAB374520</agentId>
    <serial>0000000BAB374520</serial>
    <ip>172.22.13.13</ip>
    <status>Disconnected</status>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
    <os_version>Windows 7 Service Pack 1 X64</os_version>
    <bios_version>(AC09X016.BIN)</bios_version>
```

```

    <agent_version>3.1.15.2820</agent_version>
    <lock>None</lock>
    <handlerList> ... </handlerList>
    <agentType>IPC</agentType>
  </item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "existInstaller" : false,
  "item" : { "actionmsg" : "None",
    "activated" : false,
    "agentId" : "0000000BAB374520",
    "agentType" : "IPC",
    "agent_version" : "3.1.15.2820",
    "asz" : false,
    "bios_version" : "(AC09X016.BIN)",
    "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
    "expired" : true,
    "functionList" : "backup,recovery,remoteinstall,remoteupdate,remoteactivate",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
      "handlerName" : "HDDMonitor"
    },
    { "aliasName" : "NetMonitor",
      "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
      "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
      "handlerName" : "SUSIControl"
    }
  ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "installed" : false,
    "ip" : "172.22.13.13",
    "lock" : "None",
    "name" : "WIN-QFPAAQQ4BHP",
    "netState" : "Normal",

```

```

        "newversion" : false,
        "os_version" : "Windows 7 Service Pack 1 X64",
        "rid" : 3,
        "serial" : "0000000BAB374520",
        "status" : "Disconnected",
        "swState" : "Normal",
        "type" : "device",
        "warningmsg" : "None"
    },
    "totalsize" : 1
} }

```

/RecoveryMgmt/addRecoverySch

POST

Add backup schedule for device or group.

Required fields: *name, time, mode, action, devices {week, day or date depend on mode}*

action: backup

devices: agentId, or Group:Group Id

week, if mode is weekly, the value is 0 to 6, represent Sunday to Saturday.

day, if mode is monthly, the value is 1 to 31, represent day of month.

date, if mode is yearly, the value is 1~12/1~31, represent month/day

Request Body: (media type: application/xml)

backup action for daily mode for specific device

```

<request>
  <schedule>
    <item name="name" value="Sch_1"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="daily"/>
    <item name="action" value="backup"/>
    <item name="devices" value="0000545345435435"/>
  </schedule>
</request>

```

backup action for weekly mode for specific device

```

<request>

```

```

<schedule>
  <item name="name" value="Sch_2"/>
  <item name="enable" value="true"/>
  <item name="time" value="08:00"/>
  <item name="mode" value="weekly"/>
  <item name="action" value="backup"/>
  <item name="week" value="0;2;3;5;6"/>
  <item name="devices" value="0000545345435435"/>
</schedule>
</request>

```

backup action for monthly mode for specific group

```

<request>
  <schedule>
    <item name="name" value="Sch_3"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="monthly"/>
    <item name="action" value="backup"/>
    <item name="day" value="10"/>
    <item name="devices" value="Group:1"/>
  </schedule>
</request>

```

backup action for yearly mode for specific group

```

<request>
  <schedule>
    <item name="name" value="Sch_4"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="yearly"/>
    <item name="action" value="backup"/>
    <item name="date" value="2/14"/>
    <item name="devices" value="Group:2"/>
  </schedule>
</request>

```

Response Body: (media type: application/xml)

```
<result>
```

true
</result>

Request Body: (media type: application/json)

backup action for daily mode for specific device

```
{ "request" : { "schedule" : { "item" : [ { "@name" : "name",  
      "@value" : "Sch_1"  
    },  
    { "@name" : "enable",  
      "@value" : "true"  
    },  
    { "@name" : "time",  
      "@value" : "08:00"  
    },  
    { "@name" : "mode",  
      "@value" : "daily"  
    },  
    { "@name" : "action",  
      "@value" : "backup"  
    },  
    { "@name" : "devices",  
      "@value" : "0000545345435435"  
    }  
  ] } } }
```

backup action for weekly mode for specific device

```
{ "request" : { "schedule" : { "item" : [ { "@name" : "name",  
      "@value" : "Sch_2"  
    },  
    { "@name" : "enable",  
      "@value" : "true"  
    },  
    { "@name" : "time",  
      "@value" : "08:00"  
    },  
    { "@name" : "mode",  
      "@value" : "weekly"  
    },  
    { "@name" : "action",
```

```

        "@value" : "backup"
    },
    { "@name" : "week",
      "@value" : "0;2;3;5;6"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }

```

backup action for monthly mode for specific group

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
                                           "@value" : "Sch_3"
                                         },
                                         { "@name" : "enable",
                                           "@value" : "true"
                                         },
                                         { "@name" : "time",
                                           "@value" : "08:00"
                                         },
                                         { "@name" : "mode",
                                           "@value" : "monthly"
                                         },
                                         { "@name" : "action",
                                           "@value" : "backup"
                                         },
                                         { "@name" : "day",
                                           "@value" : "10"
                                         },
                                         { "@name" : "devices",
                                           "@value" : "Group:1"
                                         }
                                       ] } } }
}

```

backup action for yearly mode for specific group

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
                                           "@value" : "Sch_4"
                                         },
                                         { "@name" : "enable",

```

```

        "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "yearly"
    },
    { "@name" : "action",
      "@value" : "backup"
    },
    { "@name" : "date",
      "@value" : "2/14"
    },
    { "@name" : "devices",
      "@value" : "Group:2"
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/RecoveryMgmt/editRecoverySch



Edit backup schedule for device or group.

Required fields: *name, enable, time, mode, action, devices {week, day or date depend on mode}*

action: backup

devices: agentId, or Group:Group Id

week, if mode is weekly, the value is 0 to 6, represent Sunday to Saturday.

day, if mode is monthly, the value is 1 to 31, represent day of month.

date, if mode is yearly, the value is 1~12/1~31, represent month/day

Request Body: (media type: application/xml)

Edit schedule "Sch_1" to backup action for daily mode for specific device

```
<request>
```

```
  <schedule>
```

```
    <item name="name" value="Sch_1"/>
```

```

    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="daily"/>
    <item name="action" value="backup"/>
    <item name="devices" value="0000545345435435"/>
  </schedule>
</request>

```

Edit schedule "Sch_2" to backup action for weekly mode for specific device

```

<request>
  <schedule>
    <item name="name" value="Sch_2"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="weekly"/>
    <item name="action" value="backup"/>
    <item name="week" value="0;2;3;5;6"/>
    <item name="devices" value="0000545345435435"/>
  </schedule>
</request>

```

Edit "Sch_3" to backup action for monthly mode for specific group

```

<request>
  <schedule>
    <item name="name" value="Sch_3"/>
    <item name="enable" value="true"/>
    <item name="time" value="08:00"/>
    <item name="mode" value="monthly"/>
    <item name="action" value="backup"/>
    <item name="day" value="10"/>
    <item name="devices" value="Group:1"/>
  </schedule>
</request>

```

Edit "Sch_4" to backup action for yearly mode for specific group

```

<request>
  <schedule>
    <item name="name" value="Sch_4"/>
    <item name="enable" value="true"/>

```

```

<item name="time" value="08:00"/>
<item name="mode" value="yearly"/>
<item name="action" value="backup"/>
<item name="date" value="2/14"/>
<item name="devices" value="Group:2"/>
</schedule>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

Edit schedule "Sch_1" to backup action for daily mode for specific device

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_1"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "daily"
    },
    { "@name" : "action",
      "@value" : "backup"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }

```

Edit schedule "Sch_2" to backup action for weekly mode for specific device

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_2"
    },

```

```

    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "weekly"
    },
    { "@name" : "action",
      "@value" : "backup"
    },
    { "@name" : "week",
      "@value" : "0;2;3;5;6"
    },
    { "@name" : "devices",
      "@value" : "0000545345435435"
    }
  ] } } }

```

Edit "Sch_3" to backup action for monthly mode for specific group

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_3"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "monthly"
    },
    { "@name" : "action",
      "@value" : "backup"
    },
    { "@name" : "day",
      "@value" : "10"
    },

```

```

    { "@name" : "devices",
      "@value" : "Group:1"
    }
  ] } } }

```

Edit "Sch_4" to backup action for yearly mode for specific group

```

{ "request" : { "schedule" : { "item" : [ { "@name" : "name",
      "@value" : "Sch_4"
    },
    { "@name" : "enable",
      "@value" : "true"
    },
    { "@name" : "time",
      "@value" : "08:00"
    },
    { "@name" : "mode",
      "@value" : "yearly"
    },
    { "@name" : "action",
      "@value" : "backup"
    },
    { "@name" : "date",
      "@value" : "2/14"
    },
    { "@name" : "devices",
      "@value" : "Group:2"
    }
  ] } } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/RecoveryMgmt/delRecoverySch/<name>

name: Schedule Name Type: String

DELETE

Delete the specific backup schedule by schedule name.

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/RecoveryMgmt/getRecoverySch/<id>

id: Agent ID or Group:Group ID **Type:** String

GET

Retrieve backup schedule information for specific device.

Response Body: (media type: application/xml)

id: 0000545345435435, and this device in Group 3

```
<result>
  <RecoverySearch>
    <Schedule>
      <ScheduleType>DeviceSch</ScheduleType>
      <name>Sch_1</name>
      <time>09:00</time>
      <mode>daily</mode>
      <action>backup</action>
      <enable>true</enable>
      <interval>1</interval>
      <devices total="1">
        <device>0000545345435435</device>
      </devices>
      <nextExcuteTime>2014-07-29 09:00</nextExcuteTime>
    </Schedule>
    <Schedule>
      <ScheduleType>DeviceSch</ScheduleType>
      <name>Sch_2</name>
      <time>08:00</time>
      <mode>weekly</mode>
      <action>backup</action>
      <enable>true</enable>
      <interval>1</interval>
```

```

    <week>0;2;3;5;6</week>
    <devices total="1">
        <device>0000545345435435</device>
    </devices>
    <nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
</Schedule>
<Schedule>
    <ScheduleType>GroupSch</ScheduleType>
    <name>Sch_5</name>
    <time>08:00</time>
    <mode>weekly</mode>
    <action>backup</action>
    <enable>true</enable>
    <interval>1</interval>
    <week>0;2;3;5;6</week>
    <devices total="1">
        <device>Group:3</device>
    </devices>
    <nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
</Schedule>
<total>3</total>
<nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
<action>backup</action>
</RecoverySearch>
</result>

```

Note[1]: Next execute time for above these schedules. If the execute time is same, the yearly mode priority is higher than monthly, weekly, daily. Device priority higher than group.

id: Group:3

```

<result>
    <RecoverySearch>
        <Schedule>
            <ScheduleType>GroupSch</ScheduleType>
            <name>Sch_5</name>
            <time>08:00</time>
            <mode>weekly</mode>
            <action>backup</action>
            <enable>true</enable>

```

```

<interval>1</interval>
<week>0;2;3;5;6</week>
<devices total="1">
  <device>Group:3</device>
</devices>
<nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
</Schedule>
<total>1</total>
<nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
<action>backup</action>
</RecoverySearch>
</result>

```

Response Body: (media type: application/json)

id: 0000545345435435, and this device in Group 3

```

{ "result" : { "RecoverySearch" : { "Schedule" : [ { "ScheduleType" : "DeviceSch",
  "action" : "backup",
  "devices" : { "@total" : "1",
    "device" : "0000545345435435"
  },
  "enable" : true,
  "interval" : 1,
  "mode" : "daily",
  "name" : "Sch_1",
  "nextExcuteTime" : "2014-07-29 09:00",
  "time" : "09:00"
},
{ "ScheduleType" : "DeviceSch",
  "action" : "backup",
  "devices" : { "@total" : "1",
    "device" : "0000545345435435"
  },
  "enable" : true,
  "interval" : 1,
  "mode" : "weekly",
  "name" : "Sch_2",
  "nextExcuteTime" : "2014-07-29 08:00",
  "time" : "08:00",
  "week" : "0;2;3;5;6"

```

```

    },
    { "ScheduleType" : "GroupSch",
      "action" : "backup",
      "devices" : { "@total" : "1",
                    "device" : "Group:3"
                  },
      "enable" : true,
      "interval" : 1,
      "mode" : "weekly",
      "name" : "Sch_5",
      "nextExcuteTime" : "2014-07-29 08:00",
      "time" : "08:00",
      "week" : "0;2;3;5;6"
    }
  ],
  "action" : "backup",
  "nextExcuteTime" : "2014-07-29 08:00",
  "total" : 3
} } }

```

Note[1]: Next execute time for above these schedules. If the execute time is same, the yearly mode priority is higher than monthly, weekly, daily. Device priority higher than group.

id: Group:3

