



Pulse Connect Secure/Pulse Policy Secure

REST API Solutions Guide

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REST API Solutions Guide

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Revision History

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8.5.1	Updated the following sections with curl command: <ul style="list-style-type: none"> - Exporting TOTP Users from One Device to Another Device - Importing TOTP Users from One Device to Another Device - Getting Active Sessions - Getting Particular Active Session Details - Deleting a Particular Active Session - Deleting All Active Sessions
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7.1	Removed the unused header "Postman-Token" from the Guide.
7.0	Updated the "PCS/PPS Configuration Using REST APIs" section with: <ul style="list-style-type: none"> - Export without ESAP and Pulse Client packages API. - Backup/restore binary configuration - Added sample curl commands
6.0	Updated the "PCS/PPS Configuration Using REST APIs" section with IF MAP related REST APIs.
5.1	Updated the "PCS/PPS Configuration Using REST APIs" section with AD and LDAP related REST APIs.
5.0	Updated with "PCS/PPS Configuration Using REST APIs" section.

Contents

REVISION HISTORY	3
OVERVIEW	7
AUTHENTICATION FOR REST APIS	8
Basic Authentication using the HTTP Authorization Header.....	8
Realm-based Authentication (Recommended)	11
SAMPLE GET/POST/PUT/DELETE REQUEST AND RESPONSES IN PCS.....	13
GET API Call: Fetch the Specific User under Local Authentication Server	13
POST API Call: Create User for Existing Local Authentication Server.....	14
PUT API Call: Update Full name field of Specific user	15
DELETE API Call: DELETE Specific User	17
Representing Configuration Resources Using Links	19
SAMPLE GET/POST/PUT/DELETE REQUEST AND RESPONSES IN PPS.....	20
GET API Call: Fetch the Details under Endpoint Policy	20
POST API Call: Create an SRX Enforcer in Infranet Enforcer Connection.....	21
PUT API Call: Update Existing Configuration Where In Initial Location Group is Configured as Guest	23
DELETE API Call: Delete an SNMP Device	24
PCS/PPS CONFIGURATIONS USING REST APIS	26
GETTING ACTIVE SESSIONS.....	27
GETTING PARTICULAR ACTIVE SESSION DETAILS.....	28
DELETING A PARTICULAR ACTIVE SESSION.....	29
DELETING ALL ACTIVE SESSIONS	29
QUERYING SET OF LEASED LICENSES IN THE LICENSE SERVER SYSTEM.....	30
PULLING STATE FROM A LICENSE SERVER ON A LICENSE CLIENT	32
CONFIGURING CERTIFICATES BASED ON CSR WORKFLOW	33
CREATING A CSR FOR A DEVICE CERTIFICATE	35
DELETING DEVICE CERTIFICATE BY ITS SUBJECT NAME.....	36
GETTING SYSTEM INFORMATION	36
RETRIEVING SERIAL NUMBER AND MACHINE ID	37
REALM-BASED ADMINISTRATOR USER USING ADMINISTRATOR LOCAL AUTHENTICATION SERVER.....	38
REALM-BASED ADMINISTRATOR USER USING AD AUTHENTICATION SERVER.....	39
REALM-BASED ADMINISTRATOR USER USING LDAP AUTHENTICATION SERVER.....	39
REALM-BASED ADMINISTRATOR USER USING RADIUS AUTHENTICATION SERVER	40
REALM-BASED ADMINISTRATOR USER FROM A PARTICULAR SOURCE IP	40
REALM-BASED ADMINISTRATOR AUTHORIZATION ROLE MAPPING TO .ADMINISTRATOR ROLE	41
SPECIFYING SESSION VALIDITY FOR REST ADMIN SESSION	42
GETTING ACTIVE DIRECTORY SEARCH GROUPS	43
ADDING SEARCH GROUP TO ACTIVE DIRECTORY	44
UPDATING ACTIVE DIRECTORY GROUP.....	45
DELETING ACTIVE DIRECTORY GROUPS.....	46
GETTING ALL LDAP GROUP LIST.....	47
ADDING GROUPS TO LDAP	47
UPDATING LDAP SOURCE GROUP	48
DELETING LDAP SOURCE GROUP	49
CREATING A CLUSTER.....	50


ADDING A MEMBER TO CLUSTER.....	51
GETTING CLUSTER STATUS.....	51
DELETING CLUSTER MEMBER.....	53
GETTING HEALTH CHECK STATUS	54
JOINING A CLUSTER	55
VIP FAILOVER.....	56
CONFIGURING IF MAP SERVER.....	56
CONFIGURING IF MAP CLIENT.....	57
CONFIGURING NO IF MAP SERVER	58
GETTING CONFIG WITHOUT PULSE PACKAGES (ESAP AND PULSE CLIENT PACKAGES).....	59
BACKING UP BINARY CONFIGURATION.....	60
RESTORING BINARY CONFIGURATION (IMPORT=NORMAL).....	60
RESTORING BINARY CONFIGURATION (IMPORT=FULL).....	62
PCS-SPECIFIC CONFIGURATIONS USING REST APIS	64
CREATING A VLAN.....	65
DELETING A VLAN.....	66
CREATING A USER ROLE.....	66
FETCHING THE USER LOGIN STATISTICS	68
UPDATING THE USER ROLE SETTINGS	69
DELETING A USER ROLE.....	71
CREATING A USER REALM.....	71
DELETING A USER REALM.....	75
CREATING A RESOURCE PROFILE	75
DELETING A RESOURCE PROFILE	77
CREATING A RESOURCE POLICY.....	78
FETCHING A RESOURCE POLICY.....	79
DELETING A RESOURCE POLICY.....	80
CREATING AN AD AUTHENTICATION SERVER.....	80
DELETING AN AD AUTHENTICATION SERVER	82
CREATING AN LDAP AUTHENTICATION SERVER.....	82
CREATING A RADIUS SERVER	85
MODIFYING RADIUS SERVER DETAILS	87
CREATING SIGN-IN-POLICY	88
DELETING SIGN-IN-POLICY.....	89
DISABLING SIGN-IN-URL.....	89
CREATING A WEB BOOKMARK FOR A ROLE.....	90
REORDERING.....	91
FETCHING THE RESOURCE WITH MULTIPLE IDENTIFIERS	92
UPDATING RESOURCE IDENTIFIED USING MULTIPLE IDENTIFIERS.....	93
FETCHING ACTIVE NUMBER OF HTML5 SESSIONS	94
UPDATING PASSWORD IN CLEAR TEXT	94
APPLYING AUTHCODE AND DOWNLOADING LICENSES FROM PCLS ON VA-SPE PSA-V.....	95
APPLYING LICENSE	96
DELETING LICENSE.....	97
GETTING LICENSE CLIENTS.....	98
GETTING LICENSE REPORT FROM LICENSE SERVER.....	100
ENABLING/DISABLING ICE LICENSE	104
GETTING THE CURRENT STATUS OF ICE LICENSE	105
EXPORTING TOTP USERS FROM ONE DEVICE TO ANOTHER DEVICE.....	105
IMPORTING TOTP USERS FROM ONE DEVICE TO ANOTHER DEVICE	106
RESETTING TOTP USER.....	106
UNLOCKING TOTP USER.....	107

