



ANTlabs API Developer Guide

API v2 DOCUMENT RELEASE 2.0.1

ANTlabs API v2 Developer Guide

This guide is intended for programmers and developers who want to use the **Application Programming Interface (API) v2** to get access data from **ANTlabs Service Platform (ASP)**.

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PREFACE

AUDIENCE

This manual is intended for administrators who will be responsible for the configuration and customization of ANTI labs products. This shall explain how the portal development by customizing should be done, as well as the tasks involved in performing customizations on ANTI labs products.

Developers are expected to have a good working knowledge of ANTI labs products. Knowledge of the operating environment and characteristics of the systems used in the deployed networks are also useful. Basic knowledge of HTML and HTTP will also allow the developer to customize the user-facing web pages.

RELATED DOCUMENTATION

You may refer to the ANTI labs homepage at <http://www.antilabs.com/> for other related materials and documents released by ANTI labs.

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1.1 Overview

This guide is intended for developers who would like to access ANTLabs APIs for further flexibility in customizing reports and services.

ANTLRabs APIs are based on RESTful APIs. The APIs give developers access to our cloud services and resources should there be a need for further customizations.

As of ASP Update 1.0.5, API v2 is already in use.

API v2 Format:

```
https://<api_server>/apis/v2/sites/all/reports/<apiname>&startDate=<startdate>&endDate=<enddate>
```

The API call terms and definitions are as follows:

- **api_server** represents the API server.
- **v2** represents the version of API released. Version 1 (v1) is used from 1.0 to 1.0.4. Version 2 (v2) is already used in ASP Update 1.0.5 and beyond.

The resources of an API call terms and definitions are as follows:

- **apiname** represents the name of the API. Each API has a different function.
- **startdate** is the start date for which data is to be retrieved.
Date format: YYYY-MM-DD
- **enddate** is the end date for which data is to be retrieved.
Date format: YYYY-MM-DD

2.1 API Server

`https://<api_server>:8443/`

2.2 Demo environment

`https://demo-asp-api.antlabs.com:8443/`

UNDERSTANDING API NAME & API RESPONSE

3.1 About APIs

APIs returns data depending upon the `api_name` parameter. By **default**, the API response is in **JSON format**. If you want to see the response in xml format, please add “**&format=xml**” to the API call.

There are three categories of APIs group in ANTLabs API:

- 1) API Users
- 2) Transactions
- 3) Reports

3.2 API Users

- **Get All Verified Users** – To get all verified users for all sites, specific site, and specific site group.
- **Get Specific Verified User** – To get a specific verified user for all sites, specific site, and specific site group.
- **Add Verified User** – To add a verified user.
- **Update Verified User** – To update verified user.
- **Get All Form Users** – To get all users form registration.
- **Get Specific Form User** – To get a specific user form registration.
- **Add Form User** – To add user form.
- **Remove Form User** – To remove user form data.
- **Get All Roaming Users** – To retrieve all roaming users.
- **Roaming User** – To retrieve specific roaming user.
- **Add Roaming User** – To add user to roaming.
- **Update Roaming user** – To update roaming user information.
- **Delete Roaming user** – To delete roaming user.
- **Move Form User to User** – To move user form to user.
- **Get All Organizations** – To get all organizations under an account.
- **Get One Organization** – To get a specific organization under an account.
- **Add Organization** – To add an organization under an account.
- **Update Organization** – To update an existing organization.
- **Delete Organization** – To delete an existing organization.
- **Update Organization License** – To add or remove licenses allocated to an organization.
- **Get All Sites** – To get all sites within an organization or an account.
- **Get One Site** – To get a specific site from within an organization or an account.
- **Add Site** – To add a site within an organization.
- **Update Site** – To update an existing site's information.
- **Delete Site** – To delete an existing site.
- **Update License and Burst** – To update the number of licenses and allowed burst for an existing organization or site.
- **Get All Admins** – To get all admin-level users.

- **Get One Admin** – To get a specific admin-level user.
- **Add Admin** – To assign admin role and permissions to a user.
- **Update Admin** – To update an existing admin user's information.
- **Delete Admin** – To delete an existing admin from a site or organization.
- **Get All Global Plans** – To get all the global plans within an organization.
- **Get One Global Plan** – To get a specific global plan within an organization.
- **Add Global Plan** – To add a global plan in an organization.
- **Update Global Plan** – To update an existing global plan in an organization.
- **Delete Global Plan** – To delete an existing global plan in an organization.
- **Get All Global Accounts** – To get all the global accounts within an organization.
- **Get One Global Account** – To get a specific global account within an organization.
- **Add Global Account** – To add a global account in an organization.
- **Update Global Account** – To update an existing global account in an organization.
- **Delete Global Account** – To delete an existing global account in an organization.
- **Get All Global Codes** – To get all the global codes within an organization.
- **Get One Global Code** – To get a specific global code within an organization.
- **Add Global Code** – To add a global code in an organization.
- **Update Global Code** – To update an existing global code in an organization.
- **Delete Global Code** – To delete an existing global code in an organization.

3.3 Transactions

- **Get All Transactions** – To retrieve all transactions.
- **Get Specific Transaction** – To retrieve specific transaction.
- **Add a Transaction** – To add a transaction.
- **Add Multiple Transactions** – To add multiple transactions.
- **Request Auth Token** – To request an auth token.

3.4 Report

Report API will allow getting reports for the following information.

- **demographics** – To get demographic report.
- **sessionusage** – To get user session usage.
- **durationusage** – To get duration usage report.
- **gender** – To get user gender counts.
- **agerange** – To get age range.
- **country** – To get location country.
- **affinityagerange** – To get demographic of age range for users.
- **affinitygender** – To get the demographic of gender for users.
- **usersource** – To get user login method.
- **device** – To get user's device type used.
- **browser** – To get user's browser type.
- **os** – To get Operating System used by users.
- **topsite** – To get top visited sites.
- **sessionsummary** – To get session summary reporting.
- **transactionssummary** – To get transaction summary reporting.

API REFERENCE DETAILS

This section provides the required and optional input, output, and response result code. **This may vary depending on your API version.**

4.1 Request Auth Token

This API allows the user to request an auth token.

API URL

https://<api_server>/apis/v2/auth/token

Required Input

Input Type	Format
orgId	[Organization's Login ID]
userId	[Admin User's Login ID]
password	[Admin User's Password]

Optional Input

NONE

HTTP Method

POST

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
2	Invalid credentials (when orgId or userId or password is incorrect)
3	API name incorrect
98	Critical Error
99	Undefined Error

Sample Input:

```
{
  "orgId": "api_org",
  "userId": "api_admin",
  "password": "Antlabs123"
}
```

Sample Output for Failure:

```
{
  "resultCode": 2,
  "result": "error",
  "error": "Invalid credentials"
}
```

Sample Output for Success:

```
{
  "token":
  "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJhc3AtYXBpLWp3dCI6InN1YiI6eyJvcmdJZCI6ImFwaV9vcmdiLCJlc2VySWQiOiJhcGlhYWRtaW4iLCJwYXNzd29yZCI6IiQyeSQxMiRhZTg5Nzg0NWFlYTZlNmE4ZjBlMjZla0trZHY3Yj1QLlds dHJLXC9WaWdmQnRSYU1BRTlkWksifSwiaWF0IjoxNjA4NTE4NTkwLCJleHAiOiJlE2MDg1MjIxOTB9.UE4ijPbjA8F1w7NMq28cuLap4KEToj5m4u3ECD-cEKQ"
  ,
  "expires_in": 3600
}
```

4.2 Add Organization

This API adds an organization.

API URL

https://<api_server>/apis/v2/organizations

Headers

Authorization - <token>

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

Required Input

Input Type	Format
orgId	[Organization's Login ID]
name	[Organization Name]

Optional Input

Input Type	Format
address	[Organization Address]
country	[Country of Organization]
phone	[Phone Number]
authType	['Radius' or 'Local', default value 'Local']

If authentication type is 'Local', the following input are required:

Input Type	Format
host	[Radius server host name]
port	[Radius server port number]
secret	[Radius server's secret key]
timeout	[Timeout in seconds]
maxLoginAttempt	[Maximum login attempt]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK / Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
501	Organization already exists

Sample Input:

```
{
  "organization": {
    "orgId": "org_test",
    "name": "Organization Test",
    "address": "81 Clemenceau Ave #04-15/16 UE Square",
    "country": " Singapore",
    "phone": "61009527",
    "authType": "Radius",
    "radius": {
      "host": "1.2.3.4",
      "port": "1812",
      "secret": "abc123",
      "timeout": "10",
      "maxLoginAttempt": "3"
    }
  }
}
```

Output

Sample Output for Failure:

```
{
  "resultCode": 501,
  "result": "error",
  "error": "Organization already exists"
}
```

Sample Output for Success:

```
{
  "resultCode": 0,
  "result": "ok"
}
```

4.3 Update Organization

This API updates an existing organization's information.

API URL

https://<api_server>/apis/v2/organizations/<orgId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
orgId	[New org ID if existing orgId needs to change]
name	[Organization Name]
address	[Organization Address]
country	[Country of Organization]
phone	[Phone Number]
authType	['Radius' or 'Local', default value 'Local']

If authentication type is 'Local', the following input are required:

Input Type	Format
host	[Host Name]
port	[Port Number]
secret	[Secret Key]
timeout	[Timeout in seconds]
maxLoginAttempt	[Maximum login attempt]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
502	Organization ID is in use
504	Organization not found

Sample Input:

```
{
  "organization": {
    "authType": "Local"
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 504,
  "result": "error",
  "error": "Organization not found"
}
```

4.4 Get All Organization

This API retrieves all organizations within an ASP account.

API URL

https://<api_server>/apis/v2/organizations

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]
page	[1, 2, 3, etc]
limit	[number of records to show in each page, default 20]
sort	[any API output key, comma separated keys for multiple sort]
order	[asc desc, default value: 'asc', comma separated order for multiple sort]
orgID	<orgID>
name	Organization Name
authType	Authentication Type
address	<address>
contactNumber	<contactNumber>

country	<country>
Date range search	Following inputs for date range searching
expiryStart and expiryEnd	<expiryStartDateTime> and <expiryEndDateTime>
createdDateTimeStart & createdDateTimeEnd	<createdDateTimeStart> and <createdDateTimeEnd>
updatedDateTimeStart & updatedDateTimeEnd	<updatedDateTimeStart> and <updatedDateTimeEnd>

Sample API Call to filter by organization name:

https://<api_server>/apis/v2/organizations?name=Org Test

Sample API Call to order country in descending order:

https://<api_server>/apis/v2/organizations?sort=name&order=desc

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error

Sample Output for Failure:

```
{
  "resultCode": 3,
  "result": "error",
  "error": "API name incorrect"
}
```

Sample Output for Success:

```
{
  "resultCode": 0,
  "result": "ok",
  "count": "1",
  "data": {
    "organization": [
      {
        "orgId": "test_org",
        "name": "API Org Test",
        "address": "81 Clemenceau Ave #04-15/16 UE Square",
        "contactNumber": "61009527",
        "authType": "local",
        "country": "Singapore",
        "createdDatetime": {
          "timezone": {
            "name": "UTC",
            "transitions": [
              {
                "ts": -9223372036854775808,
                "time": "-292277022657-01-27T08:29:52+0000",
                "offset": 0,
                "isdst": false,
                "abbr": "UTC"
              }
            ]
          },
          "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "?"
          }
        },
        "offset": 0,
        "timestamp": 1605155622
      },
      "updatedDatetime": {
        "timezone": {
          "name": "UTC",
          "transitions": [
            {
              "ts": -9223372036854775808,
              "time": "-292277022657-01-27T08:29:52+0000",
              "offset": 0,
              "isdst": false,
              "abbr": "UTC"
            }
          ]
        },
        "location": {
          "country_code": "??",

```

```

        "latitude": 0,
        "longitude": 0,
        "comments": "?"
    }
},
"offset": 0,
"timestamp": 1605155954
}
}
]
}
}

```

4.5 Get One Organization

This API retrieves a specific organization's information.

API URL

`https://<api_server>/apis/v2/organizations/<orgId>`

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not found
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access

11	Invalid token
12	Token is expired
13	Insufficient permission
98	Critical error
99	Undefined error
504	Organization not found

Sample Output for Failure:

```
Sample Output for Failure
{
  "resultCode": 504,
  "result": "error",
  "error": "Organization not found"
}
```

4.6 Delete Organization

This API deletes an existing organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
404	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
11	Invalid token
12	Token is expired
13	Insufficient permission
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
504	Organization not found

4.7 Update Organization License

This API changes the number of licenses allocated for an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/license

Headers

Authorization - <token>

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

Required Input

Input Type	Format
license	[Organization License Limit]

Optional Input

NONE

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
14	Limit reached
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
505	Organization ID incorrect

Sample Input:

```
{
  "organization": {
    "license": "10000"
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 504,
  "result": "error",
  "error": "Organization not found"
}
```

4.8 Add Site

This API adds site within an existing organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/sites

Headers

Authorization - <token>

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

Required Input

Input Type	Format
name	[Site Name]
category	[Site Category, possible values: Hotel, Transportation, Shopping Mall, Cafes and Restaurants, MICE, School and University, Office]
country	[Country Name]
postalCode	
timezone	[valid timezone supported by PHP]

Optional Input

Input Type	Format
siteGroups	[Array of site groups]
address	
city	
gatewayGuiUrl	[Gateway's GUI URL]
gatewayType	['Gateway' or 'Cloud Gateway', this input is not needed if site has no gateway]
gateways	[Array of gateways, empty array if site has no gateway]
modules	[Modules array, empty array if site has no module]
technicalContact	[Array of technical support's name, email and phone]
billingContact	[Array of financial support's name, email and phone]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK/CREATED
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
51	Gateway hardware serial not found
52	Gateway hardware serial is in use
61	Cloud gateway hardware serial not found
62	Cloud gateway instance limit is reached

71	Module not found
72	Module limit reached
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
401	Site already exists
420	Site add failed
505	Organization ID incorrect
604	Site group not found

Sample Input:

```
{
  "site": {
    "name": "Site A",
    "category": "Hotel",
    "siteGroups": ["Site Group A", "Site Group B"],
    "address": "Braddell Tech 13 Lorong 8 Toa Payoh #04-01",
    "country": "Singapore",
    "postalCode": "319261",
    "timezone": "Asia/Singapore",
    "gatewayType": "Gateway",
    "gatewayGuiUrl": "https://1.2.3.4/admin",
    "gateways": [
      {
        "haId": "1",
        "hardwareSerial": "1701062161"
      },
      {
        "haId": "2",
        "hardwareSerial": "8010299927"
      }
    ],
    "modules": [
      {
        "name": "Lawful Intercept"
      },
      {
        "name": "Event Manager"
      }
    ],
    "technicalContact": [
      {
        "name": "John",
        "email": "john@gmail.com",
        "phone": "62566046"
      }
    ],
    "billingContact": [
      {
        "name": "Smith",
        "email": "Smith@gmail.com",
        "phone": ""
      }
    ]
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 401,
  "result": "error",
  "error": "Site already exists"
}
```

4.9 Update Site

This API updates an existing site's information.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/sites/<siteToken>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
name	[Site Name]
category	[Site Category, possible values: Hotel, Transportation, Shopping Mall, Cafes and Restaurants, MICE, School and University, Office]
country	[Country Name]
postalCode	
timezone	[valid timezone supported by PHP]
siteGroups	[existing site group will be deleted and will insert again]
address	
city	
gatewayGuiUrl	[Gateway's GUI URL]
gatewayType	['Gateway' or 'Cloud Gateway', pass it if gateway type is changed]
gateways	[Gateways array]
modules	[existing modules will be deleted and will insert again]
addModules	[add new modules]
deleteModules	[delete existing modules]
technicalContact	[Technical Support's name, email, and phone]
billingContact	[Financial Support's name, email and phone]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
51	Gateway hardware serial not found
52	Gateway hardware serial is in use
61	Cloud gateway hardware serial not found
62	Cloud gateway instance limit is reached
71	Module not found
72	Module limit reached
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to response
206	License server API call failed
402	Site name is in use
404	Site not found
505	Organization ID incorrect
604	Site group not found

Sample Input to Unassign Gateways from Site:

```
{
  "site": {
    "gateways": [
      {
        "haId": "1",
        "hardwareSerial": "UNASSIGNED"
      },
      {
        "haId": "2",
        "hardwareSerial": "UNASSIGNED"
      }
    ]
  }
}
```

Sample Input Add/Delete Modules from Site:

```
{
  "site": {
    "addModules": [
      {
        "name": "Lawful Intercept"
      },
      {
        "name": "Payment"
      }
    ],
    "deleteModules": [
      {
        "name": "PMS"
      }
    ]
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 404,
  "result": "error",
  "error": "Site not found"
}
```

4.10 Get All Sites

This API retrieves all sites within an existing specific organization or all organizations.

API URL

For all sites from all organizations: https://<api_server>/apis/v2/organizations/all/sites

For all sites from specific organization:

https://<api_server>/apis/v2/organizations/<orgId>/sites

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]
page	[1, 2, 3, etc]
limit	[number of records to show in each page, default 20]
sort	[any API output key, comma separated keys for multiple sort]
order	[asc desc, default value: 'asc', comma separated order for multiple sort]
site	<site>
Date range search	Following inputs for date range searching
siteToken	<siteToken>
createdDateTimeStart & createdDateTimeEnd	<createdDateTimeStart> and <createdDateTimeEnd>
updatedDateTimeStart & updatedDateTimeEnd	<updatedDateTimeStart> and <updatedDateTimeEnd>

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
505	Organization ID incorrect

Sample API call to filter by gateway type:

https://<api_server>/apis/v2/organizations/<orgId>/sites?gatewayType=Gateway

Sample API call to order by country in ascending order:

https:// <api_server>/apis/v2/organizations/<orgId>/sites?sort=country&order=asc

Sample Output for Failure:

```
{
  "resultCode": 505,
  "result": "error",
  "error": "Organization ID incorrect"
}
```

4.11 Get One Site

This API retrieves a specific site's information.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/sites/<siteToken>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired

13	Insufficient permission
98	Critical error
99	Undefined error
404	Site not found
505	Organization ID incorrect

Sample Output for Failure:

```
{
  "resultCode": 404,
  "result": "error",
  "error": "Site not found"
}
```

4.12 Delete Site

This API deletes an existing site.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/sites/<siteToken>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
11	Invalid token
12	Token is expired
13	Insufficient permission
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
404	Site not found
505	Organization ID incorrect

4.13 Update Site License and Burst

This API changes the number of allocated licenses and burst for a specific site.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/sites/<siteToken>/license

Headers

Authorization - <token>

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

Required Input

Input Type	Format
license	[Site's license limit]
burst	[Site's burst limit]

Optional Input

NONE

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
14	Limit reached
90	Argument values incorrect
98	Critical error
99	Undefined error
205	License server failed to respond
206	License server API call failed
505	Organization ID incorrect

Sample Input to Update Site License:

```
{
  "site": {
    "license": "1000"
    "burst": "100"
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 14,
  "result": "error",
  "error": "Limit reached: Burst and license limit combined, should not be greater than the hardware limit of 1000"
}
```

4.14 Add Admin

This API adds admin-level rights and permissions to a user.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/admins

Headers

Authorization - <token>

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

Required Input

Input Type	Format
userId	[Admin Login ID]
password	[Admin Login Password]
group	[Admin Group]
email	[Admin email]
firstName	[Admin First Name]
lastName	[Admin Last Name]
displayName	[Admin Display Name]

Optional Input

Input Type	Format
authType	['Local' or 'Radius', default is 'Local']
active	[1 to enable account, 0 to disable account, default is '1']
2FA	[1 to enable 2FA, 0 to disable 2FA, default is '0']
company	[Admin company name]
designation	[Admin designation]
country	[Admin country name]
phone	[Admin contact number]
timezone	[Admin timezone]
sites	[Array of sites to assign to created admin]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK/Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
101	User already exists

104	User/Admin group not found
107	Email is in use
108	Insufficient privileges to create same-level and higher-level user
111	Global organization is not applicable for admin group level >= 100
112	Site and site group assignment is not needed for admin group level < 50
505	Organization ID incorrect

Sample Input:

```
{
  "admin": {
    "userId": "Admin A",
    "password": "Test123",
    "group": "Organization Super Admin",
    "authType": "Local",
    "active": "1",
    "2FA": "0",
    "firstName": "Zexi",
    "lastName": "Wen",
    "displayName": "Zexi Wen",
    "company": "Test Technology",
    "designation": "IT Engineer",
    "timezone": "Asia/Singapore",
    "email": "zexiwen@abc.com",
    "phone": "12345678",
    "sites": [
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      },
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      }
    ]
  }
}
```

Sample Output for Failure:

```
{
  "resultCode": 101,
  "result": "error",
  "error": "User already exists"
}
```

4.15 Update Admin

This API updates admin-level user's information.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/admins/<userId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
orgId	[Org Login ID if org id needs to change]
userId	[Admin Login ID]
password	[Admin Login Password if password needs to change]
group	[Admin Group]
email	[Admin email]
firstName	[Admin First Name]
lastName	[Admin Last Name]
displayName	[Admin Display Name]
authType	['Local' or 'Radius', default is 'Local']
active	[1 to enable account, 0 to disable account, default tis '1']
2FA	[1 to enable 2FA, 0 to disable 2FA, default tis '0']
company	[Admin company name]
designation	[Admin designation]
country	[Admin country name]
phone	[Admin contact number]
timezone	[Admin timezone]
sites	[Array of sites to replace all existing sites]
addSites	[Array of sites to add more to existing sites]
deleteSites	[Array of sites to delete from existing sites]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
102	User not found
104	User/Admin group not found
106	User ID is in use
111	Global organization is not applicable for admin group level >= 100
112	Site and site group assignment is not needed for admin group level < 50
505	Organization ID incorrect

Sample Input to Disable Admin:

```
{
  "admin": {
    "active": "0"
  }
}
```

Sample Input to Replace All Existing Sites of Admin:

```
{
  "admin": {
    "sites": [
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      },
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      },
      {
        "siteToken": "f24a626a-2920-11e7-beb3-525400fa12e0"
      }
    ]
  }
}
```

Sample Input to Remove One Existing Sites from Admin:

```
{
  "admin": {
    "deleteSites": [
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      }
    ]
  }
}
```

Sample Input to Add One More Site to Existing Sites of Admin:

```
{
  "admin": {
    "addSites": [
      {
        "siteToken": "3d01f155-203d-4801-9043-e3a95f44b842"
      }
    ]
  }
}
```

4.16 Get All Admins

This API retrieves all admin-level users from all sites or a specific site.

API URL

For admins from all sites: https://<api_server>/apis/v2/sites/all/admins

For admins from specific site: https://<api_server>/apis/v2/sites/<site_token>/admins

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]
page	[1, 2, 3, etc]
limit	[number of records to show in each page, default 20]
sort	[any API output key, comma separated keys for multiple sort]
order	[asc desc, default value: 'asc', comma separated order for multiple sort]

siteToken	<siteToken>
gatewayType	<gatewayType>
address	<address>
city	<city>
postalCode	<postalCode>
Any API outputkey	any API output key=value pair for searching
createdDateTimeStart & createdDateTimeEnd	<createdDateTimeStart> and <createdDateTimeEnd>
updatedDateTimeStart & createdDateTimeEnd	<updatedDateTimeStart> and <createdDateTimeEnd>

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error

Sample Input to get all admins with authType: local

https://<api_server>/apis/v2/sites/<site_token>/admins?authType=local

Sample Output for Failure:

```
{
  "resultCode": 12,
  "result": "error",
  "error": "Invalid Access"
}
```

4.17 Get One Admin

This API gets a specific admin-level user's information.

API URL

For admins from specific site:

`https://<api_server>/apis/v2/sites/<site_token>/admins/<userId>`

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
98	Critical error
99	Undefined error
102	User not found
505	Organization ID incorrect

Sample Output for Failure:

```
{
  "resultCode": 102,
  "result": "error",
  "error": "User not found"
}
```

4.18 Delete Admin

This API deletes an admin-level user.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/admins/<userId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
3	API name incorrect
6	Invalid access
11	Invalid token
12	Token is expired
13	Insufficient permission
98	Critical error
99	Undefined error
102	User not found
505	Organization ID incorrect

4.19 Add Global Plan

This API adds a global plan in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-plans

Headers

Authorization - <token>

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

Required Input

Input Type	Format
name	[Global Plan Name]

Optional Input

Input Type	Format
price	[Plan Price, default 0]
type	[Plan type, 'unlimited', 'fixed_duration', 'stored_duration', 'stored_volume', default 'unlimited']
relogin	[Seamless Relogin, 0 or 1, default 1]
downloadBandwidth	[Download Bandwidth in integer value or 'unlimited', default 'unlimited']
uploadBandwidth	[Upload Bandwidth in integer value or 'unlimited', default 'unlimited']
downloadBandwidthUnit	['mbps' or 'kbps']
uploadBandwidthUnit	['mbps' or 'kbps']

If type is 'fixed_duration' or 'stored_duration', the following input 'duration' is required and 'volumeLimit' is optional.

[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration in minutes, integer value, required field]
volumeLimit	[1 to apply volume limit, default 0]

If type is 'fixed_duration' or 'stored_duration', and 'volumeLimit' is 1 (i.e enabled) Following input is required.

Input Type	Format
volume	[Volume in MB, integer value, required field]

If type is 'stored_volume', following input is required.

[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value, required field]

If type is 'unlimited' or 'fixed_duration' and 'volumeLimit' is 0 (i.e disabled)
Following input is optional.

Input Type	Format
sharing	[Sharing limit, default 1, max 2000]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK/Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
701	Plan already exists

Sample Input:

```
{
  "plan": {
    "name": " Fixed Duration 1 Hour",
    "type": "fixed_duration",
    "price": 10,
    "sharing": 3,
    "duration": 3600,
    "relogin": 0,
    "downloadBandwidth": 1024,
    "downloadBandwidthUnit": 'mbps',
    "uploadBandwidth": 1024,
    "uploadBandwidthUnit": 'kbps'
  }
}
```

4.20 Update Global Plan

This API updates an existing global plan in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-plans/<plan_name>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
price	[Plan Price]
downloadBandwidth	[Download Bandwidth in integer value or 'unlimited']
uploadBandwidth	[Upload Bandwidth in integer value or 'unlimited']
downloadBandwidthUnit	['mbps' or 'kbps']
uploadBandwidthUnit	['mbps' or 'kbps']

If type is 'fixed_duration' or 'stored_duration', the following input is optional.
[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration in minutes, integer value]

If type is 'fixed_duration' or 'stored_duration', and existing 'volumeLimit' is 1
Following input is optional.

Input Type	Format
volume	[Volume in MB, integer value]

If type is 'stored_volume', following input is optional.
[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value]

If type is 'unlimited' or 'fixed_duration', and existing 'volumeLimit' is 0
Following input is optional.

Input Type	Format
sharing	[Sharing limit, default 1, max <get from config>]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
201	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found

Sample Input:

```
{
  "plan": {
    "price": 10,
    "downloadBandwidth": 1024,
    "downloadBandwidthUnit": 'mbps',
    "uploadBandwidth": 1024,
    "uploadBandwidthUnit": 'kbps'
  }
}
```

4.21 Get All Global Plan

This API retrieves all existing global plans in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-plans

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]
page	[1,2,3, etc]
limit	[Number of records to show in each page, default 20]
sort	[any API output key]
order	[asc desc, default value: 'asc', comma separated order for multiple sort]

Any API output key=value pair for searching

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect

4.22 Get One Global Plan

This API retrieves single existing global plan in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-plans/<plan_name>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found

4.23 Delete Global Plan

This API deletes single existing global plan in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-plans/<plan_name>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
702	Plan is in use and cannot be deleted
704	Plan not found

4.24 Add Global Account

This API adds a global account in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-accounts

Headers

Authorization - <token>

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

Required Input

Input Type	Format
userId	[Global Account User ID, 64 chars, min 3, valid chars: A-Z a-z 0-9 - . _ @ :]
password	[Global Account Password]
plan	[Global Plan Name]
name	[Global Account Name]
email	[Global Account email]

Optional Input

Input Type	Format
encryption	[Password encryption types, 'No', 'MD5', 'SHA1', 'Salted MD5', 'Salted SHA1', default 'No']
birthday	[format: dd-mm-yyyy]
gender	[Male, Female, Other]
enable	[1 to enable account, 0 to disable account, default is 1]
country	[Global Account country name]
phone	[Global Account phone number]
validUntil	[Global account valid until date, any valid datetime string]
qosClass	[QoS Class Name, Possible Values: 'UNLIMITED', 'GBT-1' to 'GBT-30', 'PT6', 'CT-7']
downloadBandwidth	[Download Bandwidth in integer value]
uploadBandwidth	[Upload Bandwidth in integer value]
downloadBandwidthUnit	['mbps' or 'kbps']
uploadBandwidthUnit	['mbps' or 'kbps']

If type is 'fixed_duration' or 'stored_duration', the following input is optional.

[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration integer value in minutes eg. 60 for 1 hour]

If type is 'fixed_duration' or 'stored_duration', and existing 'volumeLimit' is 1.

Following input is optional.

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'stored_volume', following input is optional.

[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'unlimited' or 'fixed_duration' and existing 'volumeLimit' is 0

Following input is optional.

Input Type	Format
sharing	[integer from 1 to <max>, default 1]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK/Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
101	User already exists
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found

Sample Input:

```
{
  "user": {
    "userId": "tester",
    "password": "Test123",
    "plan": "Fixed Duration 1 Hour 2MB",
    "enable": 0,
    "name": "Wen",
    "email": "zexiwen@abc.com",
    "phone": "12345678",
    "birthday": "11-11-2000",
    "gender": "Male",
    "country": "India",
    "validUntil": "17-03-2021 14:37:00",
    "duration": 60,
    "volume": "2048",
    "qosClass": " GBT-1",
    "downloadBandwidth": 100,
    "downloadBandwidthUnit": "kbps",
    "uploadBandwidth": 200,
    "uploadBandwidthUnit": "mbps"
  }
}
```

4.25 Update Global Account

This API updates an existing global account in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-accounts/<userId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
password	[Global account password if password needs to change]
encryption	[Password encryption types, 'No', 'MD5', 'SHA1', 'Salted MD5', 'Salted SHA1']
name	[Global Account Name]
email	[Global Account email]
birthday	[format: dd-mm-yyyy]
gender	[Male, Female, Other]
enable	[1 to enable account, 0 to disable account]

country	[Global Account country name]
phone	[Global Account phone number]
validUntil	[Global account valid until date, any valid datetime string]
qosClass	[QoS Class Name, Possible Values: 'UNLIMITED', 'GBT-1' to 'GBT-30', 'PT6', 'CT-7']
downloadBandwidth	[Download Bandwidth in integer value]
uploadBandwidth	[Upload Bandwidth in integer value]
downloadBandwidthUnit	['mbps' or 'kbps', required if downloadBandwidth is passed]
uploadBandwidthUnit	['mbps' or 'kbps', required if uploadBandwidth is passed]

If type is 'fixed_duration' or 'stored_duration', the following input is optional.
[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration integer value in minutes eg. 60 for 1 hour]

If type is 'fixed_duration' or 'stored_duration', and existing 'volumeLimit' is 1.
Following input is optional.

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'stored_volume', following input is accepted.
[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'unlimited' or 'fixed_duration' and existing 'volumeLimit' is 0
Following input is accepted.

Input Type	Format
sharing	[integer from 1 to <max>, default 1]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect

6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
102	User not found
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found

Sample Input:

```
{
  "user": {
    "password": "Test123",
    "enable": 1,
    "validUntil": "20-03-2021 14:37:00",
    "downloadBandwidth": 100,
    "downloadBandwidthUnit": "kbps",
    "uploadBandwidth": 200,
    "uploadBandwidthUnit": "mbps"
  }
}
```

4.26 Get All Global Accounts

This API retrieves all existing global accounts in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-accounts

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]

page	[1,2,3, etc]
limit	[Number of records to show in each page, default 20]
sort	[any API output key except birthday]
order	[asc desc, default value: 'asc']

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect

4.27 Get One Global Account

This API retrieves an existing global account in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-accounts/<userId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
102	User not found
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect

4.28 Delete Global Account

This API deletes an existing global account in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-accounts/<userId>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
102	User not found
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect

4.29 Add Global Code

This API adds a global code in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-codes

Headers

Authorization - <token>

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

Required Input

Input Type	Format
plan	[Global Plan Name]

Optional Input

Input Type	Format
code	[Global Code, 64 chars, min 3, valid chars: A-Z a-z 0-9 - . _ @]
enable	[1 to enable code, 0 to disable code, default is 1]
validUntil	[Global code valid until date, any valid datetime string]
qosClass	[QoS Class Name, Possible Values: 'UNLIMITED', 'GBT-1' to 'GBT-30', 'PT6', 'CT-7']
downloadBandwidth	[Download Bandwidth in integer value]
uploadBandwidth	[Upload Bandwidth in integer value]
downloadBandwidthUnit	['mbps' or 'kbps']
uploadBandwidthUnit	['mbps' or 'kbps']

If code is blank, the following optional inputs will be used to generate code (all optional)

Input Type	Format
count	[number of codes to generate, default 1, max 500]
codeFormat	['alpha', 'alnum', 'num', 'sqnum', default 'alnum']
codeLength	[integer >= 3, default 9]
codePrefix	[max 20, valid chars: A-Z a-z 0-9 - . _ @ :, default blank]
codeSuffix	[max 20, valid chars: A-Z a-z 0-9 - . _ @ :, default blank]

If type is 'fixed_duration' or 'stored_duration', the following input is optional.

[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration integer value in minutes eg. 60 for 1 hour]

If type is 'fixed_duration' or 'stored_duration', and existing 'volumeLimit' is 1.

Following input is optional.

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'stored_volume', following input is optional.

[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'unlimited' or 'fixed_duration' and existing 'volumeLimit' is 0

Following input is optional.

Input Type	Format
sharing	[sharing limit, integer from 1 to max<get from config>, default 1]

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK/Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found
801	Code already exists

Sample Input:

```
{
  "user": {
    "code": "tester",
    "plan": "Fixed Duration 1 Hour",
    "enable": 1,
    "validUntil": "17-03-2021 14:37:00"
  }
}
```

4.30 Update Global Code

This API updates an existing global code in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-codes/<code>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
enable	[1 to enable code, 0 to disable code]
validUntil	[Global code valid until date, any valid datetime string]
qosClass	[QoS Class Name, Possible Values: 'UNLIMITED', 'GBT-1' to 'GBT-30', 'PT6', 'CT-7']
downloadBandwidth	[Download Bandwidth in integer value]
uploadBandwidth	[Upload Bandwidth in integer value]
downloadBandwidthUnit	['mbps' or 'kbps', required if downloadBandwidth is passed]
uploadBandwidthUnit	['mbps' or 'kbps', required if uploadBandwidth is passed]

If type is 'fixed_duration' or 'stored_duration', the following input is optional.
[Note: if type is 'unlimited' or 'stored_volume', it is not needed]

Input Type	Format
duration	[Duration integer value in minutes eg. 60 for 1 hour]

If type is 'fixed_duration' or 'stored_duration', and existing 'volumeLimit' is 1.
Following input is optional.

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'stored_volume', following input is optional.
[Note: if type is 'unlimited', it is not needed]

Input Type	Format
volume	[Volume in MB, integer value, eg. 1024]

If type is 'unlimited' or 'fixed_duration' and existing 'volumeLimit' is 0
Following input is optional.

Input Type	Format
sharing	[sharing limit, integer from 1 to max<get from config>, default 1]

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
704	Plan not found
804	Code not found

Sample Input:

```
{
  "user": {
    "plan": "Fixed Duration 2 Hour",
    "enable": 1,
    "validUntil": "20-03-2021 14:37:00",
    "downloadBandwidth": 100,
    "downloadBandwidthUnit": "kbps",
    "uploadBandwidth": 200,
    "uploadBandwidthUnit": "mbps"
  }
}
```

4.31 Get All Global Codes

This API retrieves all existing global codes in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-codes

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

Input Type	Format
format	[xml json, default value: json]
page	[1,2,3, etc]
limit	[Number of records to show in each page, default 20]
sort	[sort by code and plan name only]
order	[asc desc, default value: 'asc']

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect

4.32 Get One Global Code

This API retrieves an existing global code in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-codes/<code>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
804	Code not found

4.33 Delete Global Code

This API deletes an existing global code in an organization.

API URL

https://<api_server>/apis/v2/organizations/<orgId>/global-codes/<code>

Headers

Authorization - <token>

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

Required Input

NONE

Optional Input

NONE

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not found
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
3	API name incorrect
6	Invalid access
7	Site token incorrect
9	Invalid json input
11	Invalid token
12	Token is expired
13	Insufficient permission
90	Argument values incorrect
98	Critical error
99	Undefined error
102	User not found
201	Radius server failed to response
202	Radius server response is empty
505	Organization ID incorrect
804	Code not found

5.1 Report

Reporting gives business owners or administrator an overview of the business and operational planning.

5.1.1 Report for Demographics

This API allows viewing demographic of user information to be used for business reporting or marketing.

Report Name : demographics

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```


Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/demographics?&startDate=2020-01-15&endDate=2020-01-17>

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "demographics":{
    "lastupdate":"2020-01-15
16:00:12",
    "top_agerange":"25-34",
    "series":[
      {
        "type":"column",
        "name":"Male",
        "data":[
          0,
          0,
          1,
          0,
          0,
          0,
          0,
```

In the Demographics graphs, we have categorized age group as below:

Demographic for **male**:

User Count	Description
0	Age 14 and below
0	Age 15 to 24
1	Age 25-34
2	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

This is a result sample output for demographic API invoking. Data retrieved shown that demographics with last update date, and top age range.

```

"type": "column",
"name": "Female",
"data": [
0,
0,
1,
0,
0,
0,
0,
0
]
"type": "column",
"name": "Unknown",
"data": [
0,
0,
0,
0,
0,
0,
0,
0
]
},
{
"type": "spline",
"name": "Average",
"data": [
0,
0,
0.67,
0,
0,
0,
0,
0
]
},
{
"type": "pie",
"name": "Total User",
"data": [
{
"name": "Male",
"y": 1
},
{
"name": "Female",
"y": 1
},
{
"name": "Unknown",
"y": 0
}
]
}

```

Demographic for **female** data:

User count	Description
0	Age 14 and below
0	Age 15 to 24
1	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Demographic for **"unknown"** age gender group.

This is because user registration without specifying their gender.

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Spline is referring to split line graph in ACS.

An average demographic age group user count.

User count	Description
0	Age 14 and below
0	Age 15 to 24
0.67	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Pie is referring to pie chart in ACS reporting.

The result shows :

Male with user count of "1".

Female with user count of "1".

Unknown with user count of "0".

5.1.2 Report for Session Usage

This API will return number of new users per day, number of repeated users per day, total number of sessions per day, total number of users per day, data uploaded per day (in bytes), data downloaded per day (in bytes) in the requested date range.

Report Name : sessionusage

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/sessionusage?&startDate=2020-01-15&endDate=2020-01-17>

Example Result:

```
"sessionusage":{
  "newuser":{
    "total":0
  },
  "user":{
    "series":[
      {
        "name":"New User",
        "data":[
          0,
          0,
          0
        ]
      },
      {
        "name":"Repeat User",
        "data":[
          9,
          1,
          0
        ]
      }
    ]
  }
}
```

The data result returns each field as a day of query if any new user.

New User

New User	Date /Day
0	15 th Jan
0	16 th Jan
0	17 th Jan

Cumulative date range of repeating users' login.

Repeat Users

Repeated Users	Date /Day
9	15 th Jan
1	16 th Jan
0	17 th Jan

```
"session":{
  "series":[
    {
      "name":"Session",
      "data":[
        [
          "2020-01-15",
          21
        ],
        [
          "2020-01-16",
          8
        ],
        [
          "2020-01-17",
          0
        ]
      ]
    }
  ]
}
```

Cumulative Session Report

Session

Sessions	Date
21	15 th Jan
8	16 th Jan
0	17 th Jan

```

"name": "Users",
"data": [
  [
    "2020-01-15",
    9
  ],
  [
    "2020-01-16",
    1
  ],
  [
    "2020-01-17",
    0
  ]
]

```

Cumulative User Report

Users

User count	Date
9	15 th Jan
1	16 th Jan
0	17 th Jan

```

"datausage": {
  "series": [
    {
      "name": "Upload",
      "data": [
        [
          "2020-01-15",
          0
        ],
        [
          "2020-01-16",
          0
        ],
        [
          "2020-01-17",
          0
        ]
      ]
    }
  ]
}

```

Data Usage

Upload

Sessions Count	Date
0	15 th Jan
0	16 th Jan
0	17 th Jan

This is showing result of data usage for upload usage.

```

"name": "Download",
"data": [
  [
    "2020-01-15",
    0
  ],
  [
    "2020-01-16",
    0
  ],
  [
    "2020-01-17",
    0
  ]
]

```

Download

User Count	Date
0	15 th Jan
0	16 th Jan
0	17 th Jan

This is showing result of data usage for download usage.

5.1.3 Report for Gender

This API is for user gender report.

Report Name : gender

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/gender?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "gender":{
    "lastupdate":"2020-01-
15 16:00:12",
    "series":[
      {
        "name":"Male",
        "data":[
          1,
          0,
          0,
          0,
          0,
          0,
          0,
          0,
          0,
          0
        ]
      }
    ]
  }
}
```

```
"name":"Female",
"data":[
  0,
  1,
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0
]
```

```
"name":"Unknown",
"data":[
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0
]
```

```
"total":{
  "male":1,
  "female":1,
  "unknown":0
}
```

For gender API results:

This API will return result about Visitor Source.

Gender: **Male**

User count	Description
1	Facebook
0	Google Plus
0	Twitter
0	Instagram
0	LINE
0	WeChat
0	Form
0	Global

Gender: **Female**

User count	Description
0	Facebook
1	Google Plus
0	Twitter
0	Instagram
0	LINE
0	WeChat
0	Form
0	Global

Gender: **Unknown**

User count	Description
0	Facebook
0	Google Plus
0	Twitter
0	Instagram
0	LINE
0	WeChat
0	Form
0	Global

As summary of the gender report, it results of different gender within the date range 15th to 17th Jan.

Result show total of 1 male, 1 female and 0 unknown gender user count for the date of 15th to 17th Jan.

5.1.4 Report for Age Range

This is for user age range reporting.

Report Name : agerange

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?startDate=<startdate>&endDate=<enddate>
```


Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/agerange?&startDate=2020-01-15&endDate=2020-01-17>

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "agerange":{
    "lastupdate":"2020-01-15 16:00:12",
    "series":[
      {
        "name":"Facebook",
        "data":[
          0,
          0,
          1,
          0,
          0,
          0,
          0,
          0,
```

```
"name":"Google Plus",
"data":[
  0,
  0,
  1,
  0,
  0,
  0,
  0,
  0,
  0,
```

```
"name":"Twitter",
"data":[
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0,
```

```
"name":"Instagram",
"data":[
  0,
  0,
  0,
  0,
  0,
  0,
  0,
  0,
```

Data result for age range API.

Facebook

User count	Description
0	Age 14 and below
0	Age 15 to 24
1	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Google Plus

User count	Description
0	Age 14 and below
0	Age 15 to 24
1	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Twitter

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

Instagram

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

```
"name": "Line",
"data": [
0,
0,
0,
0,
0,
0,
0,
0,
0,
```

Line

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

```
"name": "WeChat",
"data": [
0,
0,
0,
0,
0,
0,
0,
0,
```

Wechat

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

```
"name": "Form",
"data": [
0,
0,
0,
0,
0,
0,
0,
0,
```

Form

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

```
"name": "Global",
"data": [
0,
0,
0,
0,
0,
0,
0,
```

Global

User count	Description
0	Age 14 and below
0	Age 15 to 24
0	Age 25-34
0	Age 35-44
0	Age 45-54
0	Age 55-64
0	Age 65 and above
0	Unknown

```
"total": {
"facebook": 1,
"googleplus": 1,
"twitter": 0,
"instagram": 0,
"line": 0,
"wechat": 0,
"form": 0,
"global": 0
```

Summary will show the total of user count for each login authentication method for the date range query 15th to 17th Jan.

5.1.5 Report for Country

This is for visitor's country reporting.

Report Name : country

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v1/sites/all/reports/country?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
"resultCode":0,
  "result":"ok",
  "data":{
    "country":
    {
      "lastupdate":"2020-01-15
16:00:12",
      "series":{
        "India":{
          "25-34":{
            "Female":1
          }
        },
        "Singapore":{
          "25-34":{
            "Male":1
          }
        },
        "total":{
          "India":1,
          "Singapore":1
        }
      }
    }
  }
```

This is result for Top Places (Country) users' access for the selected date range 15th to 17th Jan.

Result explained below:

India

Age Range	Gender	User Count
Age 25-34	Female	1

Singapore

Age Range	Gender	User Count
Age 25-34	Male	1

Total

Total number of users as category in country as below:

Country	Number of Users
Singapore	1
India	1

5.1.6 Report for Affinity Age Range

This is for affinity age range API reporting.

Report Name : affinityagerange

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access

7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/affinityagerange?&startDate=2020-01-15&endDate=2020-01-17>

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "affinityagerange":{
    "series":[
      {
        "type":"column",
        "name":"Fashion",
        "data":[
          0,
          12,
          40,
          15,
          2,
          0,
          1,
          0
```

Fashion

User count	Description
0	Age 14 and below
12	Age 15 to 24
40	Age 25-34
15	Age 35-44
2	Age 45-54
0	Age 55-64
1	Age 65 and above
0	Unknown

```
"type":"column",
"name":"Food &
Beverages",
"data":[
  0,
  11,
  37,
  18,
  1,
  0,
  1,
  0
```

Food and Beverages

User count	Description
0	Age 14 and below
11	Age 15 to 24
37	Age 25-34
18	Age 35-44
1	Age 45-54
0	Age 55-64
1	Age 65 and above
0	Unknown

```
"type": "column",
"name": "Healthcare &
Beauty",
"data": [
0,
19,
69,
23,
4,
2,
1,
0
```

```
"type": "column",
"name": "Music &
Entertainment",
"data": [
0,
18,
55,
19,
2,
0,
1,
0
```

```
"type": "column",
"name": "Others",
"data": [
0,
20,
66,
26,
3,
1,
1,
0
```

```
"type": "column",
"name": "Sports",
"data": [
0,
20,
65,
24,
5,
1,
1,
0
```

Healthcare and Beauty

User count	Description
0	Age 14 and below
19	Age 15 to 24
69	Age 25-34
23	Age 35-44
4	Age 45-54
2	Age 55-64
1	Age 65 and above
0	Unknown

Music and Entertainment

User count	Description
0	Age 14 and below
18	Age 15 to 24
55	Age 25-34
19	Age 35-44
1	Age 45-54
0	Age 55-64
1	Age 65 and above
0	Unknown

Others

User count	Description
0	Age 14 and below
20	Age 15 to 24
66	Age 25-34
26	Age 35-44
3	Age 45-54
1	Age 55-64
1	Age 65 and above
0	Unknown

Sports

User count	Description
0	Age 14 and below
20	Age 15 to 24
65	Age 25-34
24	Age 35-44
5	Age 45-54
1	Age 55-64
1	Age 65 and above
0	Unknown

```
"type": "column",
"name": "Study, Arts & Literature",
"data": [
  0,
  20,
  69,
  26,
  6,
  1,
  1,
  0
]
```

Study, Arts and Literature

User count	Description
0	Age 14 and below
20	Age 15 to 24
69	Age 25-34
26	Age 35-44
6	Age 45-54
1	Age 55-64
1	Age 65 and above
0	Unknown

```
"type": "column",
"name": "Technology & Business",
"data": [
  0,
  15,
  42,
  12,
  2,
  0,
  1,
  0
]
```

Technology and Business

User count	Description
0	Age 14 and below
15	Age 15 to 24
42	Age 25-34
12	Age 35-44
2	Age 45-54
0	Age 55-64
1	Age 65 and above
0	Unknown

```
"type": "column",
"name": "Travel",
"data": [
  0,
  9,
  28,
  11,
  0,
  0,
  1,
  0
]
```

Travel

User count	Description
0	Age 14 and below
9	Age 15 to 24
28	Age 25-34
11	Age 35-44
0	Age 45-54
0	Age 55-64
1	Age 65 and above
0	Unknown

```
"type": "column",
"name": "Video Games & Toys",
"data": [
  0,
  22,
  70,
  28,
  6,
  2,
  1,
  0
]
```

Video Games and Toys

User count	Description
0	Age 14 and below
22	Age 15 to 24
70	Age 25-34
28	Age 35-44
6	Age 45-54
2	Age 55-64
1	Age 65 and above
0	Unknown

```

"type": "spline",
"name": "Average",
"data": [
0,
16.6,
54.1,
20.2,
3.1,
0.7,
1,
0
]

```

Average shows split line in graph

User count	Description
0	Age 14 and below
16.6	Age 15 to 24
54.1	Age 25-34
20.2	Age 35-44
3.1	Age 45-54
0.7	Age 55-64
1	Age 65 and above
0	Unknown

```

"type": "pie",
"name": "Total User",
"data": [
{
"name": "Fashion",
"y": 70
},
{
"name": "Food & Beverages",
"y": 68
},
{
"name": "Healthcare & Beauty",
"y": 118
},
{
"name": "Music & Entertainment",
"y": 95
},
{
"name": "Others",
"y": 117
},
{
"name": "Sports",
"y": 116
},
{
"name": "Study, Arts & Literature",
"y": 123
},
{
"name": "Technology & Business",
"y": 72
},
{
"name": "Travel",
"y": 49
},
{
"name": "Video Games & Toys",
"y": 129
}
]

```

Total User

Users Count	Traffic Sources
70	Fashion
68	Food & Beverage
118	Healthcare & Beauty
95	Music & Entertainment
117	Others
116	Sports
123	Study, Arts & Literature
72	Technology & Business Partner
49	Travel
129	Video Games & Toys

5.1.7 Report for Affinity gender

This is for affinity gender reporting.

Report Name : affinitygender

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/affinitygender?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
{
  "resultCode":0,
  "result":"ok",
  "data":{"affinitygender":{"lastupdate":"2020-01-13
16:00:13",
"series":[
{
  "y":100,
  "color":"#2b7efe",
  "drilldown":{"
    "color":"#2b7efe",
    "name":"Male",
    "affinities":["
      "Fashion",
      "Study, Arts & Literature",
      "Healthcare & Beauty",
      "Others",
      "Sports",
      "Technology & Business",
      "Travel",
      "Video Games & Toys"
    ],
    "data":[
      20,
      20,
      10,
      10,
      10,
      10,
      10,
      10,
```

```
"y":0,  
"color":"#f063a5",  
"drilldown":{  
"color":"#f063a5",  
"name":"Female",  
"affinities":[  
"Fashion",  
"Study, Arts & Literature",  
"Healthcare & Beauty",  
"Others",  
"Sports",  
"Technology & Business",  
"Travel",  
"Video Games & Toys"],  
"data":[  
0,  
0,  
0,  
0,  
0,  
0,  
0,  
0,  
0
```

Based on 13th Jan 2020

User Affinity by Gender : Male

Data (%)	Gender	Traffic Sources
20	Male	Fashion
20	Male	Study, Art & Literature
10	Male	Healthcare & Beauty
10	Male	Others
10	Male	Sports
10	Male	Technology & Business
10	Male	Travel
10	Male	Video Games & Toys

An overall calculation for data range for Users Affinity by Gender in terms of percentages.

Based on 13th Jan 2020

User Affinity by Gender : **Female**

Data (%)	Gender	Traffic Sources
0	Female	Fashion
0	Female	Study, Art & Literature
0	Female	Healthcare & Beauty
0	Female	Others
0	Female	Sports
0	Female	Technology & Business
0	Female	Travel
0	Female	Video Games & Toys

An overall calculation for data range for Users Affinity by Gender in terms of percentages.

```

"y":0,
"color":"#ff7f2b",
"drilldown":{
"color":"#ff7f2b",
"name":"Unknown",
"affinities":[
"Fashion",
"Study, Arts & Literature",
"Healthcare & Beauty",
"Others",
"Sports",
"Technology & Business",
"Travel",
"Video Games & Toys"
],
"data":[
0,
0,
0,
0,
0,
0,
0,
0,
0
]

```

Based on 13th Jan 2020

User Affinity by Gender: **Unknown**

Data (%)	Gender	Traffic Sources
0	Unknown	Fashion
0	Unknown	Study, Art & Literature
0	Unknown	Healthcare & Beauty
0	Unknown	Others
0	Unknown	Sports
0	Unknown	Technology & Business
0	Unknown	Travel
0	Unknown	Video Games & Toys

An overall calculation for data range for Users Affinity by Gender in terms of percentages.

5.1.8 Report for User Source

This is for user source reporting.

Report Name : usersource

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/usersource?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "usersource":{
    "series":[
      {
        "name":"Auto Login",
        "data":[
          [
            "2020-01-15",
            1
          ],
          [
            "2020-01-16",
            0
          ],
          [
            "2020-01-17",
            0
          ]
        ]
      }
    ]
  }
}
```

User Sources result for:

Auto Login

User Count	Date /Day
1	15 th Jan
0	16 th Jan
0	17 th Jan

```
"name":"Complimentary",
"data":[
  [
    "2020-01-15",
    4
  ],
  [
    "2020-01-16",
    1
  ],
  [
    "2020-01-17",
    0
  ]
]
```

User Sources result for:

Complimentary

User Count	Date /Day
4	15 th Jan
1	16 th Jan
0	17 th Jan

```

"name": "Facebook",
"data": [
[
"2020-01-15",
1
],
[
"2020-01-16",
0
],
[
"2020-01-17",
0
]
]

```

User Sources result for:

Facebook

User Count	Date /Day
1	15 th Jan
0	16 th Jan
0	17 th Jan

```

"name": "Google Plus",
"data": [
[
"2020-01-15",
1
],
[
"2020-01-16",
0
],
[
"2020-01-17",
0
]
]

```

User Sources result for:

Google Plus

User Count	Date /Day
1	15 th Jan
0	16 th Jan
0	17 th Jan

```

"name": "PMS",
"data": [
[
"2020-01-15",
1
],
[
"2020-01-16",
0
],
[
"2020-01-17",
0
]
]

```

User Sources result for:

PMS

User Count	Date /Day
1	15 th Jan
0	16 th Jan
0	17 th Jan

```

"name": "Roaming",
"data": [
  [
    "2020-01-15",
    1
  ],
  [
    "2020-01-16",
    0
  ],
  [
    "2020-01-17",
    0
  ]
],
"top_visitor_source": "Complimentary"
}

```

User Sources result for:

Roaming

User Count	Date /Day
1	15 th Jan
0	16 th Jan
0	17 th Jan

Top Visitor source is
Complimentary.

5.1.9 Report for Device

This is for device reporting.

Report Name : device

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site:

`https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>`

For Specific Site Group:

`https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/device?&startDate=2020-01-15&endDate=2020-01-17`

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "device":{
    "series":[
      {
        "data":[
          {
            "y":9,
            "name":"PC",
            "color":"#7BB4EC"
          },
          {
            "y":1,
            "name":"SamsungBrowser",
            "color":"#DC7CEB"
          }
        ]
      }
    ]
  }
}
```

Device

Number of Devices	Device Type
9	PC
1	Samsung Browser

5.1.10 Report for Browser

This is for browser type which is used by user.

Report Name : browser

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request

500	Internal Server Error
-----	-----------------------

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<ReportName>?&startDate=<startdate>&endDate=<enddate>

Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/browser?&startDate=2020-01-15&endDate=2020-01-17>

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "browser":{
    "series":[
      {
        "data":[
          {
            "y":8,
            "name":"Chrome",
            "color":"#7BB4EC"
          },
          {
            "y":2,
            "name":"Other",
            "color":"#DC7CEB"
          },
          {
            "y":1,
            "name":"Safari",
            "color":"#90EC7D"
          }
        ]
      }
    ]
  }
}
```

Browser

Number of Users	Browser Type
8	Chrome
2	Other
1	Safari

5.1.11 Report for OS

The OS type used by user.

Report Name : os

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site Group:

https://<apiserver>/apis/v2/sitegroups/<site_group_name>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/os?&startDate=2020-01-15&endDate=2020-01-17

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "os":{
    "series":[
      {
        "data":[
          {
            "y":7,
            "name":"Linux",
            "color":"#7BB4EC"
          },
          {
            "y":2,
            "name":"Other",
            "color":"#DC7CEB"
          },
          {
            "y":1,
            "name":"Android",
            "color":"#90EC7D"
          }
        ]
      }
    ]
  }
}
```

Operating System

Number	Share of OS	OS Type
7		Linux
1		Android
2		Other

5.1.12 Report for Topsite

This is to list the top sites visited by the user.

Report Name : topsite

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format

98	Critical Error
99	Undefined Error

For All Sites:

`https://<api_server>/apis/v2/sites/all/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

For Specific Site:

`https://<api_server>/apis/v2/sites/<site_token>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

For Specific Site Group:

`https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/topsite?&startDate=2020-01-15&endDate=2020-01-17`

Example Result:

```
{
  "resultCode":0,
  "result":"ok",
  "data":{
    "topsite":[
    ]
  }
}
```

Output should be showing most visited website example Abc.com.

5.1.13 Report for Duration Usage

This is for duration usage which is used by user.

Report Name : durationusage

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

`https://<api_server>/apis/v2/sites/all/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

For Specific Site:

`https://<api_server>/apis/v2/sites/<site_token>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

For Specific Site Group:

`https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/durationusage?&startDate=2020-01-15&endDate=2020-01-17`

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "durationusage":{
    "series":[
      {
        "name":"4+ hours",
        "data":[
          [
            "2020-01-15",
            0
          ],
          [
            "2020-01-16",
            0
          ],
          [
            "2020-01-17",
            0
          ]
        ]
      }
    ]
  }
}
```

4+ hours

Date	Number of users
15 Jan	0
16 Jan	0
17 Jan	0

```
"name": "2-4 hours",
"data": [
  [
    "2020-01-15",
    0
  ],
  [
    "2020-01-16",
    0
  ],
  [
    "2020-01-17",
    0
  ]
]
```

2- 4 hours

Date	Number of users
15 Jan	0
16 Jan	0
17 Jan	0

```
"name": "1-2 hours",
"data": [
  [
    "2020-01-15",
    0
  ],
  [
    "2020-01-16",
    0
  ],
  [
    "2020-01-17",
    0
  ]
]
```

1-2 hours

Date	Number of users
15 Jan	0
16 Jan	0
17 Jan	0

```
"name": "31-60 mins",
"data": [
  [
    "2020-01-15",
    0
  ],
  [
    "2020-01-16",
    0
  ],
  [
    "2020-01-17",
    0
  ]
]
```

31-60mins

Date	Number of users
15 Jan	0
16 Jan	0
17 Jan	0

```
"name": "0-30 mins",
"data": [
  [
    "2020-01-15",
    21
  ],
  [
    "2020-01-16",
    8
  ],
  [
    "2020-01-17",
    0
  ]
]
```

0-30 mins

Date	Number of users
15 Jan	21
16 Jan	8
17 Jan	0

5.1.14 Report for Session Summary

This is for **sessionsummary** reporting.

Report Name : sessionsummary

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

```
https://<api_server>/apis/v2/sites/all/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/sessionsummary?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
  "sessionsummary":{
    "totaluser":8,
    "average_duration":0
```

Session summary will show the total user sessions on the start and end date range. In this example, it has total of 8 user captured.

5.1.15 Report for Transaction Summary

This is for transaction summary reporting.

Report Name : transactionsummary

Required Input

Input Type	Format
startDate	startDate=<YYYY-MM-DD>
endDate	endDate=<YYYY-MM-DD>

Optional Input

Input Type	Format
reportType	Daily or Weekly or Monthly*

*only for transactionsummary API

Output

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
8	Not Supported Format
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>

For Specific Site:

```
https://<api_server>/apis/v2/sites/<site_token>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>
```

For Specific Site Group:

```
https://<api_server>/apis/v2/sitegroups/<site_group_name>/reports/<reportName>?&startDate=<startdate>&endDate=<enddate>
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/all/reports/transactionsummary?&startDate=2020-01-15&endDate=2020-01-17
```

Example Result:

```
"data":{
  "reportType":"daily",
  "totalAmount":48,
  "topDay":"Jan 15, 2020",
  "topPlan":"FixedDuration ",
  "topPlanAmount":28,
  "transactions":[
    {
      "date":"Jan 15, 2020",
      "totalAmount":28,
      "plans":[
        {
          "name":" Free Wi-fi ",
          "quantity":"8",
          "rate":"0.00",
          "amount":"0.00",
          "datetime":"2020-01-15 15:06:50"
        },
        {
          "name":"new_plan display",
          "quantity":"1",
          "rate":"0.00",
          "amount":"0.00",
          "datetime":"2020-01-15 16:57:51"
        },
        {
          "name":"FixedDuration",
          "quantity":"2",
          "rate":"14.00",
          "amount":"28.00",
          "datetime":"2020-01-15 11:43:30"
        }
      ]
    }
  ]
}
```



```

"date": "Jan 16, 2020",
"totalAmount": 20,
"plans": [
{
"name": "Plan 2 FD",
"quantity": "3",
"rate": "0.00",
"amount": "0.00",
"datetime": "2020-01-16 18:17:44"
},
{
"name": "For Demo SD",
"quantity": "2",
"rate": "10.00",
"amount": "20.00",
"datetime": "2020-01-16 16:28:35"
}
]

```

Transaction Summary Report

Date	Plan	Quantity	Rate	Amount Per Plan	Total Amount
Jan 15	Free Wi-fi	8	0	0	
Jan 15	New Plan Display	1	0	0	
Jan 15	Fixed Duration	2	14	28	28
Jan 16	Plan 2 FD	3	0	0	
Jan 16	For Demo SD	2	10	20	20
				Total :	48

This transaction summary provides the overview of business reporting for quantity and revenue for each internet plan type.

5.2. User

User reporting will allow getting verified user, roaming user, add or update user details.

5.2.1 Users – To Get all verified users

This API will allow to get all verified users.

API Name : verified users

Required Input

None

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Page	1, 2, 3, etc
limit	Number of records to show in each page (default is 20 records)
sort	Any API output key or comma separated keys for multiple sort
order	Ascending or descending (default value: 'asc', comma separated order for multiple sort.
Any API output key	any API output key=value pair for searching
loginStart	valid date time string to search by user login date range, maximum date range should be 31 days
loginEnd	valid date time string to search by user login date range, maximum date range should be 31 days
lastUpdateStart & lastUpdateEnd	from last updated record start and last updated record end time.
birthdayStart & birthdayEnd	To check User's birthday month.
createdDateTimeStart & createdDateTimeEnd	To check user's profile creation date

Output

HTTP Method
GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/users?

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/users?

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<site_group_name>/users?

Example API to get specific site for all verified users:

<https://demo-api.antlabs.com:8443/apis/v2/sites/c105df62-9919-11e6-9cb2-066072c86e19/users?>

Example Result:

```
"data":{
  "user":[
    {
      "socialuserId":"13",
      "userToken":"fb_446149642390993",
      "name":"user_13",
      "gender":"male",
      "email":"user_13@notrealemail.com",
      "birthday":{
        "timezone":{
          "name":"UTC",
          "location":{
            "country_code":"??",
            "latitude":0,
            "longitude":0,
            "comments":""
          }
        },
        "offset":0,
        "timestamp":946252800
      },
      "location":"Singapore",
      "imageUrl":"https://scontent.xx.fbcdn.net/v/t31.0-8/s720x720/19055341_471190346553589_2443027656111686212_o.jpg?oh=16022ee31de0f9cf17e90618b23031e4&oe=59F17A1D",
      "thumbnailUrl":"https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTDiOA94j-bRzdy74bIEy1aPgg3qI5mFGKrrZD1eT9ZL_trcupKvw",
      "accountUrl":"https://www.facebook.com/stacy.brandon.92",
      "ageRangeMin":"13",
      "friendCount":1035,
      "loginCount":3,
      "lastLoginTime":{
        "timezone":{
          "name":"UTC",
          "location":{
            "country_code":"??",
            "latitude":0,
            "longitude":0,
            "comments":""
          }
        },
        "offset":0,
        "timestamp":1500365426
      },
      "lastDevice":"Samsung SM-J510GN Android",
      "lastBrowser":"Chrome Mobile",
      "authName":"facebook",
      "country":",
      "mobile":",
      "consent":",
      "custom1":",
      "custom2":",
      "custom3":",
      "custom4":",
      "custom5":",
      "createDatetime":{
        "timezone":{
          "name":"UTC",
          "location":{
```

Verified users allow you to get user profile information like **social user Id**, birthday, country, gender, email, mobile, visitor sources, device used, browser used, no. of Logins, last seen, affinity information, and custom fields if available.

5.2.2 Get Specific Verified User

This API will allow getting specific verified user.

API Name : users/user_token

Required Input

None

Optional Input

Input Type	Format
Format	Xml or json (default value: json)
Page	1, 2, 3, etc
Limit	Number of records to show in each page (default is 20 records)
Sort	Any API output key or comma separated keys for multiple sort
Order	Ascending or descending (default value: 'asc', comma separated order for multiple sort.
Any API output key	any API output key=value pair for searching
loginStart	valid date time string to search by user login date range, maximum date range should be 31 days
loginEnd	valid date time string to search by user login date range, maximum date range should be 31 days
Daterange	following Input for date range searching
lastUpdateStart & lastUpdateEnd	from last updated record start and last updated record end time.
birthdayStart & birthdayEnd	To check User's birthday month.
createdDateTimeStart & createdDateTimeEnd	To check user's profile creation date

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/users/<user_token>?

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/users/<user_token>?

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<site_group_name>/users/<user_token>?

To get a particular verified user, you must have the **userToken** as a part of the API invoking. Firstly, get all verified user and copy the specific **userToken** shown as below example.

```
{
  "data":{
    "user":[
      {
        "socialuserId":"13",
        "userToken":"fb_446149642390993",
        "name":"user_13",
        "gender":"male",
        "email":"user_13@notrealemail.com",
        "birthday":{
          "timezone":{
            "name":"UTC",
            "location":{
              "country_code":"???",
              "latitude":0,
              "longitude":0,
              "comments":""
            }
          },
          "offset":0,
          "timestamp":946252800
        },

```

Example API to get specific verified user for specific site:

https://demo-api.antlabs.com:8443/apis/v2/sites/e108df62-9319-11e6-9cb2066072c16e19/users/fb_446149642390993?

Enter the userToken that you have retrieved from all verified user API and you will be able to get specific user information.

```
"resultCode":0,
"result":"ok",
"data":{
"user":{
"socialuserId":"13",
"userToken":"fb_446149642390993",
"name":"user_13",
"gender":"male",
"email":"user_13@notrealemail.com",
"birthday":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":946252800
},
"location":"Singapore",
"imageUrl":"https://scontent.xx.fbcdn.net/v/t31.0-8/s720x720/19055341_471190346553589_2443027656111686212_o.jpg?oh=16022ee31de0f9cf17e90618b23031e4&oe=59F17A1D",
"thumbnailUrl":"https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTDiOA94j-bRzdy74bIEy1aPgg3qI5mFGKrrZD1eT9ZL_trcupKvw",
"accountUrl":"https://www.facebook.com/stacy.brandon.92",
"ageRangeMin":"13",
"friendCount":1035,
"loginCount":3,
"lastLoginTime":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
}
},
"lastDevice":"Samsung SM-J510GN Android",
"lastBrowser":"Chrome Mobile",
"authName":"facebook",
"country":"","
"mobile":"","
"consent":"","
"custom1":"","
"custom2":"","
"custom3":"","
"custom4":"","
"custom5":"","
"createDatetime":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
```

5.2.3 User Add verified user

This API will allow adding verified user.

API Name : users/site_token

Required Input

Input Type	Format
userToken	User token, format authType_*
authName	Facebook, googleplus, twitter, Instagram, line, wechat or form

Optional Input

-name , gender , birthday , email , mobile , location , country , accountAPI , imageAPI, thumbnailAPI, friendCount , loginCount , consent , custom1 , custom2 , custom3 , custom4 , custom5 , createdDatetime (default value is current datetime) and format : xml or json (default value: json)

Output

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK or Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	Arguments required
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
101	User already exists

API URL:

https://<api_server>/apis/v2/sites/<site_token>/users?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/j105df62-9419-18e6-9ca2-066672d16e19/users?

An example of **Required Input** for adding verified user:

```
{
  "user": {
    "userToken": "fb_001",
    "authName": "facebook",
    "name": "John Smith",
    "gender": "male",
    "birthday": "2000-01-01",
    "email": "johnsmith@abc.com",
    "mobile": "+62 35353434",
    "location": "Google Hub1",
    "country": "Japan",
    "consent": "yes",
    "accountAPI": "https://www.facebook.com/stacy.brandon.92",
    "thumbnailAPI": "https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcTDiOA94j-
bRzdy74bIEy1aPbb3qI5mFGKrrZD1eT9ZL_trcupKvw",
    "friendCount": 10,
    "loginCount": 5,
    "custom1": "test1",
    "custom2": "test2",
    "custom3": "test3",
    "custom4": "test4",
    "custom5": "test5",
    "createdDatetime": "2020-03-01 01:01:01"
  }
}
```

5.2.4 Update verified user

This API will allow updating verified user.

API Name : users/user_token

Required Input

Input Type	Format
authName	Facebook, googleplus, twitter, Instagram, line, wechat or form

Optional Input

-name , gender , birthday , email , mobile , location , country , consent, createdDatetime (default value is current datetime) and format : xml or json (default value: json)

Output

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
201	Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	Arguments required
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

API URL:

```
https://<api_server>/apis/v2/sites/<site_token>/users/<user_token>?
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/a11945d8-8ed3-11e6-a5f8-02b35f402b95/users/fb_446149642390993?
```

An example of **Required Input** for updating verified user:

```
{
  "user": {
    "authName": "form",
    "email": "johnsmith@abc.com",
    "mobile": "+65 33333333",
    "location": "Changi",
    "country": "Singapore",
    "consent": "no"
  }
}
```

Please do note that you required to input the correct site token and userToken for updating verified user.

5.2.5 Get all form users

This API will allow to get all form users.

API Name : all/form-users

Required Input
NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)
Page	1, 2, 3, etc
limit	Number of records to show in each page (default is 20 records)
sort	Any API output key or comma separated keys for multiple sort
order	Ascending or descending (default value: 'asc', comma separated order for multiple sort.
Any API output key	Any API output key=value pair for searching
Date range search	Following Input for date range searching
birthdayStart & birthdayEnd	To check User's birthday month by start and end date
createdDateTimeStart & createdDateTimeEnd	To check user's profile creation date

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/form-users?

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/form-users?

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<site_group_name>/form-users/<form_uid>?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/all/form-users/fn_00:50:55:99:B8:8C?

Example Result:

```
"resultCode":0,
"result":"ok",
"count":"2",
"data":{
"user":[
{
"formuserId":"1",
"formUid":"6144cc4559bda0fc72b5547da221e715",
"userToken":"fn_00:50:55:99:B8:8C",
"name":"superman",
"gender":"male",
"email":"superman@antlabs.com",
"birthday":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":340416000
},
"location":"","
"country":"Indonesia",
"mobile":"","
"consent":"","
"custom1":"","
"custom2":"","
"custom3":"","
"custom4":"","
"custom5":"","
"createdDatetime":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":1538596374
}
},
"offset":0,
"timestamp":1538596374
}
```

```

"formuserId":"2",
"formUid":"a872e2f5c6429694d322661b7950fece",
"userToken":"fn_88:ED:B9:D5:D8:B9",
"name":"John Smith",
"gender":"male",
"email":"johnsmith@abc.com",
"birthday":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":946684800
},
"location":"Changi",
"country":"Singapore",
"mobile":"+65 35353434",
"consent":"Yes",
"custom1":"custom text 1",
"custom2":"custom text 2",
"custom3":"custom text 3",
"custom4":"custom text 4",
"custom5":"custom text 5",
"createdDatetime":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":1483264800

```

In this example, it shows that there are only two form users.

5.2.6 Get specified form user

This API will allow getting specific form users records.

API Name : form-users/form_uid

Required Input

None

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Output
HTTP Method
GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
102	User not found

For All Sites:

`https://<api_server>/apis/v2/sites/all/form-users/<form_uid>?`

For Specific Site:

`https://<api_server>/apis/v2/sites/<site_token>/form-users/<form_uid>?`

For Specific Site Group:

`https://<apiserver>/apis/v2/sitegroups/<site_group_name>/form-users/<form-uid>?`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/e105df62-9619-11g6-9ba2-066072c16b19/form-users/6144cc4559bda0fc72b5547da221e715?`

Example Result:

```
"resultCode":0,
"result":"ok",
"data":{
"user":{
"formuserId":"1",
"formUid":"6144cc4559bda0fc72b5547da221e715",
"userToken":"fn_00:50:56:99:B4:6C",
"name":"bendick",
"gender":"male",
"email":"bendick@antlabs.com",
"birthday":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":340416000
},
"location":"","
"country":"Indonesia",
"mobile":"","
"consent":"","
"custom1":"","
"custom2":"","
"custom3":"","
"custom4":"","
"custom5":"","
"createdDatetime":{
"timezone":{
"name":"UTC",
"location":{
"country_code":"??",
"latitude":0,
"longitude":0,
"comments":""
}
},
"offset":0,
"timestamp":1538596374
```

In this example, we have used the **form uid** to specific user form.

5.2.7 Add form user

This API is to add user to user form.

API Name : site_token/form-users

Required Input

Input Type	Format
formUid	form user unique key
userToken	User token, format fe_<email>, fm_<mobile_number>, fn_<mac address>, ft_<mac address>
authName	Facebook, googleplus , twitter , instagram , line , wechat , form

Optional Input

-name, gender, birthday, email, mobile, location, country, consent, custom1, custom2, custom3, custom4, custom5, createdDatetime (default value is current datetime) and format: `xml` or `json` (default value: `json`)

Output

HTTP Method

POST

HTTP Response Codes

Response Code	Description
201	OK or Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
101	User already exists

API URL:

```
https:// <api_server>/apis/v2/sites/<site_token>/form-users?
```

Example URL:

```
https://demo-api.antlabs.com:8443/apis/v2/sites/e105df62-9719-11e6-9da2-066072c16e99/form-users?
```

An example of Required Input for adding form users:

```
{
  "user": {
    "formUid": "a872e2f5c6429694d388991b7950fece",
    "userToken": "fn_28:ED:B9:D5:D8:B9",
    "authName": "Form",
    "name": "John Smith",
    "gender": "male",
    "birthday": "2000-01-01",
    "email": "johnsmith@abc.com",
    "mobile": "+65 35353434",
```

```

        "location": "CT Hub1",
        "country": "Singapore",
        "consent": "yes",
        "custom1": "custom text 1",
        "custom2": "custom text 2",
        "custom3": "custom text 3",
        "custom4": "custom text 4",
        "custom5": "custom text 5",
        "createdDatetime": "2020-01-01 10:00:00"
    }
}

```

5.2.8 Remove form user

This API is to remove form user.

API Name : form-users/form_uid

Required Input

NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Output

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key Incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
102	User not found

API URL:

`https://<api_server>/apis/v2/sites/<site_token>/form-users/<form_uid>?`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/e105df62-9419-11b6-9ca2-066072c16e19/form-users/a872e2f5c6829688d322661b7950fece?`

Example Result:

```
{
  "user": {
    "formUid": "a872e2f5c6829688d322661b7950fece",
    "userToken": "fn_19:BD:C8:D5:D8:B9",
    "authName": "Form",
    "name": " WWWMMM",
    "gender": "female",
    "birthday": "2000-01-01",
    "email": "pizza@abc.com",
    "mobile": "+65 35353434",
    "location": "CT Hub1",
    "country": "Singapore",
    "consent": "yes",
    "custom1": "custom text 1",
    "custom2": "custom text 2",
    "custom3": "custom text 3",
    "custom4": "custom text 4",
    "custom5": "custom text 5",
    "createdDatetime": "2017-01-01 10:00:00"
  }
}

{ "resultCode": 0, "result": "ok" }
```

Please note that you need to have the site token and form id to remove the specific form user.

5.2.9 Get all roaming users

This API will allow to retrieve all roaming users.

API Name : roaming-users

Required Input

NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)
Page	1, 2, 3, etc
limit	Number of records to show in each page (default is 20 records)

sort	Any API output key or comma separated keys for multiple sort
order	Ascending or descending (default value: 'asc', comma separated order for multiple sort.
Date range search	following Input for date range searching
siteToken	<siteToken>
userID	<userID>
userGroup	<userGroup>
billingId	<billingId>
plan	<planName>
expiryStart and expiryEnd	<expiryStartDateTime> and <expiryEndDateTime>

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
201	Authentication server failed to response
202	Authentication server response is empty

API URL:

https://<api_server>/apis/v2/sites/<site_token>/roaming-users?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/a11965d8-8ed3-11e9-a5c8-02b35f902b95/roaming-users?

Example Result.

```
{
  "resultCode":0,
  "result":"ok",
  "count":1,
  "data":{"
    "users":[
      {
        "userId":"Roam\28:16:AD:67:4C:AB@9ER7WFT3RwVgzQ7v",
        "userGroup":"roaming",
        "expiry":"2020-03-14 19:57:43",
        "billingId":"user@abc.com",
        "siteToken":"a11945d8-8ed3-11e9-a5f8-02b35f402b95",
        "plan":"Unlimited Plan"
      }
    ]
  }
}
```

Result show that one roaming user found, and it consist of the userID, userGroup, expiry, billingId, site token and plan name.

5.2.10 Get specified roaming user

This API will allow getting specific roaming user.

API Name : roaming-users/userId

Required Input

NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
102	User not found
201	Authentication server failed to response
202	Authentication server response is empty

API URL:

`https://<api_server>/apis/v2/sites/<site_token>/roaming-users/<userId>?`

Example URL:

`https://demo-api.antlabs.com:8443/apis/v2/sites/a11965d8-8ed3-11e9-a5c8-02b35f902b95/roaming-users/acs?`

```
{
  "resultCode":0,
  "result":"ok",
  "data":{
    "user":{
      "userId":"Roam\38:18:AC:67:4D:AB@8ER7BFT3RwXgzU7v",
      "userGroup":"roaming",
      "expiry":"2020-03-07 22:57:07",
      "billingId":"user@abc.com",
      "siteToken":"a11965d8-8ed3-11e9-a5c8-02b35f902b95",
      "plan":"Unlimited Plan"
    }
  }
}
```

NOTE: You need to input the correct userId for specific roaming user.

5.2.11 Add roaming user

This API allows you to add roaming users.

Note: If the site's subscription is ACS "Lite", invoking the API will return error.

Roaming sites are only available in ACS "Advanced" subscription.

API Name : site_token/roaming-users

Required Input

Input Type	Format
userId	Userid in radius API
password	Password in radius API
userGroup	Usergroup in radius API
plan	Radiusattrs=ANTlabs-User-Group-Name in radius API
duration	Current time + duration * 60 = expiry in radius API (ACS accept duration in minutes)

Optional Input

Input Type	Format
billingId	firstname in radius API
siteToken	Passed to creator
roamToken	Passed to address
macAddress	Passed to middlename in radius API
format	Xml or json (Default value: json)
unit	Unit of duration value, Possible values: 'second', 'minute' and 'hour'. Default value:'minute'

Output

HTTP Method

POST

HTTP Response Codes

Response Code	Description
200	OK
201	Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
10	Subscription required
90	Argument values incorrect
98	Critical Error
99	Undefined Error
201	Authentication server failed to response
202	Authentication server response is empty

API URL:

`https://<api_server>/apis/v2/sites/<site_token>/roaming-users?`

An example of **Required Input** for add roaming users:

```
{
  "user": {
    "userId": "Roam/28:28:AD:69:4C:AB@UC8wJBThWtnNdJRr",
    "password": "pwd123",
    "userGroup": "roaming",
    "plan": "Unlimited Plan",
    "duration": 3600,
    "billingId": "user@abc.com"
  }
}
```

Please note that you will require the user to be active in Radius UserId to be able to add into roaming user.

5.2.12 Update roaming user

This API will allow updating roaming user.

Note: If the site's subscription is ACS "Lite", invoking the API will return error.

Roaming sites are only available in ACS "Advanced" subscription.

For API update roaming users, the roaming users must be already created in the organization.

API Name : **site_token/roaming-users**

Required Input

Input Type	Format
password	Password in radius API
userGroup	Usergroup in radius API
plan	Radiusattrs=ANTlabs-User-Group-Name in radius API
duration	Current time + duration * 60 = expiry in radius API, ACS accept duration in minutes)

Optional Input

Input Type	Format
billingId	Firstname in radius API, siteToken is passed to creator, roamToken is passed to address, macAddress is passed to middlename in radius API
unit	Unit of duration value, Possible values:'second','minute' and 'hour'. Default value:'minute'
format	Xml or json (Default value: json)

Output

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
200	OK
201	Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
201	Authentication server failed to response
202	Authentication server response is empty

API URL:

https://<api_server>/apis/v2/sites/<site_token>/roaming-users/Roam/28:16:AD:67:4C:AB@UC4wJETHZtnNdJRr?

Example URL:

<https://demo-api.antlabs.com:8443/apis/v2/sites/a11945d8-8ed3-11e6-a5f8-02b35f402b95/roaming-users?>

An example of **Required Input** for updating roaming users.

```
{
  "user": {
    "password": "pwd123",
    "userGroup": "roaming",
    "plan": "Unlimited Plan",
    "duration": 3600,
    "billingId": "user@abc.com"
  }
}
```

5.2.13 Delete roaming user

This API is for deleting roaming user.

API Name : site_token/roaming-users/Roam

Required Input

NONE

Optional Input

Input Type	Format
format	Xml or json (Default value: json)

Output

HTTP Method

DELETE

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
102	User not found
201	Authentication server failed to response
202	Authentication server response is empty

API URL:

https://<api_server>/apis/v2/sites/<site_token>/roaming-users/Roam/28:16:AD:67:4C:AB@UC5wJETznNdJRr?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/a11945d8-8ed3-11e6-a5f8-02b35f402b95/roaming-users/Roam/28:16:AD:67:4C:AB@9ER7WFT3RwVgzQ7v?


```
{
  "resultCode":0,
  "result":"ok",
  "data":{
    "user":{
      "userId":"Roam\38:18:AC:67:4D:AB@8ER7BFT3RwXgzU7v",
      "userGroup":"roaming",
      "expiry":"2020-03-07 22:57:07",
      "billingId":"user@abc.com",
      "siteToken":"a11965d8-8ed3-11e9-a5c8-02b35f902b95",
      "plan":"Unlimited Plan"
    }
  }
}
```

Please note that userID Roam and site Token must match active user for delete the specific user.

5.2.14 Move form user to user

This API will allow you to move form user to normal user.

API Name : services/move

Required Input

Input Type	Format
source	Form-users <formUid>
destination	users

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Output

HTTP Method

PUT

HTTP Response Codes

Response Code	Description
201	OK or created
204	No Content
400	Invalid Input or Bad Request
405	Method Not Allowed
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect

90	Argument values incorrect
98	Critical Error
99	Undefined Error

API URL:

https://<api_server>/apis/v2/sites/<site_token>/services/move?&source=form-users/<formUid>&destination=users

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/e105df62-9419-11e9-9ca2-166882c16f19/services/move?&source=form-users/a872e2f5c6429694d322661b7990fece&destination=users

```
{ "resultCode": 0,
  "result": "ok" }
```

This is result showing the form user has been successfully moved to user.

5.3 Transaction

Transaction API is for retrieve all or specific transaction information for reporting.

5.3.1 Get all transactions

This API is used to get all transactions.

API Name : transactions

Required Input

NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)
Page	1, 2, 3, etc
limit	Number of records to show in each page (default is 20 records)
sort	Any API output key or comma separated keys for multiple sort
Order	Ascending or descending (default value: 'asc', comma separated order for multiple sort.
Date range search	Following Input for date range searching
transactionDateTimeLocalStart	Local transaction date and time start
transactionDateTimeLocalEnd	Local transaction date and time end
transactionDateTimeStart	Transaction date and time start
transactionDateTimeEnd	Transaction date and time end

arrivalDateStart	Start date of arrival
arrivalDateEnd	End date of arrival
departureDateStart	Departure start date
departureDateEnd	Departure End date
createdDateTimeStart	Creation start date and time
createdDateTimeEnd	Creation end date and time

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

For All Sites:

https://<api_server>/apis/v2/sites/all/transactions?

For All Sites Group:

https://<api_server>/apis/v2/sitegroups/all/transactions?

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/transactions?

For Specific Site Group:

https://<api_server>/apis/v2/sitegroups/<group_name>/transactions?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/all/transactions?

```
"resultCode": 0,
"result": "ok",
"count": "2",
"data": {
  "user": [
    {
      "transactionId": "2020011508350052430515",
      "userId": "6gy6k",
      "siteId": "15",
      "planName": "1 day free",
      "planType": "fixed_duration",
      "amount": "0.00",
      "ipAddress": "",
      "macAddress": "",
      "billingId": "",
      "creator": "Door",
      "guestName": "",
      "guestNumber": "",
      "roomNumber": "",
      "vipStatus": "",
      "arrivalDate": {
        "timezone": {
          "name": "UTC",
          "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": " }  },
          "offset": 0,
          "timestamp": -62169984000
        }
      }
    }
  ]
}
```

```

"country_code": "??",
    "latitude": 0,
    "longitude": 0,
    "comments": "" }
},
"offset": 0,
"timestamp": -62169984000
},
"departureDate": {
    "timezone": {
        "name": "UTC",
        "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "" }
    },
    "offset": 0,
    "timestamp": -62169984000 },
"custom1": "",
"custom2": "",
"custom3": "",
"custom4": "",
"custom5": "",
"custom6": "",
"custom7": "",
"custom8": "",
"custom9": "",
"custom10": "",
"transactionDatetime": {
    "timezone": {
        "name": "UTC",
        "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "" }
    },
    "offset": 0,
    "timestamp": 1579077300
},
"transactionDatetimeLocal": {
    "timezone": {
        "name": "UTC",
        "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "" }
    },
    "offset": 0,
    "timestamp": 1579116900 },
"createdDatetime": {
    "timezone": {
        "name": "UTC",
        "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "" }
    },
    "offset": 0,
    "timestamp": 1579077300 },
"updatedDatetime": {
    "timezone": {
        "name": "UTC",
        "location": {
            "country_code": "??",
            "latitude": 0,
            "longitude": 0,
            "comments": "" }
    },
    "offset": 0,
    "timestamp": 1579077300

```

You will be able to get transaction information such as userId, planName, planType, amount, creator, billingId, ipAddress, mac Address, guest Name, guest Number, roomNumber, arrivalDate, departureDate, vipstatus, and custom fields 1-10.

Custom fields are for additional information or parameter required for different business reporting requirement.

5.3.2 Get specified transaction

This API is used to get specified transaction.

API Name : transactions/transactionId

Required Input

NONE

Optional Input

Input Type	Format
Format	Xml or json (default value: json)

Output

HTTP Method

GET

HTTP Response Codes

Response Code	Description
200	OK
400	Invalid Input or Bad Request
404	Not Found
500	Internal Server Error

Error Codes

Error Code	Description
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error
302	Transaction not found

For All Sites:

https://<api_server>/apis/v2/sites/all/transactions/<transactionId>?

For Specific Site:

https://<api_server>/apis/v2/sites/<site_token>/transactions/<transactionId>?

For All Sites Group:

https://<api_server>/apis/v2/sitegroups/all/transactions/<transactionId>?

For Specific Site Groups:

https://<api_server>/apis/v2/sitegroups/<group_name>/transactions/<transactionId>?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/all/transactions/202001240041068081363?

```
"resultCode": 0,
"result": "ok",
"data": {
  "user": {
    "transactionId": "202001240041068081363",
    "userId": "9e6ffd",
    "siteId": "3",
    "planName": "24-hours High-Speed Paid Access",
    "planType": "stored_duration",
    "amount": "20.00",
    "ipAddress": "10.10.1.52",
    "macAddress": "61:48:61:59:14:92",
    "billingId": "notrealemail@abc.com",
    "creator": "generate_script",
    "guestName": "",
    "guestNumber": "",
    "roomNumber": "",
    "vipStatus": "",
    "arrivalDate": {
      "timezone": {
        "name": "UTC",
        "location": {
          "country_code": "??",
          "latitude": 0,
          "longitude": 0,
          "comments": "" }
        },
      "offset": 0,
      "timestamp": -62169984000
    },
    "departureDate": {
      "timezone": {
        "name": "UTC",
        "location": {
          "country_code": "??",
          "latitude": 0,
          "longitude": 0,
```

5.3.3 Add a transaction

This API is for adding a transaction.

API Name : site_token/transactions

Required Input

Input Type	Format
userId	Userid in radius API
planName	Radiusattrs=ANTlabs-User-Group-Name in radius API

planType	Unlimited, fixed_duration, stored_duration, stored_volume or autologin
creator	api

Optional Input

Input Type	Format
ipAddress	<ipAddress>
macAddress	<macAddress>
billingId	<billingId>
guestName	<guestName>
guestNumber	<guestNumber>
roomNumber	<roomNumber>
vipStatus	<vipStatus>
arrivalDate	<arrivalDate>
departureDate	<departureDate>
transactionDatetimeOffset	transactionDatetimeOffset
Custom1-10 fields	<custom field>
Format	Xml or json (default value: json)

Output

HTTP Method

POST

HTTP Response codes

Response Code	Description
201	Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More arguments required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

API URL:

https://<api_server>/apis/v2/sites/<site_token>/transactions?

Example URL:

https://demo-api.antlabs.com:8443/apis/v2/sites/a11945d8-8ed3-11e6-a5f8-02b35f402b95/transactions?

Example Result:

```
{
  "transaction": {
    "userId": "am7bza",
    "planName": "Stored Duration 1 Day",
    "planType": "stored_duration",
    "amount": "60",
    "creator": "api",
    "billingId": "bill@antlabs.com",
    "ipAddress": "10.128.85.253",
    "macAddress": "00:50:56:99:2D:6D",
    "guestName": "KS",
    "guestNumber": "100",
    "roomNumber": "801",
    "arrivalDate": "2020-02-15",
    "departureDate": "2020-02-16",
    "vipStatus": "1",
    "custom1": "cvg1",
    "custom2": "cvg2",
    "custom3": "cvg3",
    "custom4": "cvg4",
    "custom5": "cvg5",
    "custom6": "cvg6",
    "custom7": "cvg7",
    "custom8": "cvg8",
    "custom9": "cvg9",
    "custom10": "cvg10",
    "transactionDatetimeOffset": 3600
  }
}
```

For adding a transaction, you will be required to input the correct `userId`, `planName`, `planType` and `creator`.

5.3.4 Adding multiple transactions

This API is for adding multiple transactions.

API Name : `site_token/transactions`

Required Input

Input Type	Format
<code>userId</code>	Userid in radius API
<code>planName</code>	Radiusattrs=ANTlabs-User-Group-Name in radius API
<code>planType</code>	Unlimited, fixed_duration, stored_duration, stored_volume or autologin
<code>creator</code>	api

Optional Input

Input Type	Format
<code>ipAddress</code>	<ipAddress>

macAddress	<macAddress>
billingId	<billingId>
guestName	<guestName>
guestNumber	<guestNumber>
roomNumber	<roomNumber>
vipStatus	<vipStatus>
arrivalDate	<arrivalDate>
departureDate	<departureDate>
transactionDatetimeOffset	transactionDatetimeOffset
Custom1-10 fields	<custom field>
Format	Xml or json (default value: json)

Output

HTTP Method

POST

HTTP Response codes

Response Code	Description
201	Created
400	Invalid Input or Bad Request
500	Internal Server Error

Error Codes

Error Code	Description
1	More argument required
4	API Key incorrect
6	Invalid Access
7	Site token incorrect
90	Argument values incorrect
98	Critical Error
99	Undefined Error

API URL:

`https://<api_server>/apis/v2/sites/transactions/<api_name>`

An example for required input for adding multiple transaction:

```
"1": {
  "userId": "ABC123",
  "planName": "Stored Duration 1 Day",
  "planType": "stored_duration",
  "amount": "4660",
  "creator": "api",
  "billingId": "noemail@antlabs.com",
  "guestName": "Shane",
```

```

"guestNumber": "600",
"roomNumber": "707",
    "arrivalDate": "2020-02-20",
    "departureDate": "2020-02-21",
    "vipStatus": "1",
    "custom1": "cvg1",
    "custom2": "cvg2",
    "custom3": "cvg3",
    "custom4": "cvg4",
    "custom5": "cvg5",
    "custom6": "cvg6",
    "custom7": "cvg7",
    "custom8": "cvg8",
    "custom9": "cvg9",
    "custom10": "cvg10",
    "transactionDatetimeOffset": 7200 },
"2": {
    "userId": "kj3jha",
    "planName": "Fixed Duration 10 Days",
    "planType": "fixed_duration",
    "amount": "1260",
    "creator": "api",
    "billingId": "yahoo@antlabs.com",
    "guestName": "Peter",
    "arrivalDate": "2020-02-11",
    "departureDate": "2020-02-"
}, "3": {
    "userId": "ad3t3c",
    "planName": "Stored Duration 11 Days",
    "planType": "stored_duration_test",
    "amount": "360.00",
    "ipAddress": "",
    "macAddress": "",
    "billingId": "adam@antlabs.com",
    "creator": "api"
    }
}

```

6.1 Troubleshooting

1. I am unable login to ASP.

Please check if the super admin has entered the correct email id and password and has marked you as an active user.

2. I am unable to access sites.

Please check with the super admin if you have the right to access sites.

3. I want to see data for a site group/all site.

If you want to get the data by site group, use the site group name instead of site token in the API.

If you want to get the data by all sites, use 'all' instead of site token in the API.

4. I want to get data in XML format.

By default, the API response is in JSON format. If you want to see the response in xml format, please add "&format=xml" to the API call.

```
https://ASP-apidemo-antlabs.com:8443/apis/v2/sites/cd3b548e-a272-baef11e706af5084b4d3d/reports/sessionusage? &format =xml&startDate=2020-03-01&endDate=2020-03-08
```