```

{ "result" : { "RecoverySearch" : { "Schedule" : { "ScheduleType" : "GroupSch",
                                                    "action" : "backup",
                                                    "devices" : { "@total" : "1",
                                                                    "device" : "Group:3"
                                                                  },
                                                    "enable" : true,
                                                    "interval" : 1,
                                                    "mode" : "weekly",
                                                    "name" : "Sch_5",
                                                    "nextExcuteTime" : "2014-07-29 08:00",
                                                    "time" : "08:00",
                                                    "week" : "0;2;3;5;6"
                                                    },
                                                    "action" : "backup",
                                                    "nextExcuteTime" : "2014-07-29 08:00",

```

```
"total" : 1
}}}
```

/RecoveryMgmt/checkSchName

POST

Check the specific schedule name already exist or not.

Required fields: *schName*

Request Body: (media type: application/xml)

```
<request>
  <schName value="Sch_1"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <schNameExist>true</schNameExist>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "schName" : { "@value" : "Sch_1" } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "schNameExist" : true } }
```

/RecoveryMgmt/fuzzySearch

POST

Retrieve backup/recovery information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

connect - connected or disconnected represent device connected or disconnected

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="group_id" value="2"/>
    <item name="account_id" value="1"/>
    <item name="connect" value="connected"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <existInstaller>>false</existInstaller>
  <item>
    <type>device</type>
    <rid>4</rid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>>false</installed>
    <activated>>false</activated>
    <expired>>true</expired>
    <asz>>false</asz>
    <functionList>Backup,Recovery</functionList>
    <newversion>>false</newversion>
    <name>imx6qwise3310</name>
    <agentId>0000068B1FEBF1AE</agentId>
    <serial>0000068B1FEBF1AE</serial>
    <ip>172.22.12.219</ip>
```

```

<status>Connected</status>
<hwState>Normal</hwState>
<hddState>Normal</hddState>
<netState>Normal</netState>
<swState>Normal</swState>
<cpuname>ARMv7 Processor rev 10 (v7l)</cpuname>
<os_version>Poky (Yocto Project Reference Distro) 1.5.3 armv7l</os_version>
<bios_version></bios_version>
<agent_version>3.0.0.0</agent_version>
<lock>None</lock>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
  <handler>
    <handlerName>IoTGW</handlerName>
    <aliasName>IoTGW</aliasName>
  </handler>
</handlerList>
<agentType>IPC_IoTGW</agentType>
<IoTGW>
  <interface>
    <netInterface>/WSN/00170d0000602e11/Info/SenHubList</netInterface>
    <sensorHub>
      <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
      <did>5</did>
    </sensorHub>
  </interface>
</IoTGW>

```

```

    <agentId>00170d00006062fb</agentId>
    <name>Motion</name>
    <status>Connected</status>
    <upgrade>>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <autoReport>{"All":{}}</autoReport>
    <reportInterval>10</reportInterval>
    <agentType>SenHub</agentType>
</sensorHub>
<sensorHub>
    <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
    <did>6</did>
    <agentId>00170d0000606411</agentId>
    <name>CO2</name>
    <status>Connected</status>
    <upgrade>>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <autoReport>{"All":{}}</autoReport>
    <reportInterval>10</reportInterval>
    <agentType>SenHub</agentType>
</sensorHub>
</interface>
</IoTGW>
</item>
<item>
    <type>device</type>
    <rid>3</rid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>>false</installed>
    <activated>>false</activated>
    <expired>true</expired>
    <asz>>false</asz>

```

```
<functionList>backup,recovery,remoteinstall,remoteupdate,remoteactivate</functionList>
<newversion>false</newversion>
<name>WIN-QFPAAQQ4BHP</name>
<agentId>0000000BAB374520</agentId>
<serial>0000000BAB374520</serial>
<ip>172.22.13.13</ip>
<status>Disconnected</status>
<hwState>Normal</hwState>
<hddState>Normal</hddState>
<netState>Normal</netState>
<swState>Normal</swState>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<os_version>Windows 7 Service Pack 1 X64</os_version>
<bios_version>(AC09X016.BIN)</bios_version>
<agent_version>3.1.15.2820</agent_version>
<lock>None</lock>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<agentType>IPC</agentType>
</item>
</result>
```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
                                         "@value" : "2"
                                       },
                                         { "@name" : "account_id",
                                         "@value" : "1"
                                       },
                                         { "@name" : "connect",
                                         "@value" : "connected"
                                       }
                                     ] },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
                           "@value" : "ASC"
                         } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
                                  "@value" : "10"
                                },
                                { "@name" : "page no",
                                  "@value" : "1"
                                }
                              ] }
} }

```

Response Body: (media type: application/json)

```

{ "result" : { "existInstaller" : false,
  "item" : [ { "IoTGW" : { "interface" : { "netInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
                                           "sensorHub" : [ { "agentId" : "00170d00006062fb",
                                                             "agentType" : "SenHub",
                                                             "autoReport" : "{\\"All\\":{}}",
                                                             "did" : 5,
                                                             "hddState" : "Normal",
                                                             "hwState" : "Normal",
                                                             "name" : "Motion",
                                                             "netState" : "Normal",
                                                             "reportInterval" : 10,
                                                             "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
                                                             "status" : "Connected",
                                                             "swState" : "Normal",

```

```

        "upgrade" : false
    },
    { "agentId" : "00170d0000606411",
      "agentType" : "SenHub",
      "autoReport" : "{\\"All\\":{}}",
      "did" : 6,
      "hddState" : "Normal",
      "hwState" : "Normal",
      "name" : "CO2",
      "netState" : "Normal",
      "reportInterval" : 10,
      "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
      "status" : "Connected",
      "swState" : "Normal",
      "upgrade" : false
    }
  ]
} },
"actionmsg" : "None",
"activated" : false,
"agentId" : "0000068B1FEBF1AE",
"agentType" : "IPC_IoTGW",
"agent_version" : "3.0.0.0",
"asz" : false,
"bios_version" : null,
"cpuname" : "ARMv7 Processor rev 10 (v7l)",
"expired" : true,
"functionList" : "Backup,Recovery",
"handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
    "handlerName" : "HDDMonitor"
  },
  { "aliasName" : "NetMonitor",
    "handlerName" : "NetMonitor"
  },
  { "aliasName" : "ProcessMonitor",
    "handlerName" : "ProcessMonitor"
  },
  { "aliasName" : "SUSIControl",
    "handlerName" : "SUSIControl"
  }
]

```

```

        },
        { "aliasName" : "IoTGW",
          "handlerName" : "IoTGW"
        }
      ] },
      "hddState" : "Normal",
      "hwState" : "Normal",
      "installed" : false,
      "ip" : "172.22.12.219",
      "lock" : "None",
      "name" : "imx6qwise3310",
      "netState" : "Normal",
      "newversion" : false,
      "os_version" : "Poky (Yocto Project Reference Distro) 1.5.3 armv7l",
      "rid" : 4,
      "serial" : "0000068B1FEBF1AE",
      "status" : "Connected",
      "swState" : "Normal",
      "type" : "device",
      "warningmsg" : "None"
    },
    { "actionmsg" : "None",
      "activated" : false,
      "agentId" : "0000000BAB374520",
      "agentType" : "IPC",
      "agent_version" : "3.1.15.2820",
      "asz" : false,
      "bios_version" : "(AC09X016.BIN)",
      "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
      "expired" : true,
      "functionList" : "backup,recovery,remoteinstall,remoteupdate,remoteactivate",
      "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
                                        "handlerName" : "HDDMonitor"
                                      },
                                    { "aliasName" : "NetMonitor",
                                        "handlerName" : "NetMonitor"
                                      },
                                    { "aliasName" : "ProcessMonitor",
                                        "handlerName" : "ProcessMonitor"
                                      }
                                  ]
    }
  }
}

```

```

        },
        { "aliasName" : "SUSIControl",
          "handlerName" : "SUSIControl"
        }
      ],
      "hddState" : "Normal",
      "hwState" : "Normal",
      "installed" : false,
      "ip" : "172.22.13.13",
      "lock" : "None",
      "name" : "WIN-QFPAAQQ4BHP",
      "netState" : "Normal",
      "newversion" : false,
      "os_version" : "Windows 7 Service Pack 1 X64",
      "rid" : 3,
      "serial" : "0000000BAB374520",
      "status" : "Disconnected",
      "swState" : "Normal",
      "type" : "device",
      "warningmsg" : "None"
    }
  ],
  "totalsize" : 2
} }

```

/RecoveryMgmt/groupFuzzySearch

POST

Retrieve backup/recovery information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="group_id" value="2"/>
    <item name="account_id" value="1"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

showAction - false: no device with connected in this group.

- true: show action (backup, recovery, install, activate or update) for group. Install priority is higher than activate than update.

```
<result>
  <totalsize>1</totalsize>
  <existInstaller>true</existInstaller>
  <item>
    <type>group</type>
    <gid>1</gid>
    <name>Linkou</name>
    <showInstall>true</showInstall>
    <showActivate>true</showActivate>
    <showUpdate>false</showUpdate>
    <showAction>false</showAction>
  </item>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
                                          "@value" : "2"
```

```

    },
    { "@name" : "account_id",
      "@value" : "1"
    }
  ] },
  "lang" : { "@value" : "en-US" },
  "like" : { "@value" : "" },
  "orderby" : { "item" : { "@name" : "ts",
    "@value" : "ASC"
  } },
  "resultfilter" : { "item" : [ { "@name" : "page size",
    "@value" : "10"
  } ],
  { "@name" : "page no",
    "@value" : "1"
  }
  ] }
} }

```

Response Body: (media type: application/json)

showAction - false: no device with connected in this group.

- true: show action (backup, recovery, install, activate or update) for group. Install priority is higher than activate than update.

```

{ "result" : { "existInstaller" : true,
  "item" : { "gid" : 1,
    "name" : "Linkou",
    "showAction" : false,
    "showActivate" : true,
    "showInstall" : true,
    "showUpdate" : false,
    "type" : "group"
  },
  "totalsize" : 1
} }

```

/RecoveryMgmt/getGroupByID/<id>

id: Group ID Type: Long

GET

Retrieve the backup/recovery information with specific group ID.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <existInstaller>true</existInstaller>
  <item>
    <type>group</type>
    <gid>1</gid>
    <name>Linkou</name>
    <showInstall>true</showInstall>
    <showActivate>true</showActivate>
    <showUpdate>false</showUpdate>
    <showAction>false</showAction>
    <nextExcuteTime>2014-07-29 08:00</nextExcuteTime>
    <nextAction>backup</nextAction>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "existInstaller" : true,
  "item" : { "gid" : 1,
    "name" : "Linkou",
    "nextAction" : "backup",
    "nextExcuteTime" : "2014-07-29 08:00",
    "showAction" : false,
    "showActivate" : true,
    "showInstall" : true,
    "showUpdate" : false,
    "type" : "group"
  },
  "totalsize" : 1
} }
```

/RecoveryMgmt/checkSN

POST

Check the serial number of Acronis.

Required fields: *companyName*, *acronisSN*

Request Body: (media type: application/xml)

```
<request>
  <item name="companyName" value="Advantech"/>
  <item name="acronisSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "companyName",
    "@value" : "Advantech"
  },
  { "@name" : "acronisSN",
    "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
  }
] }}
```

/RecoveryMgmt/getGroupAndAccount

GET

Retrieve device groups and account information from login account, only show devices with recovery handler.

Response Body: (media type: application/xml)

```
<result>
  <Account>
    <type>self</type>      Note[1]
    <accountid>2</accountid>
    <accountname>admin</accountname>
```

```

    <description>System admin</description>
    <rootTotalDev>1</rootTotalDev>
    <rootErrorDev>1</rootErrorDev>
  </Account>
  <Account>
    <type>share</type>
    <accountid>18</accountid>
    <accountname>Kevin</accountname>
    <description>Project Supervisor</description>
    <rootTotalDev>0</rootTotalDev>
    <rootErrorDev>0</rootErrorDev>
  </Account>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "Account" : [ { "accountid" : 2,
                              "accountname" : "admin",
                              "description" : "System admin",
                              "rootErrorDev" : 1,
                              "rootTotalDev" : 1,
                              "type" : "self"
                            },
                        { "accountid" : 18,
                          "accountname" : "Kevin",
                          "description" : "Project Supervisor",
                          "rootErrorDev" : 0,
                          "rootTotalDev" : 0,
                          "type" : "share"
                        }
                      ] } }

```

Note[1]: The type value is represent the account belong itself or other account shared.

Response Body: (media type: application/json)

```

{ "result" : true }

```

4.3.8 Protection

The following resources are applicable:

- [/ProtectionMgmt](#)

- [/ProtectionMgmt/<id>](#)
- [/ProtectionMgmt/fuzzySearch](#)
- [/ProtectionMgmt/groupFuzzySearch](#)
- [/ProtectionMgmt/getGroupByID/<id>](#)
- [/ProtectionMgmt/checkkSN](#)
- [/ProtectMgmt/getGroupAndAccount](#)

/ProtectionMgmt

POST

Set device to install/update McAfee, protect, unprotect, activate.

Required fields: *agentId* or *groupId*, *action*

companyName, *mcafeeSN* {if *isActivate* is true, default is false or *action* is activate}

action: install, update, protect, unprotect, activate

if device not installed, the protect, unprotect, activate are not work.

if device installed, but not activated, update is not work.

if device installed and expired, only activate can used.

isActivate: True or False, represent activate the McAfee

companyName: company name of McAfee

mcafeeSN: Serial number of McAfee

Request Body: (media type: application/xml)

Send install command to device

<request>

<item name="agentId" value="0000545345435435"/>

<item name="action" value="install"/>

<item name="isActivate" value="True"/>

<item name="companyName" value="Advantech"/>

<item name="mcafeeSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>

</request>

Response Body: (media type: application/xml)

<result>

true

</result>

Request Body: (media type: application/json)

Send install command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "install"
  },
  { "@name" : "isActivate",
    "@value" : "True"
  },
  { "@name" : "companyName",
    "@value" : "Advantech"
  },
  { "@name" : "mcafeeSN",
    "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
  }
] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send protect command to device

```
<request>
  <item name="agentId" value="0000545345435435"/>
  <item name="action" value="protect"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send protect command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
    "@value" : "0000545345435435"
  },
  { "@name" : "action",
    "@value" : "protect"
  }
] } }
```

```
}  
]}}
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send unprotect command to device

```
<request>  
  <item name="agentId" value="0000545345435435"/>  
  <item name="action" value="unprotect"/>  
</request>
```

Response Body: (media type: application/xml)

```
<result>  
  true  
</result>
```

Request Body: (media type: application/json)

Send unprotect command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",  
                           "@value" : "0000545345435435"  
                        },  
                    { "@name" : "action",  
                      "@value" : "unprotect"  
                    }  
  ] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Request Body: (media type: application/xml)

Send activate command to device

```
<request>  
  <item name="agentId" value="0000545345435435"/>  
  <item name="action" value="activate"/>  
  <item name="companyName" value="Advantech"/>  
  <item name="mcafeeSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>  
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

Send activate command to device

```
{ "request" : { "item" : [ { "@name" : "agentId",
                           "@value" : "0000545345435435"
                         },
                    { "@name" : "action",
                      "@value" : "activate"
                    },
                    { "@name" : "companyName",
                      "@value" : "Advantech"
                    },
                    { "@name" : "mcafeeSN",
                      "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
                    }
                  ] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/ProtectionMgmt/<id>

id: Agent ID **Type:** String

Item	Description
<i>agentID</i>	Device agent ID.
<i>installed</i>	Determine McAfee installed.
<i>expired</i>	Determine McAfee expired.
<i>enable</i>	Determine McAfee protection enabled.
<i>activated</i>	Determine McAfee activated.
<i>newversion</i>	Determine McAfee have new version.
<i>warningmsg</i>	McAfee warning message.
<i>actionmsg</i>	McAfee action message.

Table 4.3.7 (a)

GET

Retrieve the McAfee information for specific device.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <existInstaller>false</existInstaller>
  <item>
    <type>device</type>
    <pid>3</pid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>false</installed>
    <activated>false</activated>
    <expired>true</expired>
    <enable>false</enable>
    <functionList>protect,unprotect,remoteinstall,remoteupdate,remoteactivate</functionList>
    <newversion>false</newversion>
    <name>WIN-QFPAAQQ4BHP</name>
    <agentId>0000000BAB374520</agentId>
    <serial>0000000BAB374520</serial>
    <status>Disconnected</status>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <ip>172.22.13.13</ip>
    <cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
    <os_version>Windows 7 Service Pack 1 X64</os_version>
    <bios_version>(AC09X016.BIN)</bios_version>
    <agent_version>3.1.15.2820</agent_version>
    <lock>None</lock>
    <handlerList>
      <handler>
        <handlerName>HDDMonitor</handlerName>
        <aliasName>HDDMonitor</aliasName>
      </handler>
    </handler>
  </item>
</result>
```

```

    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<agentType>IPC</agentType>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "existInstaller" : false,
  "item" : { "actionmsg" : "None",
    "activated" : false,
    "agentId" : "0000000BAB374520",
    "agentType" : "IPC",
    "agent_version" : "3.1.15.2820",
    "bios_version" : "(AC09X016.BIN)",
    "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
    "enable" : false,
    "expired" : true,
    "functionList" : "protect,unprotect,remoteinstall,remoteupdate,remoteactivate",
    "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
      "handlerName" : "HDDMonitor"
    },
    { "aliasName" : "NetMonitor",
      "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
      "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
      "handlerName" : "SUSIControl"
    }
  ]
}
}
}

```

```

        }
    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "installed" : false,
    "ip" : "172.22.13.13",
    "lock" : "None",
    "name" : "WIN-QFPAAQQ4BHP",
    "netState" : "Normal",
    "newversion" : false,
    "os_version" : "Windows 7 Service Pack 1 X64",
    "pid" : 3,
    "serial" : "0000000BAB374520",
    "status" : "Disconnected",
    "swState" : "Normal",
    "type" : "device",
    "warningmsg" : "None"
},
"totalsize" : 1
}}

```

/ProtectionMgmt/fuzzySearch

POST

Retrieve protection information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

connect - connected or disconnected represent device connected or disconnected

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, warningmsg, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

<request>

```

<lang value="en-US"/>
<clause>
  <item name="group_id" value="2"/>
  <item name="account_id" value="2"/>
  <item name="connect" value="connected"/>
</clause>
<like value=""/>
<orderby>
  <item name="ts" value="ASC"/>
</orderby>
<resultfilter>
  <item name="page size" value="10"/>
  <item name="page no" value="1"/>
</resultfilter>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <totalsize>2</totalsize>
  <existInstaller>false</existInstaller>
  <item>
    <type>device</type>
    <pid>4</pid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>false</installed>
    <activated>false</activated>
    <expired>true</expired>
    <enable>false</enable>
    <functionList>Protect,Unprotect</functionList>
    <newversion>false</newversion>
    <name>imx6qwise3310</name>
    <agentId>0000068B1FEBF1AE</agentId>
    <serial>0000068B1FEBF1AE</serial>
    <status>Connected</status>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
  </item>
</result>

```

```

<ip>172.22.12.219</ip>
<cpuname>ARMv7 Processor rev 10 (v7l)</cpuname>
<os_version>Poky (Yocto Project Reference Distro) 1.5.3 armv7l</os_version>
<bios_version></bios_version>
<agent_version>3.0.0.0</agent_version>
<lock>None</lock>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
  <handler>
    <handlerName>IoTGW</handlerName>
    <aliasName>IoTGW</aliasName>
  </handler>
</handlerList>
<agentType>IPC_IoTGW</agentType>
<IoTGW>
  <interface>
    <netInterface>/WSN/00170d0000602e11/Info/SenHubList</netInterface>
    <sensorHub>
      <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
      <did>5</did>
      <agentId>00170d00006062fb</agentId>
      <name>Motion</name>
      <status>Connected</status>
      <upgrade>false</upgrade>
    </sensorHub>
  </interface>
</IoTGW>

```

```

    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <autoReport>{"All":{}}</autoReport>
    <reportInterval>10</reportInterval>
    <agentType>SenHub</agentType>
</sensorHub>
<sensorHub>
    <sensorHubInterface>/WSN/00170d0000602e11/Info/SenHubList</sensorHubInterface>
    <did>6</did>
    <agentId>00170d0000606411</agentId>
    <name>CO2</name>
    <status>Connected</status>
    <upgrade>>false</upgrade>
    <hwState>Normal</hwState>
    <hddState>Normal</hddState>
    <netState>Normal</netState>
    <swState>Normal</swState>
    <autoReport>{"All":{}}</autoReport>
    <reportInterval>10</reportInterval>
    <agentType>SenHub</agentType>
</sensorHub>
</interface>
</IoTGW>
</item>
<item>
    <type>device</type>
    <pid>3</pid>
    <warningmsg>None</warningmsg>
    <actionmsg>None</actionmsg>
    <installed>>false</installed>
    <activated>>false</activated>
    <expired>>true</expired>
    <enable>>false</enable>
    <functionList>protect,unprotect,remoteinstall,remoteupdate,remoteactivate</functionList>
    <newversion>>false</newversion>
    <name>WIN-QFPAAQQ4BHP</name>
    <agentId>0000000BAB374520</agentId>

```

```

<serial>0000000BAB374520</serial>
<status>Disconnected</status>
<hwState>Normal</hwState>
<hddState>Normal</hddState>
<netState>Normal</netState>
<swState>Normal</swState>
<ip>172.22.13.13</ip>
<cpuname>Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz</cpuname>
<os_version>Windows 7 Service Pack 1 X64</os_version>
<bios_version>(AC09X016.BIN)</bios_version>
<agent_version>3.1.15.2820</agent_version>
<lock>None</lock>
<handlerList>
  <handler>
    <handlerName>HDDMonitor</handlerName>
    <aliasName>HDDMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>NetMonitor</handlerName>
    <aliasName>NetMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>ProcessMonitor</handlerName>
    <aliasName>ProcessMonitor</aliasName>
  </handler>
  <handler>
    <handlerName>SUSIControl</handlerName>
    <aliasName>SUSIControl</aliasName>
  </handler>
</handlerList>
<agentType>IPC</agentType>
</item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
                                         "@value" : "2"
                                       },
                                         { "@name" : "account_id",

```

```

        "@value" : "2"
      },
      { "@name" : "connect",
        "@value" : "connected"
      }
    ] },
    "lang" : { "@value" : "en-US" },
    "like" : { "@value" : "" },
    "orderby" : { "item" : { "@name" : "ts",
      "@value" : "ASC"
    } },
    "resultfilter" : { "item" : [ { "@name" : "page size",
      "@value" : "10"
    } ],
    { "@name" : "page no",
      "@value" : "1"
    }
  ] }
} }

```

Response Body: (media type: application/json)

```

{ "result" : { "existInstaller" : false,
  "item" : [ { "IoTGW" : { "interface" : { "netInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
    "sensorHub" : [ { "agentId" : "00170d00006062fb",
      "agentType" : "SenHub",
      "autoReport" : "{\\"All\\":{}}",
      "did" : 5,
      "hddState" : "Normal",
      "hwState" : "Normal",
      "name" : "Motion",
      "netState" : "Normal",
      "reportInterval" : 10,
      "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
      "status" : "Connected",
      "swState" : "Normal",
      "upgrade" : false
    } ],
    { "agentId" : "00170d0000606411",
      "agentType" : "SenHub",

```

```

        "autoReport" : {"All\":"{}"},
        "did" : 6,
        "hddState" : "Normal",
        "hwState" : "Normal",
        "name" : "CO2",
        "netState" : "Normal",
        "reportInterval" : 10,
        "sensorHubInterface" : "/WSN/00170d0000602e11/Info/SenHubList",
        "status" : "Connected",
        "swState" : "Normal",
        "upgrade" : false
    }
}
} },
"actionmsg" : "None",
"activated" : false,
"agentId" : "0000068B1FEBF1AE",
"agentType" : "IPC_IoTGW",
"agent_version" : "3.0.0.0",
"bios_version" : null,
"cpuname" : "ARMv7 Processor rev 10 (v7l)",
"enable" : false,
"expired" : true,
"functionList" : "Protect,Unprotect",
"handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
    "handlerName" : "HDDMonitor"
    },
    { "aliasName" : "NetMonitor",
    "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
    "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
    "handlerName" : "SUSIControl"
    },
    { "aliasName" : "IoTGW",
    "handlerName" : "IoTGW"
    }
    ]
    }

```

```

    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "installed" : false,
    "ip" : "172.22.12.219",
    "lock" : "None",
    "name" : "imx6qwise3310",
    "netState" : "Normal",
    "newversion" : false,
    "os_version" : "Poky (Yocto Project Reference Distro) 1.5.3 armv7l",
    "pid" : 4,
    "serial" : "0000068B1FEBF1AE",
    "status" : "Connected",
    "swState" : "Normal",
    "type" : "device",
    "warningmsg" : "None"
},
{ "actionmsg" : "None",
  "activated" : false,
  "agentId" : "0000000BAB374520",
  "agentType" : "IPC",
  "agent_version" : "3.1.15.2820",
  "bios_version" : "(AC09X016.BIN)",
  "cpuname" : "Intel(R) Core(TM) i7-2655LE CPU @ 2.20GHz",
  "enable" : false,
  "expired" : true,
  "functionList" : "protect,unprotect,remoteinstall,remoteupdate,remoteactivate",
  "handlerList" : { "handler" : [ { "aliasName" : "HDDMonitor",
    "handlerName" : "HDDMonitor"
  },
    { "aliasName" : "NetMonitor",
      "handlerName" : "NetMonitor"
    },
    { "aliasName" : "ProcessMonitor",
      "handlerName" : "ProcessMonitor"
    },
    { "aliasName" : "SUSIControl",
      "handlerName" : "SUSIControl"
    }
  ] }
}

```

```

    ] },
    "hddState" : "Normal",
    "hwState" : "Normal",
    "installed" : false,
    "ip" : "172.22.13.13",
    "lock" : "None",
    "name" : "WIN-QFPAAQQ4BHP",
    "netState" : "Normal",
    "newversion" : false,
    "os_version" : "Windows 7 Service Pack 1 X64",
    "pid" : 3,
    "serial" : "0000000BAB374520",
    "status" : "Disconnected",
    "swState" : "Normal",
    "type" : "device",
    "warningmsg" : "None"
  }
],
  "totalsize" : 2
} }

```

/ProtectionMgmt/groupFuzzySearch

POST

Retrieve protection information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

group_id - group id

account_id - account id

Like: Each value within space is "**OR**" operation in SQL query.

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - name, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
```

```
<lang value="en-US"/>
```

```
<clause>
```

```

    <item name="group_id" value="3"/>
    <item name="account_id" value="2"/>
  </clause>
  <like value=""/>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="10"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>

```

Response Body: (media type: application/xml)

showstatus - false: no device with connected in this group.

- true: show action (protect, unprotect, install, activate or update) for group. Install priority is higher than activate than update.

```

<result>
  <existInstaller>true</existInstaller>
  <totalsize>1</totalsize>
  <item>
    <type>group</type>
    <gid>3</gid>
    <name>Linkou</name>
    <showInstall>false</showInstall>
    <showActivate>false</showActivate>
    <showUpdate>false</showUpdate>
    <showAction>false</showAction>
  </item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "group_id",
                                         "@value" : "3"
                                       },
                                         { "@name" : "account_id",
                                         "@value" : "2"
                                       }
                                     ] },
  }
}

```

```

"lang" : { "@value" : "en-US" },
"like" : { "@value" : "" },
"orderby" : { "item" : { "@name" : "ts",
    "@value" : "ASC"
  } },
"resultfilter" : { "item" : [ { "@name" : "page size",
    "@value" : "10"
  },
  { "@name" : "page no",
    "@value" : "1"
  }
] }
} }

```

Response Body: (media type: application/json)

showstatus - false: no device with connected in this group.

- true: show action (protect, unprotect, install, activate or update) for group. Install priority is higher than activate than update.

```

{ "result" : { "existInstaller" : true,
  "item" : { "gid" : 3,
    "name" : "Linkou",
    "showAction" : false,
    "showActivate" : false,
    "showInstall" : false,
    "showUpdate" : false,
    "type" : "group"
  },
  "totalsize" : 1
} }

```

/ProtectionMgmt/getGroupByID/<id>

id: Group ID Type: Long

GET

Retrieve the protection information with specific group ID.

Response Body: (media type: application/xml)

```

<result>
  <existInstaller>true</existInstaller>
  <totalsize>1</totalsize>
  <item>
    <type>group</type>
    <gid>3</gid>
    <name>Linkou</name>
    <showInstall>false</showInstall>
    <showActivate>false</showActivate>
    <showUpdate>false</showUpdate>
    <showAction>false</showAction>
  </item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "existInstaller" : true,
  "item" : { "gid" : 3,
    "name" : "Linkou",
    "showAction" : false,
    "showActivate" : false,
    "showInstall" : false,
    "showUpdate" : false,
    "type" : "group"
  },
  "totalsize" : 1
} }

```

/ProtectionMgmt/checkSN

POST

Check the serial number of McAfee.

Required fields: *companyName*, *mcafeeSN*

Request Body: (media type: application/xml)

```

<request>
  <item name="companyName" value="Advantech"/>
  <item name="mcafeeSN" value="xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"/>
</request>

```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "@name" : "companyName",
    "@value" : "Advantech"
  },
  { "@name" : "mcafeeSN",
    "@value" : "xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx"
  }
] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/ProtectMgmt/getGroupAndAccount

GET

Retrieve device groups and account information from login account, only show devices with protection handler.

Response Body: (media type: application/xml)

```
<result>
  <Account>
    <type>self</type>      Note[1]
    <accountid>2</accountid>
    <accountname>admin</accountname>
    <description>System admin</description>
    <rootTotalDev>1</rootTotalDev>
    <rootErrorDev>1</rootErrorDev>
  </Account>
  <Account>
    <type>share</type>
    <accountid>18</accountid>
    <accountname>Kevin</accountname>
    <description>Project Supervisor</description>
    <rootTotalDev>0</rootTotalDev>
```

```

    <rootErrorDev>0</rootErrorDev>
  </Account>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "Account" : [ { "accountid" : 2,
    "accountname" : "admin",
    "description" : "System admin",
    "rootErrorDev" : 1,
    "rootTotalDev" : 1,
    "type" : "self"
  },
  { "accountid" : 18,
    "accountname" : "Kevin",
    "description" : "Project Supervisor",
    "rootErrorDev" : 0,
    "rootTotalDev" : 0,
    "type" : "share"
  }
] } }

```

Note[1]: The type value is represent the account belong itself or other account shared.

4.4 Event Management

4.4.1 EventMgmt

The following resources are applicable:

- [/EventMgmt/<type>](#)
- [/EventMgmt/fuzzySearch](#)
- [/EventMgmt/exportEvent](#)
- [/EventMgmt/getEventPeriod](#)
- [/EventMgmt/long-polling](#)

/EventMgmt/<type>

type: Event Type

Type: String

DELTE

Delete specific type of event, for example, "device", "system", or "operation".

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/EventMgmt/fuzzySearch

POST

Retrieve event information from condition

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

severity - all, information, warning, error

eventType - device, system, operation

eventSubtype - event subtype

deviceID, groupID, accountID - only one can be applied, the groupID priority is higher than accountID, than deviceID.

lastevtid - large than this event id

Like - condition: Each value within space is "**OR**" operation in SQL query.

Like - field: *type, subtype, severity, message, device_name, account_name*

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - type, subtype, severity, message, deviceId, deviceName, accountId, accountName, ts

Resultfilter: Get the top number of result

Request Body: (media type: application/xml)

```
<request>
  <lang value="zh-TW"/>
  <clause>
    <item name="severity" value="all"/>
    <item name="eventType" value="device"/>
    <item name="accountID" value="2"/>
    <item name="groupID" value="1"/>
    <item name="beginTS" value=""/>
```

```

    <item name="endTS" value=""/>
</clause>
<like>
    <item name="condition" value=""/>
    <item name="field" value="message"/>
    <item name="field" value="device_name"/>
    <item name="field" value="severity"/>
</like>
<orderby>
    <item name="ts" value="DESC"/>
</orderby>
<resultfilter>
    <item name="topNum" value="100"/>
</resultfilter>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <totalsize>3</totalsize>
  <item>
    <type>Device</type>
    <subtype>Acronis Update Status</subtype>
    <origSeverity>Information</origSeverity>
    <severity>Information</severity>
    <message>Acronis Update Status</message>
    <deviceName>imx6qwise3310</deviceName>
    <deviceID>4</deviceID>
    <agentID>0000068B1FEBF1AE</agentID>
    <accountName>admin</accountName>
    <eventID>68</eventID>
    <sessionid>N/A</sessionid>
    <ts>2015-10-06 17:01:55.721</ts>
  </item>
  <item>
    <type>Device</type>
    <subtype>McAfee Update Status</subtype>
    <origSeverity>Information</origSeverity>
    <severity>Information</severity>
    <message>McAfee Update Status</message>
  </item>

```

```

<deviceName>imx6qwise3310</deviceName>
<deviceID>4</deviceID>
<agentID>0000068B1FEBF1AE</agentID>
<accountName>admin</accountName>
<eventID>67</eventID>
<sessionid>N/A</sessionid>
<ts>2015-10-06 17:01:54.668</ts>
</item>
<item>
  <type>Device</type>
  <subtype>AddDevice</subtype>
  <origSeverity>Information</origSeverity>
  <severity>Information</severity>
  <message>Device added</message>
  <deviceName>imx6qwise3310</deviceName>
  <deviceID>4</deviceID>
  <agentID>0000068B1FEBF1AE</agentID>
  <accountName>admin</accountName>
  <eventID>66</eventID>
  <sessionid>N/A</sessionid>
  <ts>2015-10-06 17:01:53.380</ts>
</item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "clause" : { "item" : [ { "@name" : "severity",
                                         "@value" : "all"
                                       },
                                       { "@name" : "eventType",
                                         "@value" : "device"
                                       },
                                       { "@name" : "accountID",
                                         "@value" : "2"
                                       },
                                       { "@name" : "groupID",
                                         "@value" : "1"
                                       },
                                       { "@name" : "beginTS",
                                         "@value" : ""
                                       }
                                     ]
               }

```

```

    },
    { "@name" : "endTS",
      "@value" : ""
    }
  ] },
  "lang" : { "@value" : "zh-TW" },
  "like" : { "item" : [ { "@name" : "condition",
    "@value" : ""
  },
  { "@name" : "field",
    "@value" : "message"
  },
  { "@name" : "field",
    "@value" : "device_name"
  },
  { "@name" : "field",
    "@value" : "severity"
  }
  ] },
  "orderby" : { "item" : { "@name" : "ts",
    "@value" : "DESC"
  } },
  "resultfilter" : { "item" : { "@name" : "topNum",
    "@value" : "100"
  } }
} }

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "accountName" : "admin",
  "agentID" : "0000068B1FEBF1AE",
  "deviceID" : 4,
  "deviceName" : "imx6qwise3310",
  "eventID" : 68,
  "message" : "Acronis Update Status",
  "origSeverity" : "Information",
  "sessionid" : "N/A",
  "severity" : "Information",
  "subtype" : "Acronis Update Status",
  "ts" : "2015-10-06 17:01:55.721",

```

```

        "type" : "Device"
    },
    { "accountName" : "admin",
      "agentID" : "0000068B1FEBF1AE",
      "deviceID" : 4,
      "deviceName" : "imx6qwise3310",
      "eventID" : 67,
      "message" : "McAfee Update Status",
      "origSeverity" : "Information",
      "sessionId" : "N/A",
      "severity" : "Information",
      "subtype" : "McAfee Update Status",
      "ts" : "2015-10-06 17:01:54.668",
      "type" : "Device"
    },
    { "accountName" : "admin",
      "agentID" : "0000068B1FEBF1AE",
      "deviceID" : 4,
      "deviceName" : "imx6qwise3310",
      "eventID" : 66,
      "message" : "Device added",
      "origSeverity" : "Information",
      "sessionId" : "N/A",
      "severity" : "Information",
      "subtype" : "AddDevice",
      "ts" : "2015-10-06 17:01:53.380",
      "type" : "Device"
    }
  ],
  "totalsize" : 3
} }

```

/EventMgmt/exportEvent

POST

Retrieve event information from condition and export to xls.

Lang: Translate the result to specific language.

en-US, zh-TW, zh-CN, ja_JP

Clause: Each item is "**And**" operation in SQL query.

severity - all, information, warning, error

eventType - device, system, operation

deviceID, groupID, accountID - only one can be applied, the groupID priority is higher than accountID, than deviceID.

beginTS - begin time of event

endTS - end time of event

Like - condition: Each value within space is "**OR**" operation in SQL query.

Like - field: *type, subtype, severity, message, device_name, account_name*

Orderby: Order by which field and in **DESC**ending or **ASC**ending.

Field - type, subtype, severity, message, deviceId, deviceName, accountId, accountName, ts

Resultfilter: Get the SQL result with specific range by page size and page number.

Request Body: (media type: application/xml)

```
<request>
  <lang value="en-US"/>
  <clause>
    <item name="severity" value="warning" />
    <item name="accountID" value="1"/>
    <item name="groupID" value="1"/>
    <item name="deviceID" value="1"/>
    <item name="eventType" value="device"/>
    <item name="beginTS" value="2012-03-29"/>
    <item name="endTS" value="2013-04-01"/>
  </clause>
  <like>
    <item name="condition" value=""/>
    <item name="field" value=""/><item name="field" value=""/>
  </like>
  <orderby>
    <item name="ts" value="ASC"/>
  </orderby>
  <resultfilter>
    <item name="page size" value="20"/>
    <item name="page no" value="1"/>
  </resultfilter>
</request>
```

Response Body: (media type: application/xml)

<result>

/tmp/evtExport.xls

</result>

Request Body: (media type: application/json)

```
{ "request" : { "clause" : { "item" : [ { "@name" : "severity",
    "@value" : "warning "
  },
  { "@name" : "accountID",
    "@value" : "1"
  },
  { "@name" : "groupID",
    "@value" : "1"
  },
  { "@name" : "deviceID",
    "@value" : "1"
  },
  { "@name" : "eventType",
    "@value" : "device"
  },
  { "@name" : "beginTS",
    "@value" : "2012-03-29"
  },
  { "@name" : "endTS",
    "@value" : "2013-04-01"
  }
] },
"lang" : { "@value" : "en-US" },
"like" : { "item" : [ { "@name" : "condition",
    "@value" : ""
  },
  { "@name" : "field",
    "@value" : ""
  },
  { "@name" : "field",
    "@value" : ""
  }
] },
"orderby" : { "item" : { "@name" : "ts",
```

```

        "@value" : "ASC"
    } },
    "resultfilter" : { "item" : [ { "@name" : "page size",
        "@value" : "20"
    },
    { "@name" : "page no",
        "@value" : "1"
    }
    ] }
} }

```

Response Body: (media type: application/json)

```
{ "result" : "/tmp/evtExport.xls" }
```

/EventMgmt/getEventPeriod

POST

Retrieve event period from current event table.

eventType - all, device, system, operation

Request Body: (media type: application/xml)

```

<request>
    <item name="eventType" value="operation"/>
</request>

```

Response Body: (media type: application/xml)

```

<result>
    <beginDate>2014-07-29</beginDate>
    <endDate>2014-07-21</endDate>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "item" : { "@name" : "eventType",
    "@value" : "operation"
} } }

```

Response Body: (media type: application/json)

```

{ "result" : { "beginDate" : "2014-07-29",
    "endDate" : "2014-07-21"
}

```

```
}}
```

/EventMgmt/long-polling

POST

Retrieve event from database, if event be generated and newer event id larger than "lasteventid". It will be kept 60s on this request without event be generated.

Request Body: (media type: application/xml)

```
<request>
  <item name="lasteventid" value="349"/>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <totalsize>2</totalsize>
  <item>
    <type>Device</type>
    <subtype>Agent Network Info</subtype>
    <origSeverity>Information</origSeverity>
    <severity>Information</severity>
    <message>Agent Network Back to Normal</message>
    <deviceName>WIN-B093OCUOG0P</deviceName>
    <deviceID>3</deviceID>
    <agentID>0000545345435435</agentID>
    <accountName>admin</accountName>
    <eventID>351</eventID>
    <ts>2014-07-29 13:59:31</ts>
  </item>
  <item>
    <type>Device</type>
    <subtype>McAfee_Warning</subtype>
    <origSeverity>Warning</origSeverity>
    <severity>Warning</severity>
    <message>Not protect this device</message>
    <deviceName>WIN-B093OCUOG0P</deviceName>
    <deviceID>3</deviceID>
    <agentID>0000545345435435</agentID>
```

```

    <accountName>admin</accountName>
    <eventID>350</eventID>
    <ts>2014-07-29 13:59:31</ts>
  </item>
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "item" : { "@name" : "lasteventid",
    "@value" : "349"
  } } }

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "accountName" : "admin",
    "agentID" : "0000545345435435",
    "deviceID" : 3,
    "deviceName" : "WIN-B093OCUOG0P",
    "eventID" : 351,
    "message" : "Agent Network Back to Normal",
    "origSeverity" : "Information",
    "severity" : "Information",
    "subtype" : "Agent Network Info",
    "ts" : "2014-07-29 13:59:31",
    "type" : "Device"
  },
  { "accountName" : "admin",
    "agentID" : "0000545345435435",
    "deviceID" : 3,
    "deviceName" : "WIN-B093OCUOG0P",
    "eventID" : 350,
    "message" : "Not protect this device",
    "origSeverity" : "Warning",
    "severity" : "Warning",
    "subtype" : "McAfee_Warning",
    "ts" : "2014-07-29 13:59:31",
    "type" : "Device"
  }
],
  "totalsize" : 2
} }

```

4.4.2 MsgNotify

The following resources are applicable:

- [/MsgNotify/sendEMail](#)
- [/MsgNotify/sendSMS](#)

/MsgNotify/sendEMail

POST

Test mail setting and send the mail.

Request Body: (media type: application/xml)

```
<request>
  <recipient>kevin @mail.advantech.com.tw</recipient>
  <subject>test</subject>
  <content>test</content>
  <smtp_server>mail.advantech.com.tw</smtp_server>
  <smtp_port>25</smtp_port>
  <smtp_ssl>true</smtp_ssl>
  <smtp_tls>false</smtp_tls>
  <smtp_account>advantech\kevin</smtp_account>
  <smtp_passwd>URwBWUWoNYVioqy+LD/0kQ==</smtp_passwd>
  <smtp_sender>kevin@advantech.com.tw</smtp_sender>
</request>
```

Note[1]

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "content" : "test",
  "recipient" : "kevin @mail.advantech.com.tw",
  "smtp_account" : "advantech\\kevin",
  "smtp_passwd" : "URwBWUWoNYVioqy+LD/0kQ==",
  "smtp_port" : 25,
  "smtp_sender" : "kevin@advantech.com.tw",
  "smtp_server" : "mail.advantech.com.tw",
```

```

    "smtp_ssl" : true,
    "smtp_tls" : false,
    "subject" : "test"
  } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Note[1]: The password should be encrypted (Ref: [/APIInfoMgmt/getEncryptPwd](#)).

/MsgNotify/sendSMS

POST

Test SMS setting and send the SMS.

Request Body: (media type: application/xml)

```

<request>
  <phone>886960123456</phone>
  <content>test</content>
  <sms_apiid>3398412</sms_apiid>
  <sms_account>Alan.Kao</sms_account>
  <sms_passwd>fB+MZp0fXUFievALyXpphQ==</sms_passwd>
</request>

```

Note[1]

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "content" : "test",
  "phone" : 886960123456,
  "sms_account" : "Kevin.Kao",
  "sms_apiid" : 1111111,
  "sms_passwd" : "fB+MZp0fXUFievALyXpphQ=="
} }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

Note[1]: The password should be encrypted (Ref: [/APIInfoMgmt/getEncryptPwd](#)).

4.5 Database Management

4.5.1 SQLMgmt

The following resources are applicable:

- [/SQLMgmt/createTable](#)
- [/SQLMgmt/insertData](#)
- [/SQLMgmt/updateData](#)
- [/SQLMgmt/delData](#)
- [/SQLMgmt/qryData](#)
- [/SQLMgmt/getTableInfo/<name>](#)

/SQLMgmt/createTable

POST

Create a structure table for PostgreSQL.

Required fields: tableName, fieldName, fieldType

Request Body: (media type: application/xml)

```
<request>
  <tableName value="abc"/>
  <fields>
    <item fieldName="name" fieldType="character" length="256" allowNULL="true"/>
    <item fieldName="score" fieldType="bigint" allowNULL="false"/>
    <item fieldName="score2" fieldType="double" allowNULL="false"/>
    <item fieldName="birthday" fieldType="timestamp" allowNULL="false"/>
  </fields>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "fields" : { "item" : [ { "@allowNULL" : "true",
                                         "@fieldName" : "name",
                                         "@fieldType" : "character",
                                         "@length" : "256"
                                       },
                                       { "@allowNULL" : "false",
                                         "@fieldName" : "score",
                                         "@fieldType" : "bigint"
                                       },
                                       { "@allowNULL" : "false",
                                         "@fieldName" : "score2",
                                         "@fieldType" : "double"
                                       },
                                       { "@allowNULL" : "false",
                                         "@fieldName" : "birthday",
                                         "@fieldType" : "timestamp"
                                       }
                                     ] },
  "tableName" : { "@value" : "abc" }
} }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SQLMgmt/insertData

POST

Insert data to specific table for PostgreSQL.

Request Body: (media type: application/xml)

```
<request>
  <tableName value="abc"/>
  <fields>
    <item fieldName="name" value="sephiroth"/>
    <item fieldName="score" value="90"/>
    <item fieldName="score2" value="12.34"/>
    <item fieldName="birthday" value="1985-01-01"/>
  </fields>
```

</request>

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "fields" : { "item" : [ { "@fieldName" : "name",
                                         "@value" : "sephiroth"
                                       },
                                         { "@fieldName" : "score",
                                         "@value" : "90"
                                       },
                                         { "@fieldName" : "score2",
                                         "@value" : "12.34"
                                       },
                                         { "@fieldName" : "birthday",
                                         "@value" : "1985-01-01"
                                       }
                                       ] },
  "tableName" : { "@value" : "abc" }
} }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SQLMgmt/updateData

POST

Update data to specific table for PostgreSQL.

Required fields: tableName, fieldName, operator, (if condition exist) conditions_op, (if exist two or more conditions), tableField (if exist conditions), tableField2/value (one only)

Operator: =, !=, <, <=, >, >=, BETWEEN, LIKE, NOT LIKE, ILIKE, NOT ILIKE, IN, NOT IN, NOT BETWEEN, IS NULL, IS NOT NULL

conditions_op: AND, OR

Request Body: (media type: application/xml)

<request>

```

<tableName value="abc"/>
<fields>
  <item fieldName="score2" value="99.99"/>
</fields>
<conditions_op value="AND"/>
<conditions>
  <item tableField="abc.name" operator="=" value="sephiroth"/>
  <item tableField="abc.score" operator=">" value="112"/>
</conditions>
</request>

```

OR

```

<request>
  <tableName value="abc"/>
  <fields>
    <item fieldName="score2" value="99.99"/>
  </fields>
  <conditions_op value="AND"/>
  <conditions>
    <item tableField="abc.score" operator="=" tableField2="abc.score2"/>
  </conditions>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "conditions" : { "item" : [ { "@operator" : "=",
      "@tableField" : "abc.name",
      "@value" : "sephiroth"
    },
    { "@operator" : ">",
      "@tableField" : "abc.score",
      "@value" : "112"
    }
  ] },
  "conditions_op" : { "@value" : "AND" },
  "fields" : { "item" : { "@fieldName" : "score2",

```

```

        "@value" : "99.99"
      } },
      "tableName" : { "@value" : "abc" }
    } }

```

OR

```

{ "request" : { "conditions" : { "item" : { "@operator" : "=",
        "@tableField" : "abc.score",
        "@tableField2" : "abc.score2"
      } },
      "conditions_op" : { "@value" : "AND" },
      "fields" : { "item" : { "@fieldName" : "score2",
        "@value" : "99.99"
      } },
      "tableName" : { "@value" : "abc" }
    } }

```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SQLMgmt/delData

POST

Delete data to specific table for PostgreSQL.

Required fields: tableName, operator, conditions, conditions_op, (if exist two or more conditions), tableField (if exist conditions), tableField2/value (one only).

Operator: =, !=, <, <=, >, >=, BETWEEN, LIKE, NOT LIKE, ILIKE, NOT ILIKE, IN, NOT IN, NOT BETWEEN, IS NULL, IS NOT NULL

conditions_op: AND, OR

Request Body: (media type: application/xml)

```

<request>
  <tableName value="abc"/>
  <conditions_op value="AND"/>
  <conditions>
    <item tableField="name" operator="=" value="sephiroth"/>
    <item tableField="score" operator=">" value="112"/>
  </conditions>
</request>

```

OR

```
<request>
  <tableName value="abc"/>
  <conditions_op value="AND"/>
  <conditions>
    <item tableField="abc.score" operator="=" tableField2="abc.score2"/>
  </conditions>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "conditions" : { "item" : { "@operator" : "=",
      "@tableField" : "abc.score",
      "@tableField2" : "abc.score2"
    } },
  "conditions_op" : { "@value" : "AND" },
  "fields" : { "item" : { "@fieldName" : "score2",
    "@value" : "99.99"
  } },
  "tableName" : { "@value" : "abc" }
} }
```

OR

```
{ "request" : { "conditions" : { "item" : { "@operator" : "=",
      "@tableField" : "abc.score",
      "@tableField2" : "abc.score2"
    } },
  "conditions_op" : { "@value" : "AND" },
  "tableName" : { "@value" : "abc" }
} }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SQLMgmt/qryData

POST

Query data to specific table for PostgreSQL.

Required fields: tableName, operator, conditions, conditions_op, (if exist two or more conditions), tableField (if exist conditions), tableField2/value (one only).

Operator: =, !=, <, <=, >, >=, BETWEEN, LIKE, NOT LIKE, ILIKE, NOT ILIKE, IN, NOT IN, NOT BETWEEN, IS NULL, IS NOT NULL

conditions_op: AND, OR

Request Body: (media type: application/xml)

```
<request>
  <selectFields>
    <item tableField="abc.name"/>
    <item tableField="abc.score"/>
    <item tableField="abc.score2"/>
  </selectFields>
  <conditions_op value="AND"/>
  <conditions>
    <item tableField="abc.name" operator="=" value="sephiroth"/>
  </conditions>
  <offset value="10"/>
  <limit value="2"/>
  <orderBy>
    <item tableField="abc.score2" value="ASC"/>
  </orderBy>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <item>
    <score2>12.34</score2>
    <score>90</score>
    <name>sephiroth</name>
  </item>
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "conditions" : { "item" : { "@operator" : "=",
    "@tableField" : "abc.name",
    "@value" : "sephiroth"
  } },
  "conditions_op" : { "@value" : "AND" },
  "limit" : { "@value" : "2" },
  "offset" : { "@value" : "10" },
  "orderBy" : { "item" : { "@tableField" : "abc.score2",
    "@value" : "ASC"
  } },
  "selectFields" : { "item" : [ { "@tableField" : "abc.name" },
    { "@tableField" : "abc.score" },
    { "@tableField" : "abc.score2" }
  ] }
}
}
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "name" : "sephiroth",
  "score" : 90,
  "score2" : 12.34
} } }
```

/SQLMgmt/getTableInfo/<name>

name: Table Name Type: String

GET

Get specific table information for PostgreSQL.

Response Body: (media type: application/xml)

```
<result>
  <tableName>abc</tableName>
  <item>
    <fieldName>name</fieldName>
    <fieldType>character varying</fieldType>
  </item>
  <item>
    <fieldName>score</fieldName>
    <fieldType>bigint</fieldType>
```

```

</item>
<item>
  <fieldName>score2</fieldName>
  <fieldType>double precision</fieldType>
</item>
<item>
  <fieldName>birthday</fieldName>
  <fieldType>timestamp without time zone</fieldType>
</item>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "fieldName" : "name",
                           "fieldType" : "character varying"
                         },
                         { "fieldName" : "score",
                           "fieldType" : "bigint"
                         },
                         { "fieldName" : "score2",
                           "fieldType" : "double precision"
                         },
                         { "fieldName" : "birthday",
                           "fieldType" : "timestamp without time zone"
                         }
                       ]
  },
  "tableName" : "abc"
} }

```

4.5.2 NoSQLMgmt

The following resources are applicable:

- [/NoSQLMgmt/createCollection](#)
- [/NoSQLMgmt/insertData](#)
- [/NoSQLMgmt/updateData](#)
- [/NoSQLMgmt/delData](#)
- [/NoSQLMgmt/qryData](#)

/NoSQLMgmt/createCollection

POST

Set the name of collection and fields with index to create collection for MongoDB.

Request Body: (media type: application/xml)

```
<request>
  <collectionName value="table"/>
  <indexFields>
    <item fieldName="test1"/>
    <item fieldName="test2"/>
  </indexFields>
</request>
```

Request Body: (media type: application/json)

```
{ "request" : { "collectionName" : { "@value" : "table" },
  "indexFields" : { "item" : [ { "@fieldName" : "test1" },
    { "@fieldName" : "test2" }
  ] }
} }
```

Response Body: (media type: application/xml)

```
<result>
  <item>true</item>
</result>
```

/NoSQLMgmt/insertData

POST

Insert data to specific collection in MongoDB.

Set the name of collection and data content to insert. (every data belongs to json format)

Request Body: (media type: application/json)

```
{ "request" : { "collectionName" : "SUSIControl",
  "data" : [ { "testDouble" : 10.44,
    "testJARRAY" : [ { "arry1" : "arry1" },
      { "arry2" : 123 }
    ]
  }
} }
```

```

    ],
    "testJSON" : { "sub1" : "sub1",
        "sub2" : 2
    },
    "testLong" : 988,
    "testNestJARRAY" : [ { "arry1sub" : "arry1" },
        { "arry2sub" : { "arry2Sub" : 123 } },
        { "arry3sub" : [ { "av1" : "123" },
            { "av2" : 456 }
        ] }
    ],
    "testString" : "test111"
},
{ "testDouble" : 10.220000000000001,
    "testLong" : 988,
    "testString" : "test111",
    "ts" : "2015-06-2 509:08:31.731"
}
]
}}

```

Request Body: (media type: application/xml)

```

<?xml version="1.0" encoding="UTF-8" ?>
<request>
    <collectionName>abc</collectionName>
    <data>
        <testDouble>10.44</testDouble>
        <testJARRAY>
            <arry1>arry1</arry1>
        </testJARRAY>
        <testJARRAY>
            <arry2>123</arry2>
        </testJARRAY>
        <testJSON>
            <sub1>sub1</sub1>
            <sub2>2</sub2>
        </testJSON>
        <testLong>988</testLong>
        <testNestJARRAY>
            <arry1sub>arry1</arry1sub>

```

```

        </testNestJARRAY>
        <testNestJARRAY>
            <arry2sub>
                <arry2Sub>123</arry2Sub>
            </arry2sub>
        </testNestJARRAY>
        <testNestJARRAY>
            <arry3sub>
                <av1>123</av1>
            </arry3sub>
            <arry3sub>
                <av2>456</av2>
            </arry3sub>
        </testNestJARRAY>
        <testString>test111</testString>
    </data>
    <data>
        <testDouble>10.22</testDouble>
        <testLong>988</testLong>
        <testString>test111</testString>
        <ts>2015-06-2 509:08:31.731</ts>
    </data>
</request>

```

Response Body: (media type: application/xml)

```

<result>
    <item>true</item>
</result>

```

/NoSQLMgmt/updateData

POST

Set the name of collection and some conditions to update for mongoDB.

Field Info:

1. "fields": the updated result.
2. "collectionName": the name of target collection
3. " conditions_op" is designed for jsonArray of conditions. For instance, \$or(\$and) stands for

the Intersection(Union)

3. "operator" is designed for jsonArray of subconditions. For instance, \$or(\$and) stands for the Intersection(Union).

The condition of following example means: (v>1) and (u="celsius" or n=" hddTemp ")

Request Body: (media type: application/json)

```
{ "request" : { "collectionName" : "HDDMonitor",
    "condition" : [ { "subCondition" : [ { "field" : "v",
        "operator" : "$gt",
        "value" : 1
      } ] },
    { "operator" : "$or",
      "subCondition" : [ { "field" : "u",
        "operator" : "$eq",
        "value" : "celsius"
      },
      { "field" : "n",
        "operator" : "$eq",
        "value" : "hddTemp"
      }
    ]
  }
],
  "conditions_op" : "$and",
  "fields" : { "agentId" : "QQQQQQQQQQQQQQ" }
} }
```

Request Body: (media type: application/xml)

```
<?xml version="1.0" encoding="UTF-8" ?>
<request>
  <collectionName>HDDMonitor</collectionName>
  <conditions_op>$and</conditions_op>
  <condition>
    <subCondition>
      <field>v</field>
      <operator>$gt</operator>
      <value>1</value>
    </subCondition>
  </condition>
```

```

    <condition>
      <operator>$or</operator>
      <subCondition>
        <field>u</field>
        <operator>$eq</operator>
        <value>celsius</value>
      </subCondition>
      <subCondition>
        <field>n</field>
        <operator>$eq</operator>
        <value>hddTemp</value>
      </subCondition>
    </condition>
    <fields>
      <agentId>QQQQQQQQQQQQ</agentId>
    </fields>
  </request>

```

Response Body: (media type: application/xml)

```

<result>
  <item>true</item>
</result>

```

/NoSQLMgmt/delData

POST

Set the name of collection and some conditions to delete for MongoDB.

Field Info:

1. "collectionName": the name of target collection
2. " conditions_op" is designed for jsonArray of conditions. For instance, \$or(\$and) stands for the Intersection(Union)
3. "operator" is designed for jsonArray of subconditions. For instance, \$or(\$and) stands for the Intersection(Union).

The condition of following example means: (v>80) and (u="percent" or n ="hddHealthPercent ")

Request Body: (media type: application/json)

```
{ "request" : { "collectionName" : "HDDMonitor",
  "condition" : [ { "subCondition" : [ { "field" : "v",
    "operator" : "$gt",
    "value" : 80
  } ] },
  { "operator" : "$or",
    "subCondition" : [ { "field" : "u",
      "operator" : "$eq",
      "value" : "percent"
    },
    { "field" : "n",
      "operator" : "$eq",
      "value" : "hddHealthPercent"
    }
  ]
}
],
"conditions_op" : "$and"
} }
```

Request Body: (media type: application/xml)

```
<?xml version="1.0" encoding="UTF-8" ?>
<request>
  <collectionName>HDDMonitor</collectionName>
  <conditions_op>$and</conditions_op>
  <condition>
    <subCondition>
      <field>v</field>
      <operator>$gt</operator>
      <value>80</value>
    </subCondition>
  </condition>
  <condition>
    <operator>$or</operator>
    <subCondition>
      <field>u</field>
      <operator>$eq</operator>
      <value>percent</value>
    </subCondition>
  </condition>
</request>
```

```

    <subCondition>
      <field>n</field>
      <operator>$eq</operator>
      <value>hddHealthPercent</value>
    </subCondition>
  </condition>
</request>

```

Response Body: (media type: application/xml)

```

<result>
  <item>true</item>
</result>

```

/NoSQLMgmt/qryData

POST

Query data to specific collection for MongoDB.

pipelineList Info:

Follow the format of Mongo Pipeline Aggregation operator, but not support pipeline options.

The following instance equals to the mongo command:

```

db.SUSIControl.aggregate([
    { "$match" : { "v" : { "$lt" : 10000 } } },
    { "$limit" : 100 },
    { "$skip" : 5 },
    [ { "$group" : { "_id" : "$item" } } ],
    { "$sort" : { "age" : -1, "posts" : 1 } }
  ])

```

Request Body: (media type: application/json)

```

{ "request" : { "collectionName" : "abc",
  "pipelineList" : [
    { "$match" : { "testDouble" : { "$lt" : 10000 } } },
    { "$limit" : 1 },
    { "$skip" : 0 },
    { "$sort" : { "testString" : -1,
      "testLong" : 1
    } }
  ]
}

```

```
}}
```

Request Body: (media type: application/xml)

Because part of mongoDB Grammar has conflict with XML format , there isn't XML example to refer.

Response Body: (media type: application/xml)

```
<result>
  <item>
    <_id>556d3eb0fce6ee19b0ba5897</_id>
    <v>0</v>
    <n>speedMbps</n>
    <agentId>000000E04C680016</agentId>
    <handler>NetMonitor</handler>
    <sensorId>/Local Area Connection 2/speedMbps</sensorId>
    <ts>Tue Jun 02 13:27:11 CST 2015</ts>
  </item>
  <item>
    <_id>556d3eb0fce6ee19b0ba5898</_id>
    <v>0</v>
    <n>netUsage</n>
    <agentId>000000E04C680016</agentId>
    <handler>NetMonitor</handler>
    <sensorId>/Local Area Connection 2/netUsage</sensorId>
    <ts>Tue Jun 02 13:27:11 CST 2015</ts>
  </item>
  <item>
    <_id>556d3eb0fce6ee19b0ba5899</_id>
    <v>0</v>
    <n>sendBytes</n>
    <agentId>000000E04C680016</agentId>
    <handler>NetMonitor</handler>
    <sensorId>/Local Area Connection 2/sendBytes</sensorId>
    <ts>Tue Jun 02 13:27:11 CST 2015</ts>
  </item>
</result>
```

4.6 System Management

4.6.1 API Information

The following resources are applicable:

- [/APIInfoMgmt](#)
- [/APIInfoMgmt/getEncryptPwd/<pwd>](#)
- [/APIInfoMgmt/xmlJsonTrans](#)

/APIInfoMgmt

GET

Retrieve all management resources, and API version.

Response Body: (media type: application/xml)

<result>

<Mgmt>

<item>AccountMgmt</item>

<item>Auth</item>

<item>DashboardMgmt</item>

<item>DeviceCtl</item>

<item>DeviceGroupMgmt</item>

<item>DeviceLocation</item>

<item>DeviceMapMgmt</item>

<item>DeviceMgmt</item>

<item>EventMgmt</item>

<item>HWMonitorMgmt</item>

<item>KVMMgmt</item>

<item>MsgNotify</item>

<item>NoSQLMgmt</item>

<item>PowerMgmt</item>

<item>ProtectionMgmt</item>

<item>RecoveryMgmt</item>

<item>RedundancyMgmt</item>

<item>RoleMgmt</item>

<item>RuleMgmt</item>

<item>SQLMgmt</item>

<item>SWMonitorMgmt</item>

<item>ServerMgmt</item>

```

    <item>SettingMgmt</item>
    <item>ShareMgmt</item>
    <item>SubServerMgmt</item>
    <item>TerminalMgmt</item>
  </Mgmt>
  <totalsize>26</totalsize>
  <version>3.1.0</version>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "Mgmt" : { "item" : [ "AccountMgmt",
    "Auth",
    "DashboardMgmt",
    "DeviceCtl",
    "DeviceGroupMgmt",
    "DeviceLocation",
    "DeviceMapMgmt",
    "DeviceMgmt",
    "EventMgmt",
    "HWMonitorMgmt",
    "KVMgmt",
    "MsgNotify",
    "NoSQLMgmt",
    "PowerMgmt",
    "ProtectionMgmt",
    "RecoveryMgmt",
    "RedundancyMgmt",
    "RoleMgmt",
    "RuleMgmt",
    "SQLMgmt",
    "SWMonitorMgmt",
    "ServerMgmt",
    "SettingMgmt",
    "ShareMgmt",
    "SubServerMgmt",
    "TerminalMgmt"
  ] },
  "totalsize" : 26,
  "version" : "3.1.0"
}

```

```
}}
```

/APIInfoMgmt/getEncryptPwd/<pwd>

pwd: password **Type:** String

GET

Retrieve encrypted password from original password.

Response Body: (media type: application/xml)

```
<result>
  <encryptPwd>Tv1BY1VYlizUC5Ae3smP9g==</encryptPwd>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "encryptPwd" : "Tv1BY1VYlizUC5Ae3smP9g==" } }
```

/APIInfoMgmt/xmlToJsonTrans/

POST

Translate the XML to JSON or JSON to XML format.

Request Body: (media type: application/xml)

```
<request>
  <account>
    <item name="username" value="Kevin"/>
    <item name="password" value="KevinPwd"/>
  </account>
</request>
```

Response Body: (media type: application/json)

```
{ "request" : { "account" : { "item" : [ { "@name" : "username",
  "@value" : "Kevin"
},
{ "@name" : "password",
  "@value" : "KevinPwd"
}
] } } }
```

Request Body: (media type: application/json)

```
{ "request" : { "account" : { "item" : [ { "@name" : "username",
    "@value" : "Kevin"
  },
  { "@name" : "password",
    "@value" : "KevinPwd"
  }
] } } }
```

Response Body: (media type: application/xml)

```
<request>
  <account>
    <item name="username" value="Kevin"/>
    <item name="password" value="KevinPwd"/>
  </account>
</request>
```

4.6.2 SettingMgmt

The following resources are applicable:

- [/SettingMgmt](#)
- [/SettingMgmt/<type>](#)
- [/SettingMgmt/getIPList](#)
- [/SettingMgmt/getNextSchReport](#)

/SettingMgmt

PUT

Edit specific type of setting of management server.

type: event, syslog, sms, mail, map

Request Body: (media type: application/xml)

```
<syslog>
  <syslog server="127.0.0.1" port="514" enable="false"/>
</syslog>
```

Response Body: (media type: application/xml)

```
<result>
  <syslog>true</syslog>
```

</result>

Request Body: (media type: application/json)

```
{ "syslog" : { "syslog" : { "@enable" : "false",  
    "@port" : "514",  
    "@server" : "127.0.0.1"  
  } } }
```

Response Body: (media type: application/json)

```
{ "result" : { "syslog" : true } }
```

Request Body: (media type: application/xml)

```
<sms>  
  <clcikattell apiid="" account="" password="" enable="false"/>  
  <content>$(type)-$(severity)-$(message)-$(device_name)-$(account_name)-$(ts)</content>  
</sms>
```

Response Body: (media type: application/xml)

```
<result>  
  <sms>true</sms>  
</result>
```

Request Body: (media type: application/json)

```
{ "sms" : { "clcikattell" : { "@account" : "",  
    "@apiid" : "",  
    "@enable" : "false",  
    "@password" : ""  
  },  
  "content" : "$(type)-$(severity)-$(message)-$(device_name)-$(account_name)-$(ts)"  
} }
```

Response Body: (media type: application/json)

```
{ "result" : { "sms" : true } }
```

/SettingMgmt/<type>

type: Setting Type

Type: String

GET

Retrieve specific type of setting configuration of management server.

type: info, authorization, syslog, event, sms, mail, map, pluginschedule

info: Server setting information.

authorization: Server default serial number, and number of devices/groups/accounts/roles/maps limit.

syslog: Syslog server setting.

event: System schedule report

System disk space warning detect

System auto recycle event

System event error/warning/information report to SMS/Mail.

sms: Clickatell setting, and the password should be encrypted. (Ref: [/APIInfoMgmt/getEncryptPwd](#))

mail: Mail setting, support SSL/TLS. Password should be encrypted. (Ref: [/APIInfoMgmt/getEncryptPwd](#))

map: Map setting, Google or Baidu.

pluginschedule: Schedule setting for power schedule and system backup.

Response Body: (media type: application/xml)

[type: syslog]

```
<result>
  <syslog>
    <syslog server="127.0.0.1" port="514" enable="false"/>
  </syslog>
</result>
```

[type: sms]

```
<result>
  <sms>
    <clcikateall apiid="3398412" account="Kevin" password="fB+MZp0fXUFievALyXpphQ=="
enable="true"/>
    <content>$(type)-$(severity)-$(message)-$(device_name)-$(account_name)-$(ts)</content>
  </sms>
</result>
```

[type: mail]

```
<result>
  <mail>
    <smtp server="mail.advantech.com.tw" port="25" ssl="false" tls="false" enable="true">
      <sender address="kevin@advantech.com.tw" account="advantech\kevin"
password="URwBWUWoNYVioqy+LD/0kQ==">
    </smtp>
  </mail>
</result>
```

```

    <policy interval="300" retrytime="3"/>
    <subject>RMM</subject>
    <content>Type: $(type) severity: $(severity) Description: $(message) Device: $(device_name) Account:
$(account_name) Time: $(ts)</content>
  </mail>
</result>

```

Response Body: (media type: application/json)

[type: syslog]

```

{ "result" : { "syslog" : { "syslog" : { "@enable" : "false",
    "@port" : "514",
    "@server" : "127.0.0.1"
  } } } }

```

[type: sms]

```

{ "result" : { "sms" : { "clcikate11" : { "@account" : "Kevin",
    "@apiid" : "3398412",
    "@enable" : "true",
    "@password" : "fB+MZp0fXUFievALyXpphQ=="
  },
  "content" : "$(type)-$(severity)-$(message)-$(device_name)-$(account_name)-$(ts)"
} } }

```

[type: mail]

```

{ "result" : { "mail" : { "content" : "Type: $(type) severity: $(severity) Description: $(message) Device:
$(device_name) Account: $(account_name) Time: $(ts)",
  "policy" : { "@interval" : "300",
    "@retrytime" : "3"
  },
  "smtp" : { "@enable" : "true",
    "@port" : "25",
    "@server" : "mail.advantech.com.tw",
    "@ssl" : "false",
    "@tls" : "false",
    "sender" : { "@account" : "advantech\\kevin",
      "@address" : "kevin@advantech.com.tw",
      "@password" : "URwBWUWoNYVioqy+LD/0kQ=="
    }
  },

```

```
"subject" : "RMM"
} } }
```

/SettingMgmt/getIPList

GET

Retrieve IP list of management server.

Response Body: (media type: application/xml)

```
<result>
  <IP>172.22.12.54:8084</IP>
  <IP>192.168.56.1:8084</IP>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "IP" : [ "172.22.12.54:8084",
  "192.168.56.1:8084"
] } }
```

/SettingMgmt/getNextSchReport

POST

Get the date of next schedule report sending.

Request Body: (media type: application/xml)

```
<request>
  <interval>7</interval>
  <time>8:00</time>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  <date>2015-07-06 11:09</date>
</result>
```

Request Body: (media type: application/json)

```
{
  "request": {
    "interval": "7",
```

```
    "time": "8:00"
  }
}
Response Body: (media type: application/json)
{
  "result": { "date": "2015-07-06 11:09" }
}
```

4.6.3 Server Management

The following resources are applicable:

- [/ServerMgmt/getWebSrvStatus](#)
- /ServerMgmt/DelSensorData

/ServerMgmt/getWebSrvStatus

GET

Retrieve web-server CPU, memory, disk status.

Response Body: (media type: application/xml)

```
<result>
  <hardisk>
    <item>
      <isSrvInstall>false</isSrvInstall>
      <driveLetter>C:\</driveLetter>
      <totalSpace>215035428864</totalSpace>
      <freeSpace>125740486656</freeSpace>
      <usedSpace>89294942208</usedSpace>
      <usage>0.41525688431776947</usage>
    </item>
    <item>
      <isSrvInstall>true</isSrvInstall>
      <driveLetter>D:\</driveLetter>
      <totalSpace>784576561152</totalSpace>
      <freeSpace>731564855296</freeSpace>
      <usedSpace>53011705856</usedSpace>
      <usage>0.06756728212497515</usage>
    </item>
  </hardisk>
  <memory>
    <totalMemory>12751773696</totalMemory>
    <freeMemory>6492090368</freeMemory>
    <usedMemory>6259683328</usedMemory>
    <usage>0.49088726613487105</usage>
  </memory>
  <cpu>
```

```

        <cpuLoading>16.184871694328685</cpuLoading>
        <numCore>8</numCore>
    </cpu>
</result>

```

/ServerMgmt/delDeviceData/<time>

time: dateTime Type: String

DELETE

Delete device data before given datetime. The datetime format is “yyyy-MM-dd”.

Response Body: (media type: application/xml)

```

<result>
    true
</result>

```

4.6.4 Sub Server Management

The following resources are applicable:

- [/SubServerMgmt](#)
- [/SubServerMgmt/<primary-key>](#)

Item	Description
<i>inout</i>	This server reported to parent server (out: false), connect to current server (in: true)
<i>serverip</i>	Server IP address.
<i>serverid</i>	Server unique ID.
<i>name</i>	Server name.
<i>connected</i>	Conneted or disconnected
<i>authentication</i>	Authentication with AES Encryption (Account:Password), ex: admin:admin => KdZ7ouJWV9e7nrzn2Gcgow==
<i>description</i>	Server description

/SubServerMgmt

GET

Retrieve all sub-server information.

Response Body: (media type: application/xml)

```
<result>
  <totalsize>1</totalsize>
  <item>
    <sid>53</sid>
    <inout>false</inout>
    <serverip>172.22.12.255</serverip>
    <serverid>00007824AF836A8D</serverid>
    <name>Advantech</name>
    <connected>true</connected>
    <authentication>KdZ7ouJWV9e7nrzn2Gcgow==</authentication>
    <description>Advantech</description>
  </item>
</result>
```

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "authentication" : "KdZ7ouJWV9e7nrzn2Gcgow==",
    "connected" : true,
    "description" : "Advantech",
    "inout" : false,
    "name" : "Advantech",
    "serverid" : "00007824AF836A8D",
    "serverip" : "172.22.12.255",
    "sid" : 53
  },
  "totalsize" : 1
} }
```

POST

Register current server to parent server, allow any control from parent server.

Required fields: serverip, name, authentication

Request Body: (media type: application/xml)

```
<request>
  <item>
    <serverip>172.22.12.255</serverip>
    <name>Advantech</name>
    <authentication>KdZ7ouJWV9e7nrzn2Gcgow==</authentication>
    <description>Advantech</description>
```

```
</item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
</result>
```

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "authentication" : "KdZ7ouJWV9e7nrzn2Gcgow==",
    "description" : "Advantech",
    "name" : "Advantech",
    "serverip" : "172.22.12.255"
  } ] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

/SubServerMgmt/<id>

id: Sid **Type:** Long

PUT

Edit specific sub-server information by server ID.

Request Body: (media type: application/xml)

```
<request>
  <item>
    <serverip>172.22.12.255</serverip>
    <name>Sephiroth3</name>
    <authentication>KdZ7ouJWV9e7nrzn2Gcgow==</authentication>
    <description>Sephiroth3</description>
  </item>
</request>
```

Response Body: (media type: application/xml)

```
<result>
  true
```

</result>

Request Body: (media type: application/json)

```
{ "request" : { "item" : [ { "authentication" : "KdZ7ouJWV9e7nrzn2Gcgow==",  
    "description" : "Advantech2",  
    "name" : "Advantech2",  
    "serverip" : "172.22.12.255"  
  } ] } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

4.6.5 Dashboard Management

The following resources are applicable:

- [/DashboardMgmt](#)
- [/DashboardMgmt/<id>](#)

/DashboardMgmt

GET

Retrieve all dashboards information.

Response Body: (media type: application/json)

```
{ "result" : { "item" : { "accountName" : "admin",  
    "accountid" : 2,  
    "content" :  
    "{ \"allow_edit\":true, \"panes\": [{ \"col\": { \"3\": 1 }, \"col_width\": 1, \"width\": 1, \"row\": { \"3\": 1 }, \"widgets\": [{ \"s  
ettings\": { \"borderColorOfGrid\": \"#222\", \"chartWidth\": 300, \"yaxisMin\": 0, \"yaxisMax\": 100, \"charttype\": \"  
bar\", \"lineColorOfGrid\": \"#222\", \"backgroundOfGrid\": \"#000\", \"title\": \"Temperature\", \"value\": \"datasou  
rces[\\\"Temperature  
Fora\\\"] [\\\"result\\\"] [\\\"itemList\\\"] [0] [\\\"v\\\"]\", \"chartHeight\": 300, \"height\": 5, \"type\": \"jqPlotBarWid  
get\" } } ], \"datasources\": [{ \"settings\": { \"handler\": \"FORAIoTHandler\", \"name\": \"Temperature  
Fora\", \"refresh\": 5, \"senhub\": \"NULL\", \"source\": \"/FORA/Temperature\", \"user\": \"2\", \"device\": \"000014D  
AE996BE04\" }, \"name\": \"Temperature  
Fora\", \"type\": \"realtimeData\" } ], \"plugins\": [], \"columns\": 3, \"version\": 1 }",  
    "did" : 1,  
    "sequence" : 1,  
    "sheet" : "NewBoard",  
    "ts" : "2015-10-02 13:24:30.709"
```

```

    },
    "totalsize" : 1
  } }

```

/DashboardMgmt/<id>

id: Dashboard id Type: Long

GET

Retrieve specific dashboard information.

Response Body: (media type: application/json)

```

{ "result" : { "item" : { "accountName" : "admin",
    "accountid" : 2,
    "content" :
    "{ \"allow_edit\":true,\"panes\": [{ \"col\": { \"3\": 1 }, \"col_width\": 1, \"width\": 1, \"row\": { \"3\": 1 }, \"widgets\": [{ \"settings\": { \"borderColorOfGrid\": \"#222\", \"chartWidth\": 300, \"yaxisMin\": 0, \"yaxisMax\": 100, \"charttype\": \"bar\", \"lineColorOfGrid\": \"#222\", \"backgroundOfGrid\": \"#000\", \"title\": \"Temperature\", \"value\": \"datasources[\\\"TemperatureFora\\\"] [\\\"result\\\"] [\\\"itemList\\\"] [0] [\\\"v\\\"]\", \"chartHeight\": 300, \"height\": 5, \"type\": \"jqPlotBarWidget\" } }, \"datasources\": [{ \"settings\": { \"handler\": \"FORAIoTHandler\", \"name\": \"TemperatureFora\", \"refresh\": 5, \"senhub\": \"NULL\", \"source\": \"FORA/Temperature\", \"user\": \"2\", \"device\": \"000014DAE996BE04\", \"name\": \"TemperatureFora\", \"type\": \"realtime data\" }, \"plugins\": [], \"columns\": 3, \"version\": 1 }\",
    \"did\" : 1,
    \"sequence\" : 1,
    \"sheet\" : \"NewBoard\",
    \"ts\" : \"2015-10-02 13:24:30.709\"
  },
  \"totalsize\" : 1
} }

```

4.6.6 Redundancy Management

The following resources are applicable:

- [/RedundancyMgmt](#)
- [/RedundancyMgmt/<primary-key>](#)

Item	Description
serverip	Server IP address.
serverid	Server unique ID.
name	Server name.
connected	Conneted or disconnected.
master	Is master server or not.
description	Server description.
ssl	MQTT SSL option
priority	The order of becoming the master server. The highest is 3 and the lower is 1

/RedundancyMgmt

GET

Retrieve all redundancy servers information.

Response Body: (media type: application/xml)

```
<result>
  <item>
    <ssl>false</ssl>
    <connected>true</connected>
    <description>in the Taipei</description>
    <master>true</master>
    <name>ROC</name>
    <priority>1</priority>
    <serverid>0000AC220B88E66A</serverid>
    <serverip>172.22.13.29</serverip>
    <sid>1</sid>
  </item>
  <item>
    <ssl>false</ssl>
    <connected>true</connected>
    <description>in the New York</description>
    <master>false</master>
    <name>USA</name>
    <priority>2</priority>
    <serverid>00007824AF846729</serverid>
    <serverip>172.22.12.255</serverip>
    <sid>2</sid>
  </item>
</result>
```

```

</item>
<totalsize>2</totalsize>
</result>

```

Response Body: (media type: application/json)

```

{ "result" : { "item" : [ { "ssl" : false,
    "connected" : true,
    "description" : "in the Taipei",
    "master" : "true",
    "name" : "ROC",
    "priority" : 1,
    "serverid" : "0000AC220B88E66A",
    "serverip" : "172.22.13.29",
    "sid" : 1
  },
  { "ssl" : false,
    "connected" : true,
    "description" : "in the New York",
    "master" : "false",
    "name" : "USA",
    "priority" : 2,
    "serverid" : "00007824AF846729",
    "serverip" : "172.22.12.255",
    "sid" : 2
  }
],
  "totalsize" : 2
} }

```

POST

Add a slave server to sync current server. You have to add current server as master first time. You must invoke this API on original master server.

Required fields: serverip, name, desc, priority.

Request Body: (media type: application/xml)

```

<request>
  <serverip>172.22.13.29</serverip>
  <name>ROC</name>
  <desc>in the Taipei</desc>

```

```

    <priority>2</priority>
    <ssl>false</ssl>
</request>

```

Response Body: (media type: application/xml)

```

<result>
    true
</result>

```

Request Body: (media type: application/json)

```

{ "request" : { "desc" : "in the Taipei",
    "name" : "ROC",
    "priority" : "2",
    "serverip" : "172.22.13.29",
    "ssl":false
  } }

```

Response Body: (media type: application/json)

```

{ "result" : true }

```

/RedundancyMgmt/<id>

id: Sid Type: Long

PUT

Edit specific redundancy server name, desc and priority by ID. Not each item required, put the item that you want to modify. You must invoke this API on original master server.

Request Body: (media type: application/xml)

```

<request>
    <name>JPN</name>
    <desc>in the Tokyo</desc>
    <priority>2</priority>
</request>

```

Response Body: (media type: application/xml)

```

<result>
    true

```

</result>

Request Body: (media type: application/json)

```
{ "request" : { "desc" : "in the Tokyo",  
               "name" : "JPN",  
               "priority" : "2"  
            } }
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

DELETE

Delete specific redundancy server from replication set by ID. You can only invoke this API on original master server.

Response Body: (media type: application/xml)

```
<result>  
  true  
</result>
```

Response Body: (media type: application/json)

```
{ "result" : true }
```

5. Asynchronous REST/Comet API

The RMM platform provides support for Asynchronous REST/Comet APIs. This solution allows client applications to use HTTP and REST to subscribe on topics of interest and have matching data being streamed to them in real-time.

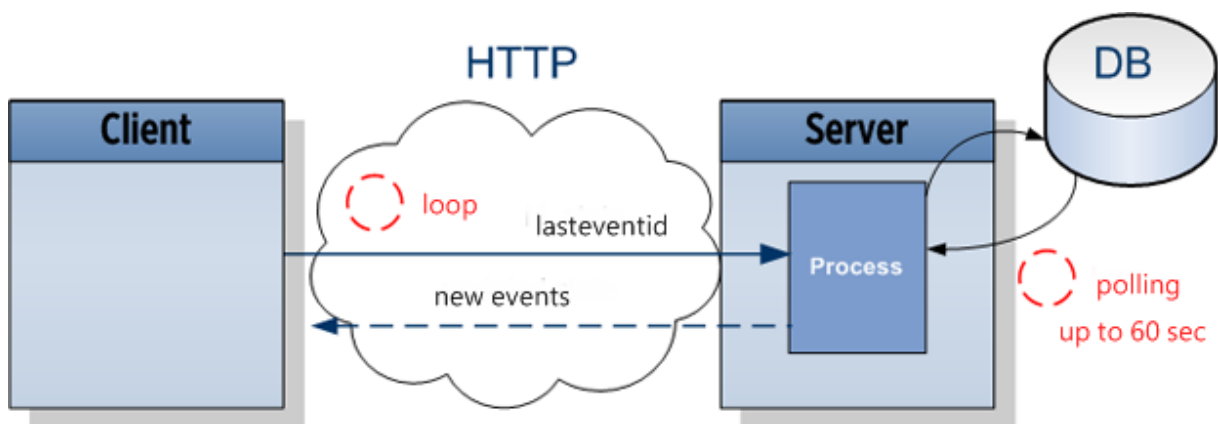
As real time asynchronous event notification, The RMM support “Long polling” mechanism. Long polling is itself not a true push; long polling is a variation of the traditional polling technique, but it allows emulating a push mechanism under circumstances where a real push is not possible, such as sites with security policies that require rejection of incoming HTTP/S Requests.

With long polling, the client requests information from the server exactly as in normal polling, except it issues its HTTP/S requests (polls) at a much slower frequency. If the server does not have any information available for the client when the poll is received, instead of sending an empty response, the server holds the request open and waits for response information to become available.

5.1 PREREQUISITES

As mention at introduction, The RMM accept XML format for data input and output , same as Long polling. Send request to server with last event id , user name and password to retrieve new events.

5.2 Using the Comet API



Client application (browser) sends a request with user id and last event id (get first from log in, and update from every long polling callback) to the server via HTTP. It creates an Apache process, which repeatedly checks DB until new events coming. When events triggered in five seconds, the client gets the server response and sends next request to the server.

5.3 Example

Long Polling

The following example illustrates how the Comet API can be used to receive streaming data using REST APIs. The “m_lastevtID” requests server for next events larger than it, and “user” “password” indicate authorization value.

Request :

```
$.ajax({
  type: 'post',
  url: '/EventMgmt/LongPolling',
  data: '<request><item name="lasteventid" value="' + m_lastevtID + '"></item></request>',
  contentType: 'application/xml',
  dataType: 'text',
  beforeSend: function(xhr)
  {
    xhr.setRequestHeader("Authorization", "Basic " + $.base64.encode(user + ":" + password));
  },
  success: function(response)
  {
  }
});
```

Here is events response from server. You can tell event from type , subtype , severity , message , deviceName, etc. Finally, remember to keep last event id for next request.

Response :

```
<result>
  <totalsize>2</totalsize>
  <item>
    <type>Operation</type>
    <subtype>postAgentName</subtype>
    <origSeverity>Information</origSeverity>
    <severity>Information</severity>
    <message>[admin] Set Agent name</message>
    <deviceName>N/A</deviceName>
    <deviceId>0</deviceId>
    <accountName>admin</accountName>
```

```

    <eventID>130</eventID>
    <sessionId>B4B82AB0933FD2EE01B0AB6B368C63C0</sessionId>
    <ts>2014-09-15 16:34:31</ts>
  </item>
  <item>
    <type>Operation</type>
    <subtype>Edit Device</subtype>
    <origSeverity>Information</origSeverity>
    <severity>Information</severity>
    <message>[ADVANTEC-CEV53O221] User modify device.</message>
    <deviceName>ADVANTEC-CEV53O221</deviceName>
    <deviceID>2</deviceID>
    <agentID>0000000BAB3C6E78</agentID>
    <accountName>admin</accountName>
    <eventID>131</eventID>
    <sessionId>B4B82AB0933FD2EE01B0AB6B368C63C0</sessionId>
    <ts>2014-09-15 16:34:31</ts>
  </item>
</result>

```

WebSocket

The following example illustrates how to use websocket to receive events from server. The “m_lastevtID” requests server for next events larger than it, and “user” “password” indicate authorization value. While websocket has been established, messages response from server would be return at *onmessage* event.

Sample code :

```

var strHost = "ws://" + strURL + "/websocket/" + $.base64.encode(m_user + ":" + m_password)
    + "/" + m_lastevtID;
    (ex : ws://localhost:8080/websocket/YWRtaW46YWRtaW4=/230)

index_m_WebSocket = new WebSocket(strHost);
index_m_WebSocket.onopen = function () {
    console.log('WebSocket opened');
}

index_m_WebSocket.onmessage = function (msg) {
    console.log('onmessage : ' + msg);
}

```

```
index_m_WebSocket.onclose = function () {  
    console.log('WebSocket close');  
}
```

```
index_m_WebSocket.onopen = function () {  
    console.log('WebSocket opened');  
}
```

```
index_m_WebSocket.onerror = function () {  
    console.log('WebSocket onerror ');  
}
```