CHECK POINT

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# AVANAN MSP API REFERENCE GUIDE

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# 1. Important Information

**Latest Software**

We recommend that you install the most recent software release to stay up-to-date with the latest functional improvements, stability fixes, security enhancements and protection against new and evolving attacks.

**Certifications**

For third party independent certification of Check Point products, see the Check Point Certifications page.

**Check Point Avanan MSP API Reference Guide**

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**Feedback**

Check Point is engaged in a continuous effort to improve its documentation.

Please help us by sending your comments.

## 1.1. Related Documents

| Document Title | Description |
|---|---|
| Avanan Administration Guide | Avanan offers an administration guide for the administrators. For more details, see Avanan Administration Guide. |
| Avanan User Guide | Avanan offers an user guide for the end users. For more details, see Avanan User Guide. |
| Avanan API Reference Guide | Avanan offers a rich set of REST API to manage and act on detected security events. For more details, see Avanan API Reference Guide. |
| Avanan MSP Administration Guide | Avanan offers Manages Security Service Providers (MSSP) customers with access to the data required to effectively manage their direct clients. For more details, see Avanan MSP Administration Guide. |

## 1.2. Revision History

| Date | Description |
|---|---|
| 19 March 2025 | Added Creating a New MSP Partner *(on page 11)*. |
| | Initial release of the document. |

# 2. Introduction

This document describes the API available for Managed Service Providers (MSP) and Managed Security Service Providers (MSSP) to manage their child MSP and customer accounts. These API commands follow the same authentication methods, request headers, and response structure described in the Avanan API Reference Guide. All the responses are JSON objects that contain a response envelope and response data.

## MSP Types

The Avanan MSP SmartAPI recognizes three different MSP types:

- **Standalone MSP** - MSP that manages its customers and is not managed by a parent MSP.
- **Parent MSP** - MSP/MSSP that manages both direct customers and/or other MSPs (Child MSP).
- **Child MSP** - MSP that is managed by another parent MSP.

Permissions for different types of MSP:

| MSP Type | Manage end-customer tenants | Manage Child MSP* | Retrieve Usage/Billing Information |
|---|---|---|---|
| Parent MSP | Yes | Yes | Yes |
| Child MSP | Yes | N/A | No |
| Standalone MSP | Yes | N/A | Yes |

* Managing a child MSP includes:

- Create, edit, and delete a child MSP, its users, and permissions.
- Get the details of the related child MSP for all the customer tenants.
- Get information about the child MSP.

# 3. Executing API Calls

## 3.1. API Authentication and Authorization

Avanan provides authentication and authorization sequence using **Client ID** and a **Client Secret**. These are used to obtain an API Access Token and sign all the requests sent to the API.

> **Note:**
>
> You must have a separate API key for every region where you manage your tenants. For example, if you manage customer tenants in the US and Europe region, you need two separate API keys.

## 3.2. Generating API Access Token

### URI - GET

To use this endpoint, send a GET request to retrieve a specific security event by its Avanan ID: `/auth`

### Request

The request includes HTTP headers obtained while registering to the Avanan API service and calculated by the API consumer.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - Generated and supplied on the request. | d290f1ee-6c54-4b01-90e6 |
| x-av-token | String | Yes | Send empty on this request only | |
| x-av-app-id | String | Yes | Avanan Application ID | US:myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2021-04-10T00:00:00.000Z' |
| x-av-sig | String | Yes | Calculated signature | For more details, see Calculating API Request Signature (x-av-sig) for Token Generation *(on page 7)*. |

### Request String Parameters

None

### Request Body

Not applicable for GET method.

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6" \
    -H "x-av-token: ‘’ " \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2021-04-10T00:00:00.000Z" \
    -H "x-av-sig: 2462b23346ab0642b65d7d094aca5fb4c29fd96d0468deceae2704d258e81497" \
    https://smart-api-production-1-us.avanan.net/v1.0/auth
```

## Response

The response obtained from the service includes an HTTP response code and a token (JWT). This token is valid for 1 hour after successful authentication.

**Note:**

You must send this token as the **x-av-token** header value with all the API consecutive calls.

## Calculating API Request Signature (x-av-sig) for Token Generation

The request includes HTTP headers obtained when you register to Avanan API service and calculated by the API consumer when you issue an API request.

To calculate the signature value (**x-av-sig**) for the request:

1. Concatenate these parameters in this order:
    a. x-av-req-id
    b. x-av-app-id
    c. x-av-date
    d. Client Secret
2. Invoke the resulting value to base 64.
3. Do SHA-256 on the resulting value.

**Example:**

Let us assume the secret key is **client_secret**. Calculating the **x-av-sig**:

```
x-av-req-id: "d290f1ee-6c54-4b01-90e6"
```

```
x-av-app-id: "US:myapp29"
```

```
x-av-date: "2021-04-10T00:00:00.000Z"
```

```
Client Secret: "client_secret"
```

To calculate **x-av-sig**:

```
sha256(
        base64(
        d290f1ee-6c54-4b01-90e6US:myapp292021-04-10T00:00:00.000Zclient_secret
        )
        )
```

The resulting value is:

```
sha256(
        ZDI5MGYxZWUtNmM1NC00YjAxLTkwZTZVUzpteWFwcDI5MjAyMS0wNC0xMFQwMDowMDowMC4wM
 DBabXlfYXZhbmFuX3NlY3JldA==
        )
```

The resulting signature value (**x-av-sig**) is:

```
2462b23346ab0642b65d7d094aca5fb4c29fd96d0468deceae2704d258e81497
```

Therefore, when you send the token generation request, you must include this header:

**x-av-sig**: "`2462b23346ab0642b65d7d094aca5fb4c29fd96d0468deceae2704d258e81497`"

## 3.3. URLs and URL Base

You must direct all API calls that manage MSP users and customers to this URL: `smart-api-production-1-us.avanan.net`

# 4. Managing Child MSPs

## 4.1. List all Associated MSP Partners

### URI - GET

To use this *endpoint*, send a GET request to retrieve all MSP: `/msp/msp-partners`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) with request string parameters.

### Request Headers

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-to-ken | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/msp-tenants
```

### Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds an MSP array. In each MSP structure, you can find the ID and name of the MSP.

### Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
```

```
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": [
  {
      "id": 0,
      "name": "string"
  }
  ]
}
```


## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | Array of tenants |
| responseData/MSPList | id | Integer | Unique ID of the MSP |
| | name | String | Name of the MSP |

## Response Sample

A valid response from the service:


```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "34234345454353343"
  },
  "responseData": {
```

```
12     [
13     {
14         "Id": 15,
15         "name": "ABC MSP"
16      }
17      ]
18 }
```

## 4.2. Creating a New MSP Partner

### URI - POST

To use this endpoint, send a POST request to create a new MSP Partner: `msp/msp-partners-extended`

> **Note:**
>
> It is a newer version of the existing `/msp/msp-partner` endpoint which was deprecated by 15 June 2025. See Creating a New MSP Partner (old) *(on page 16)*.

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) with a request body in JSON format.

> **Note:**
>
> The request body must include the name of the MSP.

### Request Headers

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-to-ken | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Body

All applicable request parameters are posted on the request body JSON:

```
1  {
2      "requestData":
3  {           "name": "string”,
4              "website": "string",
5              "country": "string",
6              "state": "string",
```

```
7             "zip": "string",
8             }
9  }
```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| name | String | Yes | | Name of the new MSP |
| website | String | Yes | URL | |
| country | String | Yes | | The country the MSP is located in. Must be one of the values from the country list. See Allowed Country Values *(on page 13)*. |
| state | String | Conditional | | Required only if country is "United States". Must be one of the values from the US states list. See Allowed State Values *(on page 15)*. |
| zip | String | Yes | | |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
1  curl -X POST -H "Accept: application/json" \
2      -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
3      -H "x-av-token: tkn8546ffffggd9d8934593" \
4      -H "x-av-app-id: myapp29" \
5      -H "x-av-date: 2016-08-29T09:12:33.001Z" \
6      -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
7      https://smart-api-production-1-us.avanan.net/v1.0/msp/msp-partners-extended
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds the details of the newly created MSP.

## Response Structure

A valid response from the service in JSON:

```
1  {
2
3    "responseEnvelope":
4
5  {     "requestId": "string",
6        "responseCode": 0,
7        "responseText": "",
8        "additionalText": "",
9        "recordsNumber": 0,
10       "scrollId": "string"   }
11 ,
12
13   "responseData":
14
```

```
{     "id": 0,
      "name": "string",
      "website": "string",
      "country": "string",
      "state": "string",
      "zip": "string"   }
}
```

### Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | Array of tenants |
| id | Integer | Unique ID of the MSP |
| name | String | Name of the MSP |
| website | String | Website associated with the MSP |
| country | String | The country the MSP is located in |
| state | String | The state the MSP is located in |
| zip | String | Zip of the MSP |

## 4.2.1. Allowed Country Values

In the **country** field, it allows the following values.

**Note:**

The values are case-sensitive. Ensure you use the correct capitalization.

| | | | | |
|---|---|---|---|---|
| Afghanistan | Åland Islands | Albania | Algeria | American Samoa |
| Andorra | Angola | Anguilla | Antarctica | Antigua and Barbuda |
| Argentina | Armenia | Aruba | Australia | Austria |
| Azerbaijan | Bahamas | Bahrain | Bangladesh | Barbados |
| Belarus | Belgium | Belize | Benin | Bermuda |

| | | | | |
|---|---|---|---|---|
| Bhutan | Bolivia (Plurinational State of) | Bonaire, Sint Eustatius and Saba | Bosnia and Herzegovina | Botswana |
| Bouvet Island | Brazil | British Indian Ocean Territory | Brunei Darussalam | Bulgaria |
| Burkina Faso | Burundi | Cabo Verde | Cambodia | Cameroon |
| Canada | Cayman Islands | Central African Republic | Chad | Chile |
| China | Christmas Island | Cocos (Keeling) Islands | Colombia | Comoros |
| Congo | Congo, Democratic Republic of the | Cook Islands | Costa Rica | Croatia |
| Cuba | Curaçao | Cyprus | Czechia | Côte d'Ivoire |
| Denmark | Djibouti | Dominica | Dominican Republic | Ecuador |
| Egypt | El Salvador | Equatorial Guinea | Eritrea | Estonia |
| Eswatini | Ethiopia | Falkland Islands (Malvinas) | Faroe Islands | Fiji |
| Finland | France | French Guiana | French Polynesia | French Southern Territories |
| Gabon | Gambia | Georgia | Germany | Ghana |
| Gibraltar | Greece | Greenland | Grenada | Guadeloupe |
| Guam | Guatemala | Guernsey | Guinea | Guinea-Bissau |
| Guyana | Haiti | Heard Island and McDonald Islands | Holy See | Honduras |
| Hong Kong | Hungary | Iceland | India | Indonesia |
| Iran (Islamic Republic of) | Iraq | Ireland | Isle of Man | Israel |
| Italy | Jamaica | Japan | Jersey | Jordan |
| Kazakhstan | Kenya | Kiribati | Korea (Democratic People's Republic of) | Korea, Republic of |
| Kuwait | Kyrgyzstan | Lao People's Democratic Republic | Latvia | Lebanon |
| Lesotho | Liberia | Libya | Liechtenstein | Lithuania |
| Luxembourg | Macao | Madagascar | Malawi | Malaysia |
| Maldives | Mali | Malta | Marshall Islands | Martinique |
| Mauritania | Mauritius | Mayotte | Mexico | Micronesia (Federated States of) |
| Moldova, Republic of | Monaco | Mongolia | Montenegro | Montserrat |
| Morocco | Mozambique | Myanmar | Namibia | Nauru |
| Nepal | Netherlands | New Caledonia | New Zealand | Nicaragua |

| | | | | |
|---|---|---|---|---|
| Niger | Nigeria | Niue | Norfolk Island | North Macedonia |
| Northern Mariana Islands | Norway | Oman | Pakistan | Palau |
| Palestine, State of | Panama | Papua New Guinea | Paraguay | Peru |
| Philippines | Pitcairn | Poland | Portugal | Puerto Rico |
| Qatar | Réunion | Romania | Russian Federation | Rwanda |
| Saint Barthélemy | Saint Helena, Ascension and Tristan da Cunha | Saint Kitts and Nevis | Saint Lucia | Saint Martin (French part) |
| Saint Pierre and Miquelon | Saint Vincent and the Grenadines | Samoa | San Marino | Sao Tome and Principe |
| Saudi Arabia | Senegal | Serbia | Seychelles | Sierra Leone |
| Singapore | Sint Maarten (Dutch part) | Slovakia | Slovenia | Solomon Islands |
| Somalia | South Africa | South Georgia and the South Sandwich Islands | South Sudan | Spain |
| Sri Lanka | Sudan | Suriname | Svalbard and Jan Mayen | Sweden |
| Switzerland | Syrian Arab Republic | Taiwan, Province of China | Tajikistan | Tanzania, United Republic of |
| Thailand | Timor-Leste | Togo | Tokelau | Tonga |
| Trinidad and Tobago | Tunisia | Turkey | Turkmenistan | Tuvalu |
| Uganda | Ukraine | United Arab Emirates | United Kingdom of Great Britain and Northern Ireland | United States |
| Uruguay | Uzbekistan | Vanuatu | Venezuela (Bolivarian Republic of) | Viet Nam |
| Western Sahara | Yemen | Zambia | Zimbabwe | |

### 4.2.2. Allowed State Values

If an MSP is created in the US, the **state** field is also mandatory. The following values are allowed.

**Note:**

The values are case-sensitive. Ensure you use the correct capitalization.

| | | | | |
|---|---|---|---|---|
| Alabama | Alaska | Arkansas | Arizona | California |
| Colorado | Connecticut | Delaware | Florida | Georgia |

| | | | | |
|---|---|---|---|---|
| Hawaii | Idaho | Illinois | Indiana | Iowa |
| Kansas | Kentucky | Louisiana | Maine | Maryland |
| Massachusetts | Michigan | Minnesota | Mississippi | Missouri |
| Montana | Nebraska | Nevada | New Hampshire | New Jersey |
| New Mexico | New York | North Carolina | North Dakota | Ohio |
| Oklahoma | Oregon | Pennsylvania | Rhode Island | South Carolina |
| South Dakota | Tennessee | Texas | Utah | Vermont |
| Virginia | Washington | West Virginia | Wisconsin | Wyoming |

## 4.3. Creating a New MSP Partner (old)

### URI - POST

To use this endpoint, send a POST request to create a new MSP Partner: `/msp/msp-partner`

> **Note:**
>
> This endpoint will be deprecated by 15 June 2025 and has been replaced by the `/msp/msp-partners-extended` endpoint. See Creating a New MSP Partner *(on page 11)*.

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) with a request body in JSON format.

> **Note:**
>
> The request body must include the name of the MSP.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Body

All applicable request parameters are posted on the request body JSON:

```
{
    "requestData": {
          "name": "string"
      }
}
```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| name | String | Yes | | Name of the new MSP |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X POST -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/msp-partners
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds the details of the newly created MSP.

## Response Structure

A valid response from the service in JSON:

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": {
    "id": 0,
    "name": "string"
  }
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | Array of tenants |
| id | Integer | Unique ID of the MSP |
| name | String | Name of the MSP |

### Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    "Id": 16,
    "name": "Acme MSP"
}
```

## 4.4. Deleting a Child MSP

### URI - DELETE

To use this endpoint, send a DELETE request to delete an MSP: `/msp/msp-partners/{msp_id}`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and the **msp_id** as a path parameter.

> **Note:**
>
> All the tenants associated with the given MSP gets deleted.

## Request Headers

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-to-ken | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| msp_id | Integer | Yes | | MSP ID to delete. |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X DELETE -H "Accept: application/json" \
     -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
     -H "x-av-token: tkn8546ffffggd9d8934593" \
     -H "x-av-app-id: myapp29" \
     -H "x-av-date: 2016-08-29T09:12:33.001Z" \
     -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
     https://smart-api-production-1-us.avanan.net/v1.0/msp/msp-partners/{msp_id}
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and does not return a **responseData** object.

**Note:**

A successful response has the status code 204.

## Response Structure

A valid response from the service in JSON:

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "string",
    "additionalText": "string",
```

```
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "string"
  }
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "34234345454353343"
  },
}
```

# 5. Managing MSP Users

## 5.1. List all the Users

### URI - GET

To use this endpoint, send a GET request to retrieve all users: `/msp/users`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request).

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| scrollId | String | No | | ID used to scroll through large sets of results. |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/users
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds an array of users. Each user object must have the userID, email, name, and permissions for the user.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": [
    {
      "id": 0,
      "email": "string",
      "firstName": "string",
      "lastName": "string",
      "role": "string",
      "samlLogin": true,
      "directLogin": true,
      "viewPrivateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
  ]
}
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | Array of users |

| Parameter | | Type | Description |
|---|---|---|---|
| responseData/UserList | id | Integer | Unique ID of the user |
| | email | String | User email |
| | firstName | String | User first name |
| | lastName | String | User last name |
| | role | String | Role of the user, one of admin, operations, user, and read-only |
| | samlLogin | Boolean | SAML login enabled for the user |
| | directLogin | Boolean | Password login enabled for the user |
| | viewPrivateData | Boolean | Allow the user to view private data on the customer portal |
| | sendAlerts | Boolean | Send alerts from customer tenants to this admin |
| | receiveWeeklyReports | Boolean | Send weekly reports from customer tenants to this admin |

### Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 200,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    [
    {
      "id": 1,
      "email": "johndoe@abccompany.com",
      "firstName": "John",
      "lastName": "Doe",
      "role": "admin",
      "samlLogin": true,
      "directLogin": true,
      "viewPrivateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
     ]
}
```

## 5.2. Creating a New MSP User

### URI - POST

To use this endpoint, send a POST request with JSON body: `/msp/users`

## Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and a JSON body with the user information.

## Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request Body

All applicable request parameters are posted on the request body JSON:

```
{
  "requestData": {
    "firstName": "string",
    "lastName": "string",
    "email": "string",
    "role": "string",
    "directLogin": true,
    "samlLogin": true,
    "viewPrivateData": true,
    "receiveWeeklyReports": true,
    "sendAlerts": true,
  }
}
```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| firstName | String | Yes | | User first name |
| lastName | String | Yes | | User last name |
| email | String | Yes | | User email address |
| role | String | Yes | | User role, one of admin, operations, user, and read-only |
| directLogin | Boolean | Yes | | Allow user to log in the MSP portal with a password |
| samlLogin | Boolean | Yes | | Allow user to log in the MSP portal with SAML |

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| viewPrivateData | Boolean | Yes | | Allow user to view private data on the customer portals |
| receiveWeeklyReports | Boolean | Yes | | Send the weekly reports to the user from the customer portals |
| sendAlerts | Boolean | Yes | | Send alerts to the user from the customer portals |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X POST -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    -d "{
                "requestData": {
                 "firstName":  "John",
                 "lastName": "Doe",
                 "email":  "johndoe@abccompany.com",
                 "role":  "admin",
                 "directLogin":  "true",
                 "samlLogin":  "true",
                 "viewPrivateData":  "true",
                 "receiveWeeklyReports":  "true",
                 "sendAlerts":  "true",
            }
        }" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/users
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** structure that shows the newly created user information.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": {
    "id": 0,
    "email": "string",
    "firstName": "string",
    "lastName": "string",
```

```
    "role": "string",
    "samlLogin": true,
    "directLogin": true,
    "viewPrivateData": true,
    "sendAlerts": true,
    "receiveWeeklyReports": true
  }
}
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | User Object |
| | id | Integer | Unique ID of the user |
| | email | String | User email |
| | firstName | String | User first name |
| | lastName | String | User last name |
| | role | String | Role of the user. One of admin, operations, user, and read-only. |
| | samlLogin | Boolean | SAML login enabled for the user |
| | directLogin | Boolean | Password login enabled for the user |
| | viewPrivateData | Boolean | Allow the user to view private data on the customer portal |
| | sendAlerts | Boolean | Send alerts from customer tenants to this admin |
| | receiveWeeklyReports | Boolean | Send weekly reports from customer tenants to this admin |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
```

```
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 200,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
      "id": 1,
      "email": "johndoe@abccompany.com",
      "firstName": "John",
      "lastName": "Doe",
      "role": "admin",
      "samlLogin": true,
      "directLogin": true,
      "privateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
}
```


## 5.3. Getting the Details of an MSP User

### URI - GET

To use this endpoint, send a GET request with a path parameter **user_id**: `/msp/users/{user_id}`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and a path parameter (**user_id**) that represents the user you want to describe.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| user_id | String | Yes | | Unique user ID |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/users/12
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** structure that shows information related to the requested user.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": {
    "id": 0,
    "email": "string",
    "firstName": "string",
    "lastName": "string",
    "role": "string",
    "samlLogin": true,
    "directLogin": true,
    "viewPrivateData": true,
    "sendAlerts": true,
    "receiveWeeklyReports": true
  }
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | Text value of response |

| Parameter | Type | Description |
|---|---|---|
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | User Object |
| id | Integer | Unique ID of the user |
| email | String | User email |
| firstName | String | User first name |
| lastName | String | User last name |
| role | String | Role of the user.<br><br>One of admin, operations, user, and read-only |
| samlLogin | Boolean | SAML login enabled for the user |
| directLogin | Boolean | Password login enabled for the user |
| viewPrivateData | Boolean | Allow the user to view private data on the customer portal |
| sendAlerts | Boolean | Send alerts from customer tenants to this admin |
| receiveWeeklyReports | Boolean | Send weekly reports from customer tenants to this admin |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 200,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
      "id": 1,
      "email": "johndoe@abccompany.com",
      "firstName": "John",
      "lastName": "Doe",
      "role": "admin",
      "samlLogin": true,
      "directLogin": true,
      "privateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
}

```

# 5.4. Updating an MSP User

## URI - PUT

To use this endpoint, send a PUT request with a path parameter (**user_id**) and a JSON body: `/msp/users/{user_id}`

## Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and a path parameter (**user_id**).

**Note:**

The request must include a JSON body object (**requestData**) with the updated user details.

## Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| user_id | String | Yes | | Unique user ID |

## Request Body

All applicable request parameters are posted on the request body JSON:

```
{
  "requestData": {
    "firstName": "string",
    "lastName": "string",
    "email": "string",
    "role": "string",
    "directLogin": true,
    "samlLogin": true,
    "viewPrivateData": true,
    "receiveWeeklyReports": true,
    "sendAlerts": true,
  }
}
```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| firstName | String | Yes | | User first name |
| lastName | String | Yes | | User last name |
| email | String | Yes | | User email address |
| role | String | Yes | | User role.<br>One of admin, operations, user, and read-only. |
| directLogin | Boolean | Yes | | Allow user to log in the MSP portal with a password |
| samlLogin | Boolean | Yes | | Allow user to log in the MSP portal with SAML |
| viewPrivateData | Boolean | Yes | | Allow user to view private data on the customer portals |
| receiveWeekly-Reports | Boolean | Yes | | Send the weekly reports to the user from the customer portals |
| sendAlerts | Boolean | Yes | | Send the user alerts from the customer portals |
| MSPTenantAccess | • All<br>• Except<br>• Only | | | • All - Applies to all tenants.<br>• Except - Applies to all tenants except the tenants listed.<br>• Only - Applies only to the tenants specified. |
| MSPTenants | • Except<br>• Only | | | Applicable only when Except or Only is selected. Input is list of tenant ids. |
| MSPRole | • Admin<br>• Help Desk | | | Applicable for admin and help desk roles. |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see MSP Types.

```
curl -X POST -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    -d "{
           "requestData": {
```

```
            "firstName":  "John",
            "lastName": "Doe",
            "email":  "johndoe@abccompany.com",
            "role":  "admin",
            "directLogin":  "true",
            "samlLogin":  "true",
            "viewPrivateData":  "true",
            "receiveWeeklyReports":  "true",
            "sendAlerts":  "true",
        }
    }" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/users/1
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** structure that shows information related to the user, and the updates made.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
     "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 200,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
      "id": 1,
      "email": "johndoe@abccompany.com",
      "firstName": "John",
      "lastName": "Doe",
      "role": "admin",
      "samlLogin": true,
      "directLogin": true,
      "privateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |

| Parameter | Type | Description |
|---|---|---|
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | User Object |
| id | Integer | Unique ID of the user |
| email | String | User email |
| firstName | String | User first name |
| lastName | String | User last name |
| role | String | Role of the user.<br><br>One of admin, operations, user, and read-only. |
| samlLogin | Boolean | SAML login enabled for the user |
| directLogin | Boolean | Password login enabled for the user |
| viewPrivateData | Boolean | Allow the user to view private data on the customer portal |
| sendAlerts | Boolean | Send alerts from customer tenants to this admin |
| receiveWeeklyReports | Boolean | Send weekly reports from customer tenants to this admin |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
     "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 200,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
      "id": 1,
      "email": "johndoe@abccompany.com",
      "firstName": "John",
      "lastName": "Doe",
      "role": "admin",
      "samlLogin": true,
      "directLogin": true,
      "privateData": true,
      "sendAlerts": true,
      "receiveWeeklyReports": true
    }
}
```

# 5.5. Deleting an MSP User

## URI - DELETE

To use this endpoint, send a DELETE request with a path parameter (**user_id**): `/msp/users/{user_id}`

## Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and a path parameter (**user_id**).

**Note:**

The **user_id** must be the user ID of the user to be deleted.

## Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| user_id | String | Yes | | Unique user ID |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X DELETE -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851"\
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/users/1
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure. There is no **responseData** object. The successful deletion returns the status code 204.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  }
}
```

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 204,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 0,
    "totalRecordsNumber": 0,
    "scrollId": ""
  }
}
```

# 6. Managing MSP Customers

## 6.1. List all the Customer Tenants of an MSP

### URI - GET

To use this endpoint, send a GET request to retrieve all tenants associated with a given MSP: `/msp/tenants`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) with request string parameters.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Body

All applicable request parameters are posted on the request body JSON:

```
{
    "requestData":
        {
          "scrollId": "string"
        }
}
```

### Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| scrollId | String | No | | ID used to scroll large sets of results. |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/tenants
```

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds an array of tenants.

You can find tenant details within each tenant. This includes the domain, deployment mode, user counts, and billing package.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "string",
    "additionalText": "string",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "string"
  },
  "responseData":[
    {
      "id": 0,
      "domain": "string",
      "deploymentMode": "string",
      "pocDateStart": "string",
      "pocDateExpiration": "string",
      "users": 0,
      "status": {
        "statusCode": "string",
        "description": "string"
      }
      "package": {
        "id": 0,
        "codeName": "string",
        "displayName": "string"
      },
      "addons": [
        {
          "id": 0,
          "name": "string"
        }
      ],
      "maxLicensedUsers": 0
    }
  ]
}
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | Array of tenants |
| responseData/TenantList | id | Integer | Unique ID of the tenant |
| | domain | String | Avanan customer portal domain |
| | deploymentMode | String | Tenant mode paid or PoC |
| | pocDateStart | String | Start of PoC for a tenant |
| | pocDateExpiration | String | End of PoC for a tenant |
| | users | Integer | Total user count for a tenant |
| | status | Object | Object with tenant status |
| | package | Object | Billing package object |
| | addons | Object | Array of Add-ons |
| | maxLicensedUsers | Integer | Maximum number of users for the portal |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "34234345454353343"
  },
  "responseData": {
```

```
    [
        {
        'id': 3318,
              'domain': 'abctenant.avanan.net',
              'deploymentMode': 'paid',
              'pocDateStart': '2021-10-25',
              'pocDateExpiration':  '2021-11-09',
              'users': 25,
           'status': {'statusCode': 'success', 'description': 'Active'},
           'package': None,
           'addons': [],
           'maxLicensedUsers': None
        }
     ]
}
```

## 6.2. Creating a Customer Tenant

### URI - POST

To use this endpoint. send a POST request with JSON body to create a new tenant: `/msp/tenants`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) with request parameters posted on the request body.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Body

All applicable request parameters are posted on the request body JSON:

```
{
  "requestData": {
    "adminEmail": "string",
    "tenantName": "string",
    "adminName": "string",
    "phone": "string",
    "companyName": "string",
    "tenantRegion": "us",
  }
}
```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| adminEmail | String | Yes | | Tenant administrator email |
| tenantName | String | Yes | | |
| adminName | String | Yes | | Tenant administrator's first and last name |
| phone | String | Yes | Ten digit phone number | Tenant administrator phone number |
| company-Name | String | Yes | | Name of company associated with the tenant |
| tenantRegion | String | Yes | Country code in lower case | Country code for tenant creation region<br>• US (USA)<br>• EU (Europe)<br>• CA (Canada) |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X POST -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    -d "{
           "requestData": {
            "adminEmail":  "johndoe@abccompany.com",
            "tenantName": "abccompany",
            "adminName": "John Doe",
            "Phone": "9023234576",
            "companyName": "abccompany",
            "tenantRegion":  "us"
        }
    }" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/tenants
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The **responseData** object contains the details of the newly created tenant.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
```

```
    "responseCode": 0,
    "responseText": "string",
    "additionalText": "string",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": "string"
  },
  "responseData":
    {
      "id": 0,
      "domain": "string",
      "deploymentMode": "string",
      "pocDateStart": "string",
      "pocDateExpiration": "string",
      "users": 0,
      "status": {
        "statusCode": "string",
        "description": "string"
      }
      "package": {
        "id": 0,
        "codeName": "string",
        "displayName": "string"
      },
      "addons": [
        {
          "id": 0,
          "name": "string"
        }
      ],
      "maxLicensedUsers": 0
    }
}
```


## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | Array of tenants |
| id | Integer | Unique ID of the tenant |
| domain | String | Avanan customer portal domain |
| deploymentMode | String | Tenant mode paid or PoC |

| Parameter | Type | Description |
|---|---|---|
| pocDateStart | String | Start of PoC for the tenant |
| pocDateExpiration | String | End of PoC for the tenant |
| users | Integer | Total user count for tenant |
| status | Object | Object with tenant status |
| package | Object | Billing package object |
| addons | Object | Array of add-ons |
| maxLicensedUsers | Integer | Maximum number of users for the portal |

### Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
    'id': 3318,
              'domain': 'abctenant.avanan.net',
              'deploymentMode': 'paid',
              'pocDateStart': '2021-10-25',
              'pocDateExpiration':  '2021-11-09',
              'users': 25,
   'status': {'statusCode': 'success', 'description': 'Active'},
   'package': None,
   'addons': [],
   'maxLicensedUsers': None}
}
```

## 6.3. Getting the Details of a Customer Tenant

### URI - GET

To use this *endpoint*, send a GET request with a path parameter to see the details of a given tenant: `/msp/tenants/{tenant_id}`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and the ID of the tenant to detail as a path parameter.

## Request Headers

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-to-ken | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| tenant_id | Integer | Yes | | Avanan tenant ID retrieved from the tenant endpoint |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
     -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-jjshduhuh" \
     -H "x-av-token: tkn8546ffffggd9d8934593" \
     -H "x-av-app-id: myapp29" \
     -H "x-av-date: 2021-02-28T09:12:33.001Z" \
     -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
     https://smart-api-production-1-us.avanan.net/v1.0/msp/tenants/120
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object that holds the details of the tenant. The tenant details include the license, PoC/paid start dates, user count, and expiration dates.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": {
    "id": 0,
```

```
    "domain": "string",
    "deploymentMode": "string",
    "pocDateStart": "string",
    "pocDateExpiration": "string",
    "users": 0,
    "status": {
      "statusCode": "string",
      "description": "string"
    },
    "package": {
      "id": 0,
      "codeName": "string",
      "displayName": "string"
    },
    "addons": [
      {
        "id": 0,
        "name": "string"
      }
    ],
    "maxLicensedUsers": 0
  }
}
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | Array of tenants |
| responseData | id | Integer | Unique ID of the tenant |
| | domain | String | Avanan customer portal domain |
| | deploymentMode | String | Tenant mode paid or PoC |
| | pocDateStart | String | Start of PoC for the tenant |
| | pocDateExpiration | String | End of PoC for the tenant |
| | users | Integer | Total user count for tenant |
| | status | Object | Object with tenant status |
| | package | Object | Billing package object |
| | addons | Object | Array of add-ons |

| Parameter | Type | Description |
|---|---|---|
| maxLicensedUsers | Integer | Maximum number of users for the portal |

### Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 0,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 1,
    "totalRecordsNumber": 1,
    "scrollId": ""
  },
  "responseData": {
    {
    'id': 3318,
    'domain': 'abctenant.avanan.net',
    'deploymentMode': 'paid',
    'pocDateStart': '2021-10-25',
    'pocDateExpiration':  '2021-11-09',
    'users': 25,
    'status': {'statusCode': 'success', 'description': 'Active'},
    'package': None,
    'addons': [],
    'maxLicensedUsers': None
    }
}
```

## 6.4. Deleting a Customer Tenant

### URI - DELETE

To use this endpoint, send a DELETE request with a path parameter to delete the tenant and all its data: `/msp/tenants/{tenant_id}`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and the tenant ID as a path parameter.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| tenant_id | Integer | Yes | | Avanan tenant ID to specify the tenant to delete. |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-jjshduhuh" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp2" \
    -H "x-av-date: 2021-02-28T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/tenants/120
```

### Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure with no **responseData** structure. After you delete the tenant, the request returns the status code 204.

### Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  }
}
```

### Response Parameters

The response parameters:

| Parameter | Type | Description | |
|---|---|---|---|
| responseEn-velope | Object | A container of metadata properties | |

| Parameter | Type | Description | |
|---|---|---|---|
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNum-ber | Integer | Number of records in the response |
| | totalRecords-Number | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
    "responseCode": 204,
    "responseText": "Success",
    "additionalText": "",
    "recordsNumber": 0,
    "totalRecordsNumber": 0,
    "scrollId": ""
  },
}
```

# 7. Managing the Security of a Single Customer Tenant

In order to filter through security events/entities, define exceptions and take security-related actions on a single customer tenant, refer to the Avanan SmartAPI Reference Guide for standard (base) tenants.

**Note:**

You do not need to generate a secret key for every customer. Instead, use the MSP API key you received from the *Avanan Support*. See URLs and URL Base *(on page 8)*.

## Customer Tenant API URL

For the standard (base) tenants, to filter security events, entities, define exceptions and take security related actions on a single customer tenant, refer to the Avanan SmartAPI Reference Guide.

For every customer tenant, use the URL assigned to its region:

| Region | URI Base |
|---|---|
| United States | smart-api-production-1-us.avanan.net |
| Europe | smart-api-production-1-eu.avanan.net |
| Australia | smart-api-production-5-ap.avanan.net |
| Canada | smart-api-production-1-ca.avanan.net |
| United Kingdom (UK) | smart-api-production-1-euw2.avanan.net |
| India | smart-api-production-1-aps1.avanan.net |

**Note:**

For the customer tenants in the UAE region, management of the security using APIs is not supported.

## Customer Tenant API Authentication and Authorization

To execute API calls of specific customer tenants, you must use the MSP API key received from the *Avanan Support*. See API Authentication and Authorization *(on page 6)*.

**Note:**

You must have a separate API key for every region where you manage your tenants. For example, if you need to get the security events for tenants residing in the US and Europe region, you need two separate API keys. However, to create, delete, and license tenants, one MSP API key is enough.

# 8. Useful Resources

- Parent MSP
  - Parent MSP API (JSON)
  - Parent MSP Swagger (JSON)
  - SmartAPI Client (PY)
- Child MSPs
  - Child MSP API (JSON)
  - SmartAPI Client (PY)

# 9. Managing Customer Licenses and Usage

## 9.1. List all the Available Licenses

### URI - GET

To use this endpoint, send a GET request to list all the licenses: `/msp/licenses`

### Request

The request must only include HTTP headers (obtained in the authentication/authorization process and used to sign the request).

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-jjshduhuh" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2021-02-28T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/licenses
```

### Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object with an array of license objects. The license objects include the ID, code name, and display name of all the available tenant licenses.

### Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
```

```
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": [
    {
      "id": 0,
      "codeName": "string",
      "displayName": "string"
    }
  ]
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | An array of License Objects |
| id | Integer | ID of license choice |
| codeName | String | Code name for the license |
| displayName | String | Display name of the license |

## Response Sample

A valid response from the service:

```
{
    'responseEnvelope': {
        'requestId': 'e5f28cbe-17cd-41e3-8c5d-10818f1ef2f4',
          'responseCode': 200,
          'responseText': '',
          'additionalText': '',
          'recordsNumber': 3,
          'scrollId': ''
    },
     'responseData': [
        {
            'id': 1,
              'codeName': 'advanced_anti_phishing',
              'displayName': 'Advanced Anti-Phishing'
```

```
15          },
16            {
17              'id': 2,
18              'codeName': 'complete_malware',
19              'displayName': 'Complete Malware'
20          },
21            {
22              'id': 3,
23                 'codeName': 'full_suite_protection',
24                 'displayName': 'Full-Suite Protection'
25          }
26      ]
27 }
```

## 9.2. List Available License Add-ons

### URI - GET

To use this endpoint, send a GET request to list add-ons: `/msp/addons`

### Request

The request must only include HTTP headers (obtained in the authentication/authorization process and used to sign the request).

### Request Headers

| Header | Type | Re-quired | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-to-ken | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
1  curl -X GET -H "Accept: application/json" \
2      -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-jjshduhuh" \
3      -H "x-av-token: tkn8546ffffggd9d8934593" \
4      -H "x-av-app-id: myapp29" \
5      -H "x-av-date: 2021-02-28T09:12:33.001Z" \
6      -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
7      https://smart-api-production-1-us.avanan.net/v1.0/msp/addons
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure consists of a **responseEnvelope** structure and a **responseData** object with an array of add-on objects. The add-on objects include the ID and name of all the available tenant add-ons.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
        "requestId": "string",
        "responseCode": 0,
        "responseText": "",
        "additionalText": "",
        "recordsNumber": 0,
        "scrollId": "string"
  },
  "responseData": [
    {
      "id": 0,
      "name": "string"
    }
  ]
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | An array of License Objects |
| id | Integer | ID of license choice |
| name | String | Name of the add-on |

## Response Sample

A valid response from the service:

```
{
    'responseEnvelope': {
```

```
        'requestId': 'da1b074e-8f54-495b-b626-182c883e3817',
         'responseCode': 200,
         'responseText': '',
         'additionalText': '',
         'recordsNumber': 1,
         'scrollId': ''
    },
     'responseData': [
        {
            'id': 1,
            'name': 'IRaaS'
        }
     ]
}
```

## 9.3. Assigning License to a Customer Tenant

### URI - POST

To use this endpoint, send a POST request with a path parameter that specifies the tenant to apply for a license and a request body with the license data: `/msp/tenants/{tenant_id}/license`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request) and the ID of the tenant to apply the new license to as a path parameter. The request body must include the required license code name and any optional license specifications.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| tenant_id | Integer | Yes | | Avanan tenant ID to specify the tenant to delete. |

### Request Body

All applicable request parameters are posted on the request body JSON:

```
{
  "requestData": {
```

```
        "tenantId": "string",
        "maxLicensedUsers": 0,
        "licenseCodeName": "string",
        "addonIdList": [0]
    }
}

```

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| licenseCodeName | String | Yes | | Code name of the desired license, taken from licenses endpoint response. |
| addonIdList | List of Integers | No | | An array of desired add-on IDs. Add-on IDs are available from the add-ons endpoint. |
| maxLicensedUsers | Integer | No | | Maximum number of users for the tenant. |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X POST -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    -d "{
            "requestData": {
                "licenseCodeName":  "complete_malware",
                "maxLicensedUsers": "20"
            }
        }" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/tenants/120/license
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure includes a **responseEnvelope** structure and a **responseData** structure that shows the **tenantID** and details of the new license.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
```

```
  },
  "responseData": {
    "license": {
      "id": 0,
      "codeName": "string",
      "displayName": "string"
    },
    "tenantId": 0,
    "tenantDomain": "string",
    "addons": [
      {
        "id": 0,
        "name": "string"
      }
    ],
    "maxLicensedUsers": 0
  }
}
```

## Response Parameters

The response parameters:

| Parameter | Type | Description |
|---|---|---|
| responseEnvelope | Object | A container of metadata properties |
| requestId | String | Request ID (from the request header **x-av-req-id** value) |
| responseCode | Integer | 0 = Success<br>Other values = Failure |
| responseText | String | The text value of the response |
| additionalText | String | Additional information |
| recordsNumber | Integer | Number of records in the response |
| totalRecordsNumber | Integer | Total number of records |
| scrollId | String | A unique ID used to scroll through data |
| responseData | Object | Portal license details |
| license | Object | License object that contains the ID, code name, and display name |
| tenantId | Integer | ID of the Avanan tenant |
| tenantDomain | String | The top level domain of the Avanan tenant |
| maxLicensedUsers | Integer | Maximum number users seats for the tenant |
| addons | Array of Add-on objects | An array of add-on objects with the add-on ID and name |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
    "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
```

```
    "responseCode": 200,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 1,
    "scrollId": "string"
  },
  "responseData": {
    "license": {
      "id": 2,
      "codeName": "complete_malware",
      "displayName": "Complete Malware"
    },
    "tenantId": 120,
    "tenantDomain": "abccompany",
    "addons": [],
    "maxLicensedUsers": 20
      }
}
```


## 9.4. Getting Monthly Usage Details of Customers

### URI - GET

To use this endpoint, send a GET request: `/msp/usage`

### Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request). This request must include two query string parameters, the month and the year. The service returns the usage for the given month.

### Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

### Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| year | Integer | Yes | querystring | Year of usage |
| month | Integer | Yes | querystring | Month to retrieve usage |

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| scrollId | String | No | | ID used to scroll large sets of results. |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp2"" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
    -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
    https://smart-api-production-1-us.avanan.net/v1.0/msp/usage?year=2021&month=9
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure includes a **responseEnvelope** structure and a **responseData** object with an array of usage for all associated customers in the given month.

## Response Structure

A valid response obtained from the service (JSON format):

```
{
  "responseEnvelope": {
    "requestId": "string",
    "responseCode": 0,
    "responseText": "",
    "additionalText": "",
    "recordsNumber": 0,
    "scrollId": "string"
  },
  "responseData": [
    {
      "day": "string",
      "tenantDomain": "string",
      "licenseCodeName": "string",
      "users": 0,
      "dailyPrice": 0,
      "cost": 0
    }
  ]
}
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecordsNumber | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |
| responseData | | Object | Usage List - Array of usage |
| responseData/UsageList | day | String | Day of usage in DateTime format |
| | tenantDomain | String | TLD of the Avanan tenant |
| | licenseCodeName | String | Code name of the license for the tenant on the day of usage |
| | users | Integer | User count for the usage day |
| | dailyPrice | Float | Price for the day per user |
| | cost | Float | Cost for all users of the tenant per day |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
        "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
        "responseCode": 204,
        "responseText": "",
        "additionalText": "",
        "recordsNumber": 1,
        "scrollId": ""
  },
  "responseData": [
            {
                'day': '2021-09-02',
                'tenantDomain': "abccompany",
                'licenseCodeName': 'full_suite_protection',
                'users': 45,
                'dailyPrice': 0.069,
                'cost': 3.11
            }
  ]
}
```

# 9.5. Getting Daily Usage Details of Customers

## URI - GET

To use this endpoint, send a GET request: `/msp/usage/day`

## Request

The request includes HTTP headers (obtained in the authentication/authorization process and used to sign the request). This request must include three **querystring** parameters (year, month, and day). These parameters correspond to the day to return usage.

## Request Headers

| Header | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| x-av-req-id | String | Yes | UUID - generated and supplied on the request | d290f1ee-6c54-4b01-90e6-d701748f0851 |
| x-av-token | String | Yes | Token obtained in the authentication sequence | tkn8546ffffggd9d8934593 |
| x-av-app-id | String | Yes | Application ID provided by Avanan | myapp29 |
| x-av-date | String | Yes | Date-time in GMT | '2016-08-29T09:12:33.001Z' |
| x-av-sig | String | Yes | Calculated signature | tkn8jmveolrrtertr9d8934593 |

## Request String Parameters

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| year | Integer | Yes | querystring | Year for usage |
| month | Integer | Yes | querystring | Month to retrieve usage |
| day | Integer | Yes | querystring | Day to retrieve usage |

## Request Body Parameters

The JSON parameters:

| Parameter | Type | Required | Format | Description/Sample |
|---|---|---|---|---|
| scrollId | String | No | | ID used to scroll through large sets of results. |

## Request Sample (CURL) Format

This request sample shows URI base in USA region. For URI base in other regions, see URLs and URL Base *(on page 8)*.

```
curl -X GET -H "Accept: application/json" \
    -H "x-av-req-id: d290f1ee-6c54-4b01-90e6-d701748f0851" \
    -H "x-av-token: tkn8546ffffggd9d8934593" \
    -H "x-av-app-id: myapp29" \
    -H "x-av-date: 2016-08-29T09:12:33.001Z" \
```

```
6       -H "x-av-sig: tkn8jmveolrrtertr9d8934593" \
7       https://smart-api-production-1-us.avanan.net/v1.0/msp/usage?
    year=2021&month=9&day=2
```

## Response

The response obtained from the service includes an HTTP response code and JSON formatted structure. The structure includes a **responseEnvelope** structure and a **responseData** object with an array of usage for all associated customers in the given day.

## Response Structure

A valid response obtained from the service (JSON format):

```
1  {
2    "responseEnvelope": {
3      "requestId": "string",
4      "responseCode": 0,
5      "responseText": "",
6      "additionalText": "",
7      "recordsNumber": 0,
8      "scrollId": "string"
9    },
10   "responseData": [
11     {
12       "day": "string",
13       "tenantDomain": "string",
14       "licenseCodeName": "string",
15       "users": 0,
16       "dailyPrice": 0,
17       "cost": 0
18     }
19   ]
20 }
```

## Response Parameters

The response parameters:

| Parameter | | Type | Description |
|---|---|---|---|
| responseEnvelope | | Object | A container of metadata properties |
| | requestId | String | Request ID (from the request header **x-av-req-id** value) |
| | responseCode | Integer | 0 = Success<br>Other values = Failure |
| | responseText | String | The text value of the response |
| | additionalText | String | Additional information |
| | recordsNumber | Integer | Number of records in the response |
| | totalRecords-Number | Integer | Total number of records |
| | scrollId | String | A unique ID used to scroll through data |

| Parameter | | Type | Description |
|---|---|---|---|
| responseData | | Object | Usage List - Array of usage |
| responseData/UsageList | day | String | Day of usage in DateTime format |
| | tenantDomain | String | TLD of the Avanan tenant |
| | licenseCodeName | String | Code name of the license for the tenant on the day of usage |
| | users | Integer | User count for the usage day |
| | dailyPrice | Float | Price for the day per user |
| | cost | Float | Cost for all users of the tenant per day |

## Response Sample

A valid response from the service:

```
{
  "responseEnvelope": {
        "requestId": "cc7796ac-6235-4a06-b7e9-6abc557976f6",
        "responseCode": 204,
        "responseText": "",
        "additionalText": "",
        "recordsNumber": 1,
        "scrollId": ""
  },
  "responseData": [
    {
        'day': '2021-09-02',
        'tenantDomain': “abccompany”,
        'licenseCodeName': 'full_suite_protection',
        'users': 45,
        'dailyPrice': 0.069,
        'cost': 3.11
    }
  ]
}
```