SAMPLE ERROR RESPONSES	108
400 BAD REQUEST	108
403 Forbidden.....	111
404 NOT FOUND	111
422 UNPROCESSABLE ENTITY.....	113
LIMITATIONS.....	114
PPS-SPECIFIC CONFIGURATIONS USING REST APIS	115
CREATING THE HC POLICY	116
DELETING THE HC POLICY	117
CREATING THE INFRANET ENFORCER	118
DELETING THE INFRANET ENFORCER	118
CREATING A RESOURCE POLICY.....	119
DELETING A RESOURCE POLICY.....	119
CREATING A RADIUS CLIENT.....	120
DELETING A RADIUS CLIENT.....	120
CREATING A RADIUS ATTRIBUTE POLICY.....	121
DELETING A RADIUS ATTRIBUTE POLICY.....	121
CREATING SNMP DEVICE	122
DELETING SNMP DEVICE	123
CREATING SNMP POLICY	123
DELETING SNMP POLICY	124
CREATING DEVICE GROUP - TACACS+.....	124
DELETING DEVICE GROUP- TACACS+	124
CREATING TACACS+ CLIENT.....	125
DELETING TACACS+ CLIENT.....	125
CREATING SHELL POLICIES.....	126
DELETING SHELL POLICIES.....	126
CREATING ADMISSION CONTROL CLIENT	127
DELETING ADMISSION CONTROL CLIENT.....	127
CREATING ADMISSION CONTROL POLICY	127
DELETING ADMISSION CONTROL POLICY	128
GETTING AUTHENTICATION API KEY	128
PULSE POLICY SECURE ALERT BASED ADMISSION CONTROL APIS.....	129
Checking Status of PPS Server	129
Getting Session Details for Endpoint Based on IP Address	129
Getting Session Details for Endpoint Based on MAC Address	129
Sending Alert Event to PPS.....	129
PROFILER REST APIS.....	130
Approving Devices.....	130
Updating Device Attributes.....	130

Overview

The REST API provides a standardized method for Next-Gen firewalls, NAC devices, and third-party systems to interact with PCS/PPS. **Representational state transfer (REST)** or RESTful Web services are one way of providing interoperability between computer systems on the Internet. REST-compliant Web services allow requesting systems to access and manipulate textual representations of Web resources using a uniform and predefined set of stateless operations. In a RESTful Web service, requests made to a resource's URI will elicit a response that may be in XML, HTML, JSON or some other defined format. PCS/PPS supports JSON format only.

REST methods determine the HTTP method for manipulating the resources defined in the service operation. The kind of operations available include those predefined by the HTTP verbs GET, POST, PUT, DELETE and so on. The response may confirm that some alteration has been made to the stored resource, and it may provide hypertext links to other related resources or collections of resources. By making use of a stateless protocol and standard operations, REST systems aim for fast performance, reliability, and the ability to grow, by re-using components that can be managed and updated without affecting the system as a whole, even while it is running.

 **Note:** REST API Support for PCS/PPS involves only Configuration APIs. Also, PCS/PPS supports only the GET, POST, PUT and DELETE APIs.

The valid and supported values are described in the **Table 1**.

Table 1: Valid and Supported Values

HTTP Verb	Definition
DELETE	Delete an existing resource.
GET	Retrieve a representation of a resource.
POST	Create a new resource
PUT	Create a new resource to a new URL or modify an existing resource to an existing URL.

The error codes supported are described in the **Table 2**.

Table 2: Error Codes Supported

HTTP Verb	Definition
200 OK	Requesting for resource information successful using GET Resource update successful using PUT
201 Created	Resource creation successful using POST
204 No Content	Deletion of resource successful with no body. Even PUT, POST may return 204 if no errors or warnings seen
400 – Bad Request	Any Request (GET/PUT/POST/DELETE, and so on) is invalid. Example: Incorrect JSON format

HTTP Verb	Definition
401 – Unauthorized	Any REST Call with invalid credentials
403 – Forbidden	REST Call with valid credentials but no permission
404 – Not found	Requested resource in URI does not exist
422 – Unprocessable Entity	Any validation/referential integrity errors that would result in failure of PUT/POST/DELETE request
500 Server Error	When PCS/PPS rest server is not responding

Authentication for REST APIs

Basic authentication using the HTTP authorization header is used to authenticate username/password on the Administrators auth. server. It is expected that the user is already configured in the Administrators auth. server. On a successful login, a random token (api_key) is generated **once** and sent back as a JSON response. Further access to APIs can use this api_key value as username and password as empty in their Authorization header for access.

 **Note:** A new random api_key is generated on a successful login. The user can continue to use this key till the administrator:

- Enables/disables the user account
- Enables/disables the Allow REST API feature for that user

Basic Authentication using the HTTP Authorization Header

Configurations for REST APIs

The configuration of PCS/PPS can be accessed using REST APIs. The PCS/PPS configuration is represented in a json form when accessed using REST APIs. The structure of the JSON representation is very similar to the structure of PCS/PPS XML configuration.

A new admin UI option for users under "Administrators" authserver has been added. REST API authentication would be successful only for those users who have this option enabled.

REST API access can be enabled from Pulse Connect Secure Admin console as shown below or from [Pulse Connect Secure serial console](#).

To enable this check box in Pulse Connect Secure Admin Console:

1. Go to Authentication > Auth. Servers > Administrators > Update Administrator admin1.
2. Select the **Allow access to REST APIs** check box. See figure below.
3. Click Save Changes.

The screenshot shows the Pulse Secure Admin Console interface. The breadcrumb trail is 'Auth Servers > Administrators > Update Administrator admin1'. The page title is 'Update Administrator admin1'. The form includes fields for 'Full Name' (Unspecified Name), 'Authenticate using:' (Administrators), 'Password', and 'Confirm Password'. Below these are several checkboxes: 'One-time use (disable account after the next successful sign-in)', 'Allow console access', and 'Allow access to REST APIs'. The 'Allow access to REST APIs' checkbox is checked and highlighted with a red box, with a red annotation next to it stating 'This is the new check box added'. Below this are radio buttons for 'Enabled', 'Disabled', and 'Quarantined'. There is also a checkbox for 'Require user to change password at next sign in'. A note at the bottom states: 'Note: You must also configure password management on the Authentication server Settings with 'Allow users inherit the server's password management capabilities''. A 'Save Changes' button is located at the bottom left.

Enabling REST API Access for an Administrator from the Serial Console

REST API access for an administrator user can be enabled during initial configuration and while creating a new administrator user.

During initial provisioning, there are no administrator accounts configured and the system prompts to create a new administrator user. For the option "Do you want to enable REST API access for this administrator (y/n):", enter **y**.

Note: Any characters other than "y" or "n" are invalid responses.

```

~ ssh shri@10.243.53.143

Internal port configuration completed, proceeding to next step...
-----
Internal NIC: .[OK]
Currently there are no administrators configured...

Please create an administrator user.
Admin username: admindb
Password:
Confirm password:
Do you want to enable REST API access for this administrator (y/n): y

The administrator was successfully created.
-----

```

When creating a new administrator user from the console using the option "2. Create admin username and password", for the option "Do you want to enable REST API access for this administrator (y/n):", enter **y**.

```

— ssh shri@10.243.53.143

Current version: 9.0R1 (build 63950)
Rollback version: 8.3R4 (build 60528)
Reset version: 8.1R4.1 (build 37682)

Licensing Hardware ID: 0332MJ0WK0NUP1115
Serial Number: 0332122015100018

Please choose from among the following options:
 0. Start shell
100. mount root rw and start rsync...
101. mount root rw and chpax /home/bin...
102. modify platform code...
103. validate files...
104. Start sshd for debugging ...
105. Manage fault injection scenarios
    1. Network Settings and Tools
    2. Create admin username and password
    3. Display log/status
    4. System Operations
    5. Toggle password protection for the console (OFF)
    6. Create a Super Admin session.
    7. System Maintenance
    8. Reset allowed encryption strength for SSL
[Choice: 2

Please create an administrator username and password.
Admin username: consoleadmin

Password:
[Confirm password:
Do you want to enable REST API access for this administrator (y/n): y

The administrator consoleadmin was successfully created.

```

The entire communication is over TLS. An example is explained below:

REQUEST

```

GET /api/v1/auth HTTP/1.1
Host: 10.209.112.106
Authorization: Basic YWRtaW5kYjpkYW5hMTIz
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: application/json
Expires: -1
Keep-Alive: timeout=15
{ "api_key": "p5mM1c7RQu81R2NvssLCCZhP05kf0N2ONFeYeLXX6aU=" }

```

Equivalent Curl Command

Note: While using curl command, ensure appropriate server CA certs is installed in the cert store recognized by curl. The sample curl commands provided in this document assumes you have appropriate server CA certs installed.

COMMAND

```
curl -i -u admindb:dana123 -G https://<hostname>/api/v1/auth
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json
```

```
{"api_key": "p9/h85ytEmkDzvkGSmQ4z77p6Ya7aLIC42vh0F9CGaQ="}
```

api_key received in response to authentication request should be used as Username with EMPTY password in all future requests. Refer to the examples in [Sample GET/POST/PUT/DELETE Request and Responses in PCS](#).

Realm-based Authentication (Recommended)

Pulse Secure recommends realm-based authentication instead of basic authentication using the HTTPS authorization header.

REQUEST

```
POST /api/v1/realm_auth HTTP/1.1
```

```
Host: 10.209.116.214
```

```
Content-Type: application/json
```

```
Authorization: Basic YWRtaW46ZGFuYTEyMw==
```

```
{
  "realm": "adminrealm"
}
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
content-type →application/json
```

```
{
  "api_key": "NjQzOGU0N2I5MDUyMWZhZW0NmZiMTMxY2U3M2YyM2Q="
}
```

Authorization header for all future requests should perform Basic Auth using above api_key value as username and password as empty.

REQUEST

```
GET /api/v1/configuration HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
cDVtTWxjN1JRdTgxUjJOdnNzTENDWmhQMDVrZjBOMk9ORmVZZUxYWDZhVT06
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length →283
```

```
Content-Type →application/json
```

```
{  
  "administrators":  
  { "href": "/api/v1/configuration/administrators" }  
  ,  
  "authentication":  
  { "href": "/api/v1/configuration/authentication" }  
  ,  
  "system":  
  { "href": "/api/v1/configuration/system" }  
  ,  
  "users":  
  { "href": "/api/v1/configuration/users" }  
}
```

Sample GET/POST/PUT/DELETE Request and Responses in PCS

Below is a sample of GET/POST/PUT/DELETE request and responses:

GET API Call: Fetch the Specific User under Local Authentication Server

REQUEST

```
GET /api/v1/configuration/authentication/auth-servers/auth-server/Sys-Local/local/users/user/user0001 HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
cDkvaDg1eXRFbWtEenZrR1NtUTR6Nzdwn11hN2FMSUM0MnZoMEY5Q0dhUT06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 309
```

```
Content-Type: application/json
```

```
{
  "change-password-at-signin": "false",
  "console-access": "false",
  "enabled": "true",
  "fullname": "user0001",
  "one-time-use": "false",
  "password-encrypted":
  "3u+UR6n8AgABAAAATjgR31G4neKag2hxI+wjaNsRRZGD6wMQVkleQv+DPQZdUrQi5IWPuihJf8tnrsBV0XCQly6WgZ79Jv1fyzmssg==",
  "username": "user0001"
}
```

Equivalent Curl Command

COMMAND

```
curl -i -u p9/h85ytEmkDzvkgSmQ4z77p6Ya7aLIC42vh0F9CGaQ=: -X GET https://<hostname>/api/v1/configuration/authentication/auth-servers/auth-server/System%20Local/local/users/user/user0001
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json
```

```
Content-Length: 303
```

```
{
  "change-password-at-signin": "false",
```

```

"console-access": "false",
"enabled": "true",
"fullname": "user0001",
"one-time-use": "false",
"password-encrypted":
"3u+UR6n8AgABAAAAOrKwtwwYUZlizIhEaq54tt550UA39gKEP8AQ7sjr/WTdtPLf36
mpsI5zGWpORVRjEIFAzVOvmxwgXVLBEJnIRQ==",
"username": "user0001"
}

```

POST API Call: Create User for Existing Local Authentication Server

REQUEST

```

POST /api/v1/configuration/authentication/auth-servers/auth-server/Sys-
Local/local/users/user HTTP/1.1

```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
cDkvaDg1eXRFbWtEenZrR1NtUTR6Nzdwn1lhN2FMSUM0MnZoMEY5Q0dhUT06
```

```
Content-Type: application/json
```

```

{
  "change-password-at-signin": "false",
  "console-access": "false",
  "enabled": "true",
  "fullname": "user0001",
  "one-time-use": "false",
  "password-encrypted":
  "3u+UR6n8AgABAAAATjgR31G4neKag2hxI+wjaNsRRZGD6wMQVkleQv+DPQZdUrQi5IWPuihJ
  f8tnrsBV0XCQly6WgZ79Jv1fyzmssg==",
  "username": "user0001"
}

```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 122
```

```
Content-Type: application/json
```

```

{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or error!"
      }
    ]
  }
}

```

```

    }
  ]
}
}

```

Equivalent Curl Command

COMMAND

```

curl -i -u hv5uaqOWF5kuISVnUiGEabOL8fsczsK98zVwpHYWgKE=: -X POST
https://<hostname>/api/v1/configuration/authentication/auth-servers/auth-
server/System%20Local/local/users/user -H 'Content-Type:
application/json' -d '{"change-password-at-signin": "false", "console-
access": "false", "enabled": "true", "fullname": "user0001", "one-time-
use": "false", "password-cleartext": "abc123", "username": "user0002"}'

```

RESPONSE

HTTP/1.1 201 CREATED

Content-Type: application/json

Content-Length: 128

```

{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

PUT API Call: Update Full name field of Specific user

REQUEST

```

PUT /api/v1/configuration/authentication/auth-servers/auth-server/Sys-
Local/local/users/user/user0001/fullname HTTP/1.1

```

Host: 10.209.112.106

Authorization: Basic

cDkvaDgIeXRFbWtEenZrR1NtUTR6Nzdwn1lhN2FMSUM0MnZoMEY5Q0dhUT06

Content-Type: application/json

Cache-Control: no-cache

```

{
  "fullname": "REST API test for user0001"
}

```

```

}
RESPONSE
HTTP/1.1 200 OK
Content-Length: 122
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or error!"
      }
    ]
  }
}

```

Equivalent Curl Command

```

COMMAND
curl -i -u hv5uaqOWF5kuISVnUiGEabOL8fsczsK98zVwpHYWgKE=: -X PUT
https://<hostname>/api/v1/configuration/authentication/auth-servers/auth-
server/System%20Local/local/users/user/user0001/fullname -H 'Content-
Type: application/json' -d '{"fullname": "user0001"}'

RESPONSE
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 124
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}

```


After updating, fetch the User details and observe the fullname field updated:

REQUEST

```
GET /api/v1/configuration/authentication/auth-servers/auth-server/Sys-Local/local/users/user/user0001 HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
cDkvaDg1eXRFbWtEenZrR1NtUTR6Nzdwn1lhN2FMSUM0MnZoMEY5Q0dhUT06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length →327
```

```
Content-Type →application/json
```

```
{
  "change-password-at-signin": "false",
  "console-access": "false",
  "enabled": "true",
  "fullname": "REST API test for user0001",
  "one-time-use": "false",
  "password-encrypted":
  "3u+UR6n8AgABAAAATjgR31G4neKag2hxI+wjaNsRRZGD6wMQVkJEQv+DPQZdUrQi5IWPuihJf8tnrsBV0XCQly6WgZ79Jv1fyzmssg==",
  "username": "user0001"
}
```

DELETE API Call: DELETE Specific User**REQUEST**

```
DELETE /api/v1/configuration/authentication/auth-servers/auth-server/Sys-Local/local/users/user/user0001 HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
cDkvaDg1eXRFbWtEenZrR1NtUTR6Nzdwn1lhN2FMSUM0MnZoMEY5Q0dhUT06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length →122
```

```
Content-Type →application/json
```

```
{
```

```

"result": {
  "info": [
    {
      "message": "Operation succeed without warning or error!"
    }
  ]
}
}

```

Equivalent Curl Command

COMMAND

```

curl -i -u hv5uaqOWF5kuISVnUiGEabOL8fsczsK98zVwpHYWgKE=: -X DELETE
https://<hostname>/api/v1/configuration/authentication/auth-servers/auth-
server/System%20Local/local/users/user/user0002/

```

RESPONSE

```

HTTP/1.1 204 NO CONTENT
Content-Type: application/json
Content-Length: 0

```

After deleting, try to fetch the resource and you would observe 404 response.

REQUEST

```

GET /api/v1/configuration/authentication/auth-servers/auth-
server/Sys-Local/local/users/user/user0001 HTTP/1.1

Host: 10.209.112.106

Authorization: Basic
cDkvaDgleXRFbWtEenZrR1NtUTR6Nzdwn1lhN2FMSUM0MnZoMEY5Q0dhUT06

Content-Type: application/json

Cache-Control: no-cache

```

RESPONSE

```

404 NOT FOUND

Content-Length: 105

Content-Type: application/json

{
  "result": {
    "errors": [
      {
        "message": "Resource does not exist."
      }
    ]
  }
}

```

```
    }  
  ]  
}  
}
```

Representing Configuration Resources Using Links

When performing a GET request on a configuration resource, the json response may have "href" attributes to represent smaller resources within.

As an example, "GET /api/v1/configuration" returns:

```
{  
  "users": {  
    "href": "/api/v1/configuration/users"  
  },  
  "system": {  
    "href": "/api/v1/configuration/system"  
  },  
  "authentication": {  
    "href": "/api/v1/configuration/authentication"  
  },  
  "administrators": {  
    "href": "/api/v1/configuration/administrators"  
  }  
}
```

The href values can be used to access smaller resources.

Sample GET/POST/PUT/DELETE Request and Responses in PPS

Below is a sample of GET/POST/PUT/DELETE request and responses:

GET API Call: Fetch the Details under Endpoint Policy

This example shows how to fetch the details under endpoint policy in PPS.

REQUEST

```
GET /api/v1/configuration/uac HTTP/1.1

Host xx.xx.xx.xx

Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06

Content-Type: application/json

{
  "admissionControl": {
    "href": "/api/v1/configuration/uac/admissionControl"
  },
  "host-enforcer": {
    "href": "/api/v1/configuration/uac/host-enforcer"
  },
  "infranet-enforcer": {
    "href": "/api/v1/configuration/uac/infranet-enforcer"
  },
  "mac-address-realms": {
    "href": "/api/v1/configuration/uac/mac-address-realms"
  },
  "network-access": {
    "href": "/api/v1/configuration/uac/network-access"
  },
  "snmpEnforcement": {
    "href": "/api/v1/configuration/uac/snmpEnforcement"
  }
}
```

RESPONSE

```
HTTP/1.1 200 OK

Content-Length: 340

Content-Type: application/json
```

Equivalent Curl Command

COMMAND

```
curl -i -u g4dncT4699c+IWip/+8urgXM0Luy1vQdj9zNxEFWEbM=: -X GET
https://<hostname>/api/v1/configuration/uac
```

RESPONSE

```
HTTP/1.1 200 OK

Content-Type: application/json
```

```

Content-Length: 620

{
  "admissionControl": {
    "href": "/api/v1/configuration/uac/admissionControl"
  },
  "host-enforcer": {
    "href": "/api/v1/configuration/uac/host-enforcer"
  },
  "infranet-enforcer": {
    "href": "/api/v1/configuration/uac/infranet-enforcer"
  },
  "mac-address-realms": {
    "href": "/api/v1/configuration/uac/mac-address-realms"
  },
  "network-access": {
    "href": "/api/v1/configuration/uac/network-access"
  },
  "networkDeviceAdministration": {
    "href": "/api/v1/configuration/uac/networkDeviceAdministration"
  },
  "snmpEnforcement": {
    "href": "/api/v1/configuration/uac/snmpEnforcement"
  }
}

```

POST API Call: Create an SRX Enforcer in Infranet Enforcer Connection

This example shows how to create an SRX Enforcer in Infranet Enforcer connection.

```

REQUEST
POST /api/v1/configuration/uac/infranet-enforcer/connections/infranet-
enforcer/ HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "idp-for-local-sessions-only": "true",
  "junos": {
    "location-group": "- No 802.1X -",
    "password-encrypted":
"3u+UR6n8AgABAAAofSnIBrU19vdwUslG5LG4cg1QH6CbXDSmY4ZW0x85HY="
  },
  "name": "SRX",
  "serial-number": [
    "SJFIOQJI4KNM"
  ],
  "severity-filter": "medium",
  "use-idp": "false"
}

```

```

}
RESPONSE
HTTP/1.1 201 OK
Content-Length: 122
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or
error!"
      }
    ]
  }
}

```

Equivalent Curl Command

```

COMMAND
curl -i -u g4dncT4699c+IWip/+8urgXM0Luy1vQdj9zNxEFWEbM=: -X POST
https://<hostname>/api/v1/configuration/uac/infranet-
enforcer/connections/infranet-enforcer -H 'Content-Type:
application/json' -d '{"idp-for-local-sessions-only": "true", "junos": {
"location-group": "- No 802.1X -", "password-
encrypted": "3u+UR6n8AgABAAAAofSnIBrU19vdwUslG5LG4cg1QH6CbXDSmY4ZW0x85HY="
},"name": "SRX","serial-number": ["SJFIOQJI4KNM"],"severity-filter":
"medium", "use-idp": "false"}'
RESPONSE
HTTP/1.1 201 CREATED

Content-Type: application/json
Content-Length: 124

{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}

```

PUT API Call: Update Existing Configuration Where In Initial Location Group is Configured as Guest

This example updates the existing configuration where in the initial Location Group is configured as "Guest" and then later updated to "Default" Location group.

Before Updating the Location Group

REQUEST

```
GET api/v1/configuration/uac/network-access/radius-clients/radius-client/Radius%20Client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZ1N1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "location-group": "Guest",
  "name": "Radius Client",
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Length: 122
Content-Type: application/json
```

Equivalent Curl Command

COMMAND

```
curl -i -u g4dncT4699c+IWip/+8urgXM0Luy1vQdj9zNxEFWEbM=: -X PUT
https://<hostname>/api/v1/configuration/uac/network-access/radius-clients/radius-client/Radius%20Client -H 'Content-Type: application/json'
-d '{"location-group": "Default","name": "Radius Client"}'
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 124
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}
```

After Updating the Location Group

REQUEST

```

PUT api/v1/configuration/uac/network-access/radius-clients/radius-
client/Radius%20Client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "location-group": "Default",
  "name": "Radius Client",
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 122
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or
error!"
      }
    ]
  }
}

```

DELETE API Call: Delete an SNMP Device

This example shows how to delete SNMP device from PPS.

REQUEST

```

DELETE api/v1/configuration/uac/snmpEnforcement/clients/client/ruckus
HTTP/1.1
Host 10.96.73.37
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json

```


Equivalent Curl Command

COMMAND

```
curl -I -u g4dncT4699c+IWip/+8urgXM0Luy1vQdj9zNxEFWEbM=: -X DELETE  
https://<hostname>/api/v1/configuration/uac/snmpEnforcement/clients/client/ruckus
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT  
Content-Type: application/json  
Content-Length: 0
```

PCS/PPS Configurations Using REST APIs

- [Getting Active Sessions](#)
- [Getting Particular Active Session Details](#)
- [Deleting a Particular Active Session](#)
- [Deleting All Active Sessions](#)
- [Querying Set of Leased Licenses in the License Server System](#)
- [Pulling State from a License Server on a License Client](#)
- [Configuring Certificates based on CSR Workflow](#)
- [Creating a CSR for a Device Certificate](#)
- [Deleting Device Certificate by Its Subject Name](#)
- [Getting System Information](#)
- [Retrieving Serial Number and Machine ID](#)
- [Realm-based Administrator User Using Administrator Local Authentication Server](#)
- [Realm-based Administrator User Using AD Authentication Server](#)
- [Realm-based Administrator User Using LDAP Authentication Server](#)
- [Realm-based Administrator User Using Radius Authentication Server](#)
- [Realm-based Administrator User from a Particular Source IP](#)
- [Realm-based Administrator Authorization Role Mapping to .Administrator Role](#)
- [Specifying Session Validity for REST Admin Session](#)
- [Getting Active Directory Search Groups](#)
- [Adding Search Group to Active Directory](#)
- [Updating Active Directory Group](#)
- [Deleting Active Directory Groups](#)
- [Getting All LDAP Group List](#)
- [Adding Groups to LDAP](#)
- [Updating LDAP Source Group](#)
- [Deleting LDAP Source Group](#)
- [Creating a Cluster](#)
- [Adding a Member to Cluster](#)
- [Getting Cluster Status](#)
- [Deleting Cluster Member](#)
- [Getting Health Check Status](#)
- [Joining a Cluster](#)
- [VIP Failover](#)
- [Configuring IF MAP Server](#)
- [Configuring IF MAP Client](#)
- [Configuring No IF MAP Server](#)
- [Getting Config Without Pulse Packages \(ESAP and Pulse Client Packages\)](#)
- [Backing Up Binary Configuration](#)
- [Restoring Binary Configuration \(import=normal\)](#)
- [Restoring Binary Configuration \(import=full\)](#)

Getting Active Sessions

REQUEST

Fetch default number of active sessions (default=200)

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/system/active-users
```

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/system/active-users
```

Fetch specified number of active sessions

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/system/active-
users?number=<number>
```

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/system/active-users?number=250
```

RESPONSE

Content-Type: application/json

```
{
  "active-users": {
    "active-user-records": {
      "active-user-record": [
        {
          "active-user-name": "user1",
          "agent-type": "Windows 8.1 Google Chrome",
          "authentication-realm": "localrealm",
          "endpoint-security-status": "Not Applicable\nPassed
Policies: \nFailed Policies: \nEliminated Roles: ",
          "events": 0,
          "login-node": "localhost2",
          "network-connect-ip": null,
          "network-connect-transport-mode": null,
          "session-id":
"sldb03b1e971b7ebe163bb70c966a8ae2b50767aae300000000",
          "pulse-client-version": "9.1.4.1316",
          "user-roles": "localrealm",
          "user-sign-in-time": "2018/08/23 11:45:40"
        },
        {
          "active-user-name": "user2",
          "agent-type": "Windows 7 Google Chrome",
          "authentication-realm": "localrealm",
          "endpoint-security-status": "Not Applicable\nPassed
```

```

Policies: \nFailed Policies: \nEliminated Roles: ",
    "events": 0,
    "login-node": "localhost2",
    "network-connect-ip": null,
    "network-connect-transport-mode": null,
    "session-id":
"sid68377b6249d24784edfdd07edfe61ee9934b556100000000",
    "user-roles": "localrealm",
    "user-sign-in-time": "2018/08/23 11:46:15"
  }
]
},
"total-matched-record-number": 2,
"total-returned-record-number": 2,
"user-login-permission": true
}
}

```

Getting Particular Active Session Details

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/system/active-users?name=user2
```

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/system/active-users?name=user2
```

RESPONSE

Content-Type: application/json

```

{
  "active-users": {
    "active-user-records": {
      "active-user-record": [
        {
          "active-user-name": "user2",
          "agent-type": "Windows 7 Google Chrome",
          "authentication-realm": "localrealm",
          "endpoint-security-status": "Not Applicable\nPassed
Policies: \nFailed Policies: \nEliminated Roles: ",
          "events": 0,
          "login-node": "localhost2",

```

```

        "network-connect-ip": null,
        "network-connect-transport-mode": null,
        "session-id":
        "sid68377b6249d24784edfdd07edfe61ee9934b556100000000",
        "user-roles": "localrealm",
        "user-sign-in-time": "2018/08/23 11:46:15"
    }
]
},
"total-matched-record-number": 1,
"total-returned-record-number": 1,
"user-login-permission": true
}
}

```

Deleting a Particular Active Session

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/system/active-
users/session/sid6dc167193b66fef812ef3fdb62729e53f8499f0c25df3be -X DELETE
```

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/system/active-
users/session/sid6dc167193b66fef812ef3fdb62729e53f8499f0c25df3be -X DELETE
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Deleting All Active Sessions

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/system/active-users?all -X
DELETE
```

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/system/active-users?all -X DELETE
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
Content-Type: application/json
```

Querying Set of Leased Licenses in the License Server System

REQUEST

```
GET /api/v1/license/license-server-lease-information HTTP/1.1
Host: 10.209.114.226
Authorization: Basic
c2czWUJmc1lyUjcwN2daSFh6RHdqME1YSnNhddZmcXlaOVZKNFNSdStaZz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Length: 2210
Content-Type: application/json
{
  "leased-license-counts": {
    "features": {
      "feature": [
        {
          "clients": {
            "client-info": [
              {
                "leased-count": 0,
                "name": "client1"
              }
            ]
          },
          "name": "Advanced Mobile License - Onboarding",
          "total-count": 0
        },
        {
          "clients": {
            "client-info": [
              {
                "leased-count": 0,
                "name": "client1"
              }
            ]
          }
        }
      ]
    }
  }
}
```

```

    ]
  },
  "name": "Cloud Secure feature",
  "total-count": 0
},
{
  "clients": {
    "client-info": [
      {
        "leased-count": 0,
        "name": "client1"
      }
    ]
  },
  "name": "Concurrent Meeting Users",
  "total-count": 0
},
{
  "clients": {
    "client-info": [
      {
        "leased-count": 200,
        "name": "client1"
      },
      {
        "leased-count": 0,
        "name": "client2"
      }
    ]
  },
  "name": "Concurrent Users",
  "total-count": 200
},
{
  "clients": {
    "client-info": [
      {
        "leased-count": 0,
        "name": "client1"

```

```

        }
    ]
},
"name": "Named Users",
"total-count": 0
},
{
  "clients": {
    "client-info": [
      {
        "leased-count": 0,
        "name": "client1"
      }
    ]
  },
  "name": "Premier Java Remote Desktop Applet",
  "total-count": 0
}
]
},
"machine-id": "VASPMVKIT1NJNFPPS",
"query-summary": {},
"release-info": {
  "build-number": "10124",
  "version": "9.0"
},
"serial-number": null,
"signature":
"HMx/W0VhDAABAAApoB/uSUYcwJS1k7HeXVMXK6+KsIPTrJnjXrUci
JEef2EKWYyqgbDGoXhzYaGD16Ye29oOw2KRQlyCM/HRpIpujA==",
"time-stamp": "Fri Aug 24 14:43:00 2018"
}
}

```

Pulling State from a License Server on a License Client

REQUEST

```
PUT /api/v1/license/license-client-lease-state HTTP/1.1
```

```
Host: 10.209.114.228
```



```

Authorization: Basic
OWZBcVNKUKRCCedjSEVQY3A0aDZ2UnFwdjhXbExIYzUxRS91TVU1VnBnMD06

Content-Type: application/json

{

}

```

Note: While using above URL (i.e., license-client-lease-state) by PUT operation, we provide empty JSON body as input, because PUT operation expects JSON body.

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 86
Content-Type: application/json

{
  "result": {
    "info": [
      {
        "message": "Success"
      }
    ]
  }
}

```

Configuring Certificates based on CSR Workflow

REQUEST

```

POST /api/v1/system/certificates/device-certificates HTTP/1.1
Host: 10.209.114.228
Authorization: Basic aWZuM2VmZVZTRU9YNVZkVVZ3eFpiYWdob3VCTndxZEkyExubUcyVU5ibz06
Content-Type: application/json

{
  "cert": "MIINzgIBAzCCDYogCSqGSib3DQEHAaCCDXsEgg13MIINczCCBgQGCSqGSib3DQE
HAaCCBfUEggXxMIIF7TCCBekGCyqGSib3DQEMCgECoiIE9jCCBPIwHAYKKoZIhvcNAQwBAz
AOBAjpyGwUOJOWeAICB9AEggTQFjak4T3ftSlkdoiOtc/xvhSfrrkezs109tN6tqyuVYWFQ
UZkpUIg4v2pU1zOvFOTPlnoVCmeiL2HX7OzuLPALcnSvGmaq61I+Y5dBWmMxMo+bs8sU36
p6YS4D9Bq3VIMecAHwzc/30hPf+gaaoySQiMuLa34CnNeFxFfxMlH0sXilQeqaLAtMno5AM
QW1/nHSAyJPwa5OWrJ5mkfHKh4kog893diYwolmlIqlp7Qseza4+uosWathih/jac1iDmlb
03kjr+OQAukXFQ19ejvyrmMhcjhozARqwmGegj6I+JpdJPUxvwVytQ20Nj4lNDRnAb5sp1oA
i0u5aN49afY6kRjNuKueUkEmrpmumNJJufkDkKx1eqYOB0qQ50K1w9qFhEOaOLivGQalIjz
Nyc+Bbs2TMw8RJWDsA7TVJhQKBcVjtIOSFzsVjyWJeI9VzB+iUbi+XCHYRQP0W6el6HWg2b
31iNhMID5Lt2GWQOzT6iUVNlsZFoofyfXsZBY0JC6nsbvZVMRNBGXE2fEFA/qIga8Gn5E9z
cIqibnXXW0jAOa+m3d+KRR49XaoAjjzpj3ErqLVz1l/nGTix9W3H4mSHd9xX43h6Pbz0tGm

```

u6l9nnWP/52y6/TMQQB5v0RHe0klj+uX00ZuezmmeYEapX+SObQrMqmnvTgWApf7FzulcvA
 IHomQ184MJzarNnhOp01AQGESaa6tABtk2Yzpbm+g5SAgnjwxH0IjeF/kwapQttIYc1TM3q
 Q9EsPKqbpqQna4qETIRLI3R6GVNTBnG/g9M9MQh2MtnvonSolpJds+TtLoO+BtY9J2XSMK0
 wtXyONb67xjTRRsC1ulfAvP4RdyHpmM4JO3+VW1F4n8Vz1+RYrRj0sKja/jHm1ElZvhxJHb
 wEMFDSvFIqAVfQGGKy1iJWSjalNeO2TEPVJOf2o+TofnYDq4hk0tABVdWLRfmn3byi91+xi
 oIOLputEGG8ZtoAdlPkag/lKBnWa37z3eHnfQC9qWU8dcONBQo/HFxupj482jQa7lUg3fp7
 apM4CuDQEGJWYNS4/Z+5+zEqq9q+/w9ke5Y/a/5ukeP9HRS3xpeEe56qb98qPx3dXSSDgXt
 D1L6r48Dl+4ISYmLEl0yFwXtJ3vuYk5NiUjmZsuI1tnLQoxim5z6NUZ5/7G04mG/BzAX3qT
 74MlRzVda7uZdJPyJLyTGUtidn562HvYnrGtO9P+08OH6c2Dp4eOgnQCrhPP51ZHd9VNo0n
 yqtZmZ0E4oHN4G7ud+6fwIvaSF9gpwliTWAf5122dr1llAe3ZFPs5bZv7jrfY7LGuTh+100
 3MshmtYZAiW8nM1ODm4HstQsSxHWVb+WK4uiorvhq2cplJ+71rGQI/kCM8hdZJOUYzsrnQX
 QUn/rS100w9VAP88SG9mJiQynoX4+BKYtnn4XE4D3tEFUygd2RmG2GdeGBjOeHh/KeMrXk2
 z9oLEn7CaDeZQCp/7wGdDLfb/nAkmyiO6DwKpZzDazGdSdd0gRTkY4LdtyjPTkeADN+wXvj
 h6tutjgWgHEHI3xnvMan1/rzZV80SGpbqWFEcLck158YuprYqVRN2CmJCILoVbUaay6Vq9j
 aHkIkT3lxzU6UkNTKxqo3Rhad9StfxCRqlrYxgd8wEwYJKoZThvcNAQkVMQYEBAAEAawXQ
 YJKoZThvcNAQkUMVAeTgBsAGUALQA2AGMANQA0AGUAMABjADQALQAYAGYANQBkAC0ANABjA
 GYAMAAtAGEAYwBiAGUALQBhADAAyGbjAGUAZgA4AGIAYgA4AGEAMzBpBgkrBgEEAYI3EQEx
 XB5aAE0AaQBjAHIAbwBzAG8AZgB0ACAAUgBTAEEAIABTAEMAaABhAG4AbgB1AGwAIABDAHI
 AeQBwAHQAbwBnAHIAyQBwAGgAaQBjACAAUABYAG8AdgBpAGQAZQBjYMIHhZwYJKoZThvcNAQ
 cGoI IHWDCCBlQCAQAwggdNBgkqhkiG9w0BBwEwHAYKKoZThvcNAQwBBjAOBAGQOOB7+SpC1
 QICB9CAggcgKOhImrEmUqPOG8XR59tFV0HodvnlfzxI7aM6PnAgwPiMSxa6e69kZ/DCeY5V
 5XZkfw+nYAZvgGuZw26oLgVz14T/j0Z3kYTKcn1Mx+gvj5coadwfr21HirvwyndeXKJ6w1Y
 h4omK/x4891AFgvKizeeOewczIGmWCqQh81HUGiR8aAfLU2neKxcLoGofhQnN5k/SSKsBTu
 UBQ80zGiXh+48xS4CTzE8vEyDXyQqE09sqxoDtWTw7U5cV8qXwpgy+FSb4c/Y/RCggTqmCL
 +NwSMCvhEGfKSq9ZwJvniEpsQ1mHzK/e4ZRQH/C+eNCccV/6zR5onNbZ0fpVTGDCCG0Z970
 5zzGur5z83CGy53fchs2fdoQP6kqps7VeKbym2NBBT6tx9ZD4Ue988EQwkM0dw/7/9resv6
 VnL+T9prJJq7pEPKyl8ocTSTPbINSsJ8f6z+R01/cxOnpyZ3pe2kWneC0xVUeTCsfip5DEb
 OfgaCy4omJstlx57Z5GQrVfs01V21NjY6i0Ev7e2AGyn+Kq2ZcrTBzjJQpaoDjLjaFodkB
 VPwR0kXCEjScfV/YjURTSgVcv1F1k/OyVf3EDcTxzjtOEuvkLrYsBANzAtcchE7tM1JdV1D
 v4lA5nudd1plgQkwp911LOM5AieKMGuaSFLCq0RNTHo61AFTeEOCgK1uDoRtac+TtgzrAyQ
 GpUwQ/j/CFzy2yhQzSg2+nOFDA4D2I2Bw3SyMVAv45NtPPYnoplY9j0iRPfSOUzbHqULI8P
 vRyICY3EhIv7MVzG812TMD1WovZzaNonSB4plj+rq+aL6YH15O3/AQ5v/n3b/ebrKDSSTYR
 OC1nVfxxwF+nLTMeCPumAfb8JWdAmOvsUmyd8j8b6CgE2fMsR6yzZMmTcdispYelr+at4hd
 7v57K2JKcTKffs23zU9QZ6w30+soSr4dKhXVKoFny8pGZkgA5Dd5ksytKJgKJHM5Z6yRij8
 cc0WwPrqK9jZvFqx0+t8rAFUA1QRbM6nnwF4g6z2vMdEtUYtnNXIZIWe5E6YJ1mxzn26dFA
 t2AnM8MelPSNVaxVqhoCZAZOdRmhYXg4uT+4rMazBXJ7txtCNsQd/sw4WpOp9jzRoANfHXK
 2uKkFRS62216u6hCoVCMj5D7UjB/4S80NZIwa67cikY/89t4vEZbwwS0dLQ2CMIQVeeUFTo
 4Hq32RaVRPhIJql0MH/fyMIvSfqEoMunY/D/26rKnivVp9XZdyd2ZKMV5nNftbwC6UhhQ76
 PwKRg5GsOuDJUxHzY0DXIGtCsuZWUeuDnm0iyVZ2LVCRPyTWAiur0nepcn1nVcehlxddqGS
 ulAWSqmOODMmwytm6mDKAvLnN8qjpL742bTIHkxmtUvoNxrGT4i+0jwGWLGNy6sx3JAXIY
 Zv85xt+cV5KDvmF822w6CtUs5l8lWvBdAC6WD+wmnQzGsqvSbj9jLLKFxOtLYs863dDDtEN
 dZiYtrCKjEKNloY8X0f1N1fczguZ8ssBa6XWQ4hjgwanpjBsvReJZcWogUFqYuXtZUB/mIU
 SZyNSIFwCO4cWa4vqE4P1Pj156jnIdpqwgqalJHTm7WsCEIbgdBfyJp75/vJR/A4PAJcsZm
 FfIayNwM/zePFhZp0UdxrnoptZfsF4XspgZEPbHyxmfQG7f8sfAQq0iQLH0kpaBD3VuTrud
 gOfFbVfrjim8UXUNhKpYSgy3GWeHXadrOHsOZ0Yj0a/AY5Wwny7RJAZO00UCMLGRVFXjyj9
 RQvCPphejNVmhLNqlT3dqEcZ3TptR4xILuoXC6sQkViBhV7dEp0nVzA6jUzCGOnYmCWl7/
 N6+bd1XHC6dg76igIUHHiJz0jqHfIoxqAak+72Iv706QtVMYI+Cpe4FLRqhoNUJpHAT7+5E
 Oq2WqWXB+KXk5/Wh7/Cio6pZsAuEAU0elDDz/mex2oUfigYvtYwFPBo0fWzTqkVwP7P18E5
 wudK19Q+JYonZVaapChTDJF9/OoVElg0rrQ5nxzKQRrTbtekZSj5j66p107ux2R+Q7MpRsm
 wT8ERgW8CexPHOAIKAWSBpWaT6ogh1MletHIK++ShXSIRA3NbDjrkwU8q0E9w1CUyAfXnQv
 4pTQaGHadF/j2F2foMBAW2Jgh1KP9UgB54K+KLRjOIFcEUqqh+j42bh2/c0jAppJtWNgn2j
 FQzuK2I3E0MVVNOEPJmEvpDXM1DZzhFNxeL8D+LfMn1B4zNTdngE0arUOspr72Rm0Rx43Oc
 U0w/nkL6DckhviZdco4PSLLXJeBW/fBc2Ws04/qxEKwreGwCr3fM17X4HZtCRJOsVj0Bg6J
 Ap3f30Os55bjQanFubM9YFZrC6rGnKshyiUIFutMPwzbuIWCWQP29TnlSJWk91C0j2oy6/
 209o7U78grLvG11SyynqehN8TLxP9MDswHzAHBgUrDgMCGgQU9XDxBt/loGEHzU/DE0xAa
 6823YEFFmEIfAiPtILVXcDNuDn0rU1xc24AgIH0A==",

"password": <certificate_password>

"internal-interfaces": { "internal-interface" : ["<Internal Port>"]

```

    "vport1" ] },
    "external-interfaces": { "external-interface" : ["<External Port>"] },
    "management-interface": true
}

```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 112
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation successfully completed."
      }
    ]
  }
}

```

Creating a CSR for a Device Certificate

REQUEST

```

POST /api/v1/system/certificates/device-certificate-csrs HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
aWZuM2VmZVZTRU9YNVZkVVZ3eFpiYWdob3VCTndxZEkyExubUcyVU5ibz06
Content-Type: application/json
{
  "subject-common-name": "QA.pcs.company.com",
  "key-type": "ECDSA",
  "ecc-curve": "P-384"
}

```

RESPONSE

```

HTTP/1.1 201 OK
Content-Length: 266
Content-Type: application/json
{
  "result": {
    "info": [

```

```

    {
      "message": "Created CSR 'CSR_164' successfully"
    },
    {
      "message": "Use POST
/api/v1/system/certificates/device-certificate-
csrs/CSR_164/certificate to upload the signed certificate"
    }
  ]
}
}

```

Deleting Device Certificate by Its Subject Name

REQUEST

```
DELETE /api/v1/system/certificates/device-
certificates/srikrsa.test.saqacertserv.com HTTP/1.1
```

Host: 10.209.114.228

Authorization: Basic

aWZuM2VmZVZTRU9YNVZkVVZ3eFpiYWdob3VCTndxZEkyExubUcyVU5ibz06

Content-Type: application/json

RESPONSE

HTTP/1.1 204 NO CONTENT

Content-Length: 0

Content-Type: application/json

Getting System Information

REQUEST

```
GET /api/v1/system/system-information HTTP/1.1
```

Host: 10.209.114.228

Authorization: Basic

aWZuM2VmZVZTRU9YNVZkVVZ3eFpiYWdob3VCTndxZEkyExubUcyVU5ibz06

Content-Type: application/json

RESPONSE

HTTP/1.1 200 OK

Content-Length: 193

Content-Type: application/json

```
{
  "rollback-partition-information": {
    "build": "2330",
    "os-name": "ive-sa",
    "os-version": "9.1R2"
  },
  "software-inventory": {
    "software": {
      "build": "4520",
      "name": "IVE-OS",
      "type": "operating-system",
      "version": "9.1R4"
    }
  },
  "system-information": {
    "hardware-model": "PSA5000-V",
    "host-name": "localhost2",
    "os-name": "ive-sa",
    "os-version": "9.1R4",
    "serial-number": "VASPHJPEG824R1U0S"
  }
}
```

Retrieving Serial Number and Machine ID

REQUEST

```
GET /api/v1/system/system-information HTTP/1.1
Host: 10.96.116.30
Authorization: Basic
czM3MzVDTFVYbnFObFR5NHdNSTFES3piSDhrMTVwR0pLV2gwOTlMYmxhYz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Length: 193
Content-Type: application/json
{
  "rollback-partition-information": {
    "build": "5801",
```

```

    "os-name": "ive-sa",
    "os-version": "9.1R6"
  },
  "software-inventory": {
    "software": {
      "build": "6087",
      "name": "IVE-OS",
      "type": "operating-system",
      "version": "9.1R7"
    }
  },
  "system-information": {
    "cluster-node": {},
    "hardware-model": "PSA-3000",
    "host-name": "node1",
    "machine-id": "0312MB24A0EZ504VS",
    "os-name": "ive-sa",
    "os-version": "9.1R7",
    "serial-number": "0312022017100103"
  }
}

```

Realm-based Administrator User Using Administrator Local Authentication Server

REQUEST

```

POST /api/v1/realm_auth HTTP/1.1
Host: 10.209.114.228
Authorization: Basic YWRtaW4xOmRhbmExMjM=
Content-Type: application/json
{
  "realm": "<realm-name>"
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: application/json
{
  "api_key": "MjUwOGQyNzAyOWU3MWQ2MzNiMTM2Njg2MzAwNDg3MjU="
}

```

Realm-based Administrator User Using AD Authentication Server

REQUEST

```
POST /api/v1/realm_auth HTTP/1.1
Host: 10.209.114.228
Authorization: Basic bmF6ZWVyOlBzZWN1cmUxMjMk
Content-Type: application/json
{
  "realm": "AdminADRealm"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "api_key": "ODRjOTcxOTY5ZTlmYTcwY2QwYzk1ZDBjMWQ5N2RmN2Q="
}
```

Realm-based Administrator User Using LDAP Authentication Server

REQUEST

```
POST /api/v1/realm_auth HTTP/1.1
Host: 10.209.114.228
Authorization: Basic bmF6ZWVyOlBzZWN1cmUxMjMk
Content-Type: application/json
{
  "realm": "LDAPRealm"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "api_key": "ZTQxNTIxOTJhNmUwMjg3MWI5MjZkYmE1MGM0MzdiMDI="
}
```

Realm-based Administrator User Using Radius Authentication Server

REQUEST

```
POST /api/v1/realm_auth HTTP/1.1
Host: 10.209.114.225
Authorization: Basic amFjazpqcW5pcGVy
Content-Type: application/json
{
  "realm": "RadiusAdminRealm"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "api_key": "MGMzZjJkZDZlYmRlYzgzMDME5NzkwYzE1ZGM5MmQyYTQ="
}
```

Realm-based Administrator User from a Particular Source IP

REQUEST

```
PUT /api/v1/configuration/administrators/admin-
realms/realm/AdminLocalAuthRealm/authentication-policy/source-
ip/customized HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
T1dFM056VTBPVE15T0dFeU16WXpOakU0WVRFek9EWXhOamRoTVdVNFpqYz06
Content-Type: application/json
{
  "customized": "selected-ip"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Length: 124
Content-Type →application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
```



```

        error!"
    }
]
}
}
REQUEST
POST /api/v1/configuration/administrators/admin-
realms/realm/AdminLocalAuthRealm/authentication-policy/source-
ip/ips/ip HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
T1dFM056VTBPVE15T0dFeU16WXpOakU0WVRFek9EWXhOamRoTVdVNFpqYz06
Content-Type: application/json
{
    "access": "allow",
    "address": "10.96.158.3",
    "netmask": "255.255.255.255"
}
RESPONSE
HTTP/1.1 201 CREATED
Content-Length: 124
Content-Type: application/json
{
    "result": {
        "info": [
            {
                "message": "Operation succeeded without warning or
error!"
            }
        ]
    }
}

```

Realm-based Administrator Authorization Role Mapping to .Administrator Role

```

REQUEST
PUT /api/v1/configuration/administrators/admin-
realms/realm/AdminADRealm/role-mapping-rules HTTP/1.1
Host: 10.209.114.228
Authorization: Basic

```

```
TldvNF16TmtOVEZqTkRFek1EUXdPVGRoTlRrