Authentication and Authorization API

GET /V1/CMDB/Domains/{?tenantId}

Use this function returns a list of accessible domains in a specific tenant. The returned accessible domains vary by the user privileges you use to log in. To retrieve a full list of domains in a specified tenant, you must log in with system admin or tenant admin permissions.

Detail Information

Title : Get all accessible domains of a tenants API

Version : 01/23/2019.

API Server URL : http(s):// IP address of your NetBrain Web API Server /ServicesAPI/API/V1/CMDB/Domains

Authentication :

Type	In	Name
Bearer Authentication	Parameters	Authentication token

Request body(required***)

No request body.

Query Parameters(required***)

Name	Type	Description
tenantId*	string	Unique identifier for the tenant from which you desire to retrieve the domain information. tenantId can be retrieved from get all accessible tenants. **Note:** If user don't have the privilege to visit all tenants, specific tenantId is required for this API.

Headers

Data Format Headers

Name	Type	Description
Content-Type	string	support "application/json"
Accept	string	support "application/json"

Authorization Headers

Name	Type	Description
token*	string	Authentication token, get from login API.

###Response

Name	Type	Description
domains	array	A list of all accessible domains.
domainId	string	The domain ID.
domainName	string	The domain name.
statusCode	integer	Code issued by NetBrain server indicating the execution result.
statusDescription	string	The explanation of the status code.

Example

```
{
    'domains': [
        {
            'domainId': '850ff5e9-c639-404d-85a3-d920dbee509c',
            'domainName': 'Support and Service'
        },
        {
            'domainId': '0201adc4-ae96-46f0-ae3d-01cdba9e41d6',
            'domainName': 'GE Test'
        }
    ],

    'statusCode': 790200,
    'statusDescription': 'Success.'
}
```

Full Example

```
# import python modules
import requests
import time
import urllib3
import pprint
#urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)
import json

# Set the request inputs
token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
tenantId = "fb24f3f0-81a7-1929-4b8f-99106c23fa5b"
full_url = "http://192.168.28.79/ServicesAPI/API/V1/CMDB/Domains"

# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}
headers["Token"] = token

data = {"tenantId": tenantId}

try:
    # Do the HTTP request
    response = requests.get(full_url, params=data, headers=headers, verify=False)
    # Check for HTTP codes other than 200
```

```python
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        result = response.json()
        print (result)
    else:
        print ("Get domains failed! - " + str(response.text))

except Exception as e: print (str(e))
```

{'domains': [{'domainId': '850ff5e9-c639-404d-85a3-d920dbee509c', 'domainName': 'Support and Service'}, {'domainId': '0201adc4-ae96-46f0-ae3d-01cdba9e41d6', 'domainName': 'GE Test'}], 'statusCode': 790200, 'statusDescription': 'Success.'}

cURL Code from Postman

```
curl -X GET \
  'http://192.168.28.79/ServicesAPI/API/V1/CMDB/Domains?token=c00de805-9210-44a9-9a26-
f0c1e944ea36&tenantId=fb24f3f0-81a7-1929-4b8f-99106c23fa5b' \
  -H 'Postman-Token: ee6dda7c-cbcc-43b8-8957-9c4f2d2a4b5b' \
  -H 'cache-control: no-cache'
```

Error Examples

```
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"""Error 1: empty tenantId"""

Input:
    token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
    tenantId = ""
    full_url = "http://IP address of your NetBrain Web API
Server/ServicesAPI/API/V1/CMDB/Domains"

Response:
    "{'domains': [], 'statusCode': 790200, 'statusDescription': 'Success.'}"

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"""Error 2: wrong tenantId"""

Input:
    token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
    tenantId = "aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa"
    full_url = "http://IP address of your NetBrain Web API
Server/ServicesAPI/API/V1/CMDB/Domains"

Response:
    """Get domains failed! -
    {"statusCode":791006,
    "statusDescription":"tenant with id aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa does not
exist."}"""
```

GET /V1/CMDB/Tenants/

This method returns a list of accessible tenants (including tenant ID and names). The returned tenants list varies by the privileges of different user roles. To retrieve a full list of all available tenants, users must log in with admin role.

Detail Information

Title : Get All Asseccible Tenants API

Version : 01/23/2019.

API Server URL : http(s):// < NetBrain Web API Server Address > /ServicesAPI/API/V1/CMDB/Tenants

Authentication :

Type	In	Name
Bearer Authentication	Parameters	Authentication token

Request body(required***)

No request body.

Parameters(required***)

No parameters required

Headers

Data Format Headers

Name	Type	Description
Content-Type	string	support "application/json"
Accept	string	support "application/json"

Authorization Headers

Name	Type	Description
token*	string	Authentication token, get from login API.

Response

Name	Type	Description
tenants	array	A list of all accessible tenants.
tenantId	string	The tenant ID.
tenantName	string	The tenant name.
statusCode	integer	Code issued by NetBrain server indicating the execution result.
statusDescription	string	The explanation of the status code.

Example :

```
{
    'tenants': [
        {
            'tenantId': 'fb24f3f0-81a7-1929-4b8f-99106c23fa5b',
            'tenantName': 'Initial Tenant'
        }
    ],
    'statusCode': 790200,
    'statusDescription': 'Success.'
}
```

Full Example

```python
# import python modules
import json
import requests
import time
import urllib3
import pprint
urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)


token = "828a4561-5ee5-40ac-bf98-01788be48330"
full_url = "http://192.168.28.79/ServicesAPI/API/V1/CMDB/Tenants"


# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}
headers["Token"] = token

try:
    # Do the HTTP request
    response = requests.get(full_url, headers=headers, verify=False)
    # Check for HTTP codes other than 200
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        result = response.json()
        print (result)
    else:
        print ("Get tenants failed! - " + str(response.text))
except Exception as e: return (str(e))
```

```
{'tenants': [{'tenantId': 'fb24f3f0-81a7-1929-4b8f-99106c23fa5b',
   'tenantName': 'Initial Tenant'}],
 'statusCode': 790200,
 'statusDescription': 'Success.'}
```

cURL Code from Postman

```
curl -X GET \
  'http://192.168.28.79/ServicesAPI/API/V1/CMDB/Tenants?token=c00de805-9210-44a9-9a26-
f0c1e944ea36' \
  -H 'Postman-Token: b3ecf2c4-d94a-4059-a01f-bcd21fc8a286' \
  -H 'cache-control: no-cache'
```

Error Example :

```
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"""Error 1: empty url"""

Input:
    token = "828a4561-5ee5-40ac-bf98-01788be48330"

    full_url = ""

Response:
    "Invalid URL'': No schema supplied. Perhaps you meant http://"

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"""Error 2: wrong url"""

Input:
    token = "828a4561-5ee5-40ac-bf98-01788be48330"

    full_url = "http://192.1688.28.79/ServicesAPI/API/V1/CMDB/Tenants"

Response:
    """HTTPConnectionPool(host='192.1688.28.79', port=80):
        Max retries exceeded with url: /ServicesAPI/API/V1/Session (Caused by
NewConnectionError(
            '<urllib3.connection.HTTPConnection object at 0x0000022F203C79B0>:
            Failed to establish a new connection: [Errno 11001] getaddrinfo failed'))"""

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"""Error 3: empty token"""

Input:
    token = ""

    full_url = "http://192.168.28.79/ServicesAPI/API/V1/CMDB/Tenants"

Response:
    { "statusCode": 795005, "statusDescription": "Invalid token. }
```

```
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"""Error 4: wrong token"""

Input:
    token = "aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa"

    full_url = "http://192.168.28.79/ServicesAPI/API/V1/CMDB/Tenants"

Response:
    { "statusCode": 795005, "statusDescription": "Invalid token. }
```

POST /V1/Session

This method creates an authentication token and starts a session with user's body information and netbrain server url.

Detail Information

Title : Log in API

Version : 01/23/2019.

API Server URL : http(s):// IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session

Authentication : Not Required.

Request body(required***)

Name	Type	Description
username*	string	the username to log into your NetBrain domain.
password*	string	the password to log into your NetBrain domain.
authentication_id	string	This body parameter is only required for an external user through SSO, LDAP/AD or TACACS and the value must same with the name of external authentication which the user created by admin role during system management under "User Account" section.

Example :

```
body = {
        "username": "NetBrain",
        "password": "NetBrain"
    }
```

Parameters(required***)

No parameters required.

Headers

Data Format Headers

Name	Type	Description
Content-Type	string	support "application/json"
Accept	string	support "application/json"

Response

Name	Type	Description
token	string	The returned authentication token.
statusCode	integer	The returned status code of executing the API.
statusDescription	string	The explanation of the status code.

Example :

```
{
    'token': 'fc6bc6ea-a46a-4e9b-8906-c623f78474b6',
    'statusCode': 790200,
    'statusDescription': 'Success.'
}
```

Full Example

```python
# import python modules
import requests
import time
import urllib3
import pprint
#urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)
import json

body = {
    "username" : "Netbrain",
    "password" : "Netbrain"
}

full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}

try:
    # Do the HTTP request
    response = requests.post(full_url, headers=headers, data = json.dumps(body), verify=False)
    # Check for HTTP codes other than 200
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        js = response.json()
        print (js)
    else:
        print ("Get token failed! - " + str(response.text))
except Exception as e:
```

```
    print (str(e))
```

```
{'token': '9b9715e8-7274-4a28-9692-e00ad315a283', 'statusCode': 790200, 'statusDescription':
'Success.'}
```

Example For External user

```
body = {
    "username" : "Netbrain",
    "password" : "Netbrain",
    "authentication_id" : "net-brain"
}

full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}

try:
    # Do the HTTP request
    response = requests.post(full_url, headers=headers, data = json.dumps(body), verify=False)
    # Check for HTTP codes other than 200
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        js = response.json()
        print (js)
    else:
        print ("Get token failed! - " + str(response.text))
except Exception as e:
    print (str(e))
```

```
{'token': '5e9af6f4-efa8-4a19-9d42-add069c67c99', 'statusCode': 790200, 'statusDescription':
'Success.'}
```

cURL Code from Postman

```
curl -X POST \
  http://192.168.28.79/ServicesAPI/API/V1/Session \
  -H 'Accept: application/json' \
  -H 'Content-Type: application/json' \
  -H 'Postman-Token: ba5d854d-80ec-4a63-be98-65dc92c74a7a' \
  -H 'cache-control: no-cache' \
  -d '{
    "username": "Netbrain",
    "password": "Netbrain"
    }'
```

Error Example :

```
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```

```
"""Error 1: empty url"""

Input:
    body = {
        "username" : "NetBrain",
        "password" : "NetBrain"
    }

    full_url = ""

Response:
    "Invalid URL '': No schema supplied. Perhaps you meant http://?"

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"""Error 2: wrong url"""

Input:
    body = {
        "username" : "NetBrain",
        "password" : "NetBrain"
    }

    full_url = "http://IP address of your NetBrain Web API
ServerXXXXXXXXXXX%%%%%%%/ServicesAPI/API/V1/Session"

Response:
    """HTTPConnectionPool(host='192.1688.28.79', port=80):
        Max retries exceeded with url: /ServicesAPI/API/V1/Session (Caused by
NewConnectionError(
            '<urllib3.connection.HTTPConnection object at 0x0000022F203C79B0>:
            Failed to establish a new connection: [Errno 11001] getaddrinfo failed'))"""

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"""Error 3: empty body"""

Input:
    body = {
        "username" : "",
        "password" : ""
    }

    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

Response:
    "Get token failed! - {"statusCode":795000,"statusDescription":"Invalid username or
password."}"
```

```
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"""Error 4: wrong body information"""

Input:
    body = {
        "username" : "wwwwwww",
        "password" : "wwwwwww"
    }

    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

Response:
    "Get token failed! - {"statusCode":795000,"statusDescription":"Invalid username or
password."}"

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"""Error 4: for external user, empty authentication id"""

Input:
    body = {
        "username" : "Netbrain",
        "password" : "Netbrain",
        "authentication_id" : ""
    }

    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

Response:
    {
        "statusCode": 795000,
        "statusDescription": "Invalid username or password."
    }

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"""Error 4: for external user, wrong authentication id"""

Input:
    body = {
        "username" : "Netbrain",
        "password" : "Netbrain",
        "authentication_id" : "XXXXXXXXX"
    }

    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"
```

```
Response:
    {
        "statusCode": 795000,
        "statusDescription": "Invalid username or password."
    }
```

DELETE /V1/Session

Use this API to log out from the current session.

Detail Information

Title : Log out API

Version : 01/23/2019.

API Server URL : http(s):// IP address of your NetBrain Web API Server /ServicesAPI/API/V1/Session

Authentication :

Type	In	Name
Bearer Authentication	Headers	Authentication token

Request body(required***)

No request body.

Parameters(required***)

No parameters required.

Headers

Data Format Headers

Name	Type	Description
Content-Type	string	support "application/json"
Accept	string	support "application/json"

Authorization Headers

Name	Type	Description
token	string	Authentication token, get from login API.

Response

Name	Type	Description
statusCode	integer	The returned status code of executing the API.
statusDescription	string	The explanation of the status code.

Example :

```
{
    "statusCode": 790200,
    "statusDescription": "Success."
}
```

Full Example

```python
# import python modules
import requests
import time
import urllib3
import pprint
urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)
import json

# Set the request inputs
token = "a63c6610-1a44-4907-bb57-784179d30ba3"
full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}
headers["token"] = token

try:
    # Do the HTTP request
    response = requests.delete(full_url, headers=headers, verify=False)
    # Check for HTTP codes other than 200
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        js = response.json()
        print (js)
    else:
        print ("Session logout failed! - " + str(response.text))

except Exception as e:
    print (str(e))
```

```
{'statusCode': 790200, 'statusDescription': 'Success.'}
```

cURL Code from Postman

```
curl -X DELETE \
  http://192.168.28.79/ServicesAPI/API/V1/Session \
  -H 'Postman-Token: d6de8cb3-ca3b-4bde-b9c7-be800e902d2c' \
  -H 'cache-control: no-cache' \
  -H 'token: 7480e46f-6a25-470e-9c61-351f6b7d86fa'
```

Error Exampes

```
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"""Error 1: empty url"""

Input:
    token = "a63c6610-1a44-4907-bb57-784179d30ba3"

    full_url = ""

Response:
    "Invalid URL '': No schema supplied. Perhaps you meant http://?"

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"""Error 2: wrong url"""

Input:
    token = "a63c6610-1a44-4907-bb57-784179d30ba3"

    full_url = "http://IP address of your NetBrain Web API
Serveraaaaaaaaaaaaaaa/ServicesAPI/API/V1/Session"

Response:
    """HTTPConnectionPool(host='192.1688.28.79', port=80):
       Max retries exceeded with url: /ServicesAPI/API/V1/Session (Caused by
NewConnectionError(
            '<urllib3.connection.HTTPConnection object at 0x0000022F203C79B0>:
            Failed to establish a new connection: [Errno 11001] getaddrinfo failed'))"""

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####################

"""Error 3: empty token"""

Input:
    token = ""

    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

Response:
    { "statusCode": 795005, "statusDescription": "Invalid token. }

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"""Error 4: wrong token"""

Input:
    token = "aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa"
```

```
    full_url = "http://IP address of your NetBrain Web API Server/ServicesAPI/API/V1/Session"

Response:
    { "statusCode": 795005, "statusDescription": "Invalid token. }
```

PUT /V1/Session/CurrentDomain

Use this API to specify a domain to work on to get or set NetBrain data by associating domainID to the current session.

Detail Information

Title : Specify a domain to work on API

Version : 01/23/2019.

API Server URL : http(s):// IP address of your NetBrain Web API Server /ServicesAPI/API/V1/Session/CurrentDomain

Authentication :

Type	In	Name
Bearer Authentication	Parameters	Authentication token

Request body(required***)

Name	Type	Description
tenantId*	string	Unique identifier for the tenant from which you desire to retrieve the domain information. tenantId can be retrieved from get all accessible tenants.
domainId	string	Input the ID of the target domain. Get a domain ID by using the API Get all accessible domains of a tenant. **Note**: This parameter is optioanl if the following operations aim only on tenant.

Example

```
{
    "tenantId": "fb24f3f0-81a7-1929-4b8f-99106c23fa5b",
    "domainId": "0201adc4-ae96-46f0-ae3d-01cdba9e41d6"
}
```

Parameters(required***)

No parameters required.

Headers

Data Format Headers

Name	Type	Description
Content-Type	string	support "application/json"
Accept	string	support "application/json"

Name	Type	Description
token	string	Authentication token, get from login API.

Response

Name	Type	Description
statusCode	integer	Code issued by NetBrain server indicating the execution result.
statusDescription	string	The explanation of the status code.

```
{
    "statusCode": 790200,
    "statusDescription": "Success."
}
```

Full Example

```python
# import python modules
import requests
import time
import urllib3
import pprint
#urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)
import json


# Set the request inputs
token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
full_url = "http://192.168.28.79/ServicesAPI/API/V1/Session/CurrentDomain"
tenantId = "fb24f3f0-81a7-1929-4b8f-99106c23fa5b"
domainId = "0201adc4-ae96-46f0-ae3d-01cdba9e41d6"

# Set proper headers
headers = {'Content-Type': 'application/json', 'Accept': 'application/json'}
headers["Token"] = token

body = {
        "tenantId": tenantId,
        "domainId": domainId
    }

try:
    # Do the HTTP request
    response = requests.put(full_url, data=json.dumps(body), headers=headers, verify=False)
    # Check for HTTP codes other than 200
    if response.status_code == 200:
        # Decode the JSON response into a dictionary and use the data
        result = response.json()
```

```
        print (result)
    elif response.status_code != 200:
        print ("Login failed! - " + str(response.text))

except Exception as e: print (str(e))
```

```
{'statusCode': 790200, 'statusDescription': 'Success.'}
```

cURL Code from Postman

```
curl -X GET \
  'http://192.168.28.79/ServicesAPI/API/V1/CMDB/Domains?token=c00de805-9210-44a9-9a26-
f0c1e944ea36&tenantId=fb24f3f0-81a7-1929-4b8f-99106c23fa5b' \
  -H 'Postman-Token: ee6dda7c-cbcc-43b8-8957-9c4f2d2a4b5b' \
  -H 'cache-control: no-cache'
```

Error Examples:

```
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"""Error 1: empty tenantId and domainId"""

Input:
    token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
    full_url = "http://192.168.28.79/ServicesAPI/API/V1/Session/CurrentDomain"
    tenantId = ""
    domainId = ""

Response:
    "{
        "statusCode": 791000,
        "statusDescription": "Null parameter: the parameter 'tenantId' cannot be null."
     }"

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"""Error 1: wrong tenantId"""

Input:
    token = "4f257785-d5f9-42d4-b896-d21f0cb62e6f"
    full_url = "http://192.168.28.79/ServicesAPI/API/V1/Session/CurrentDomain"
    tenantId = "aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa"
    domainId = "0201adc4-ae96-46f0-ae3d-01cdba9e41d6"

Response:
    "{
        "statusCode": 791004,
        "statusDescription": "Invalid tenant id."
    }"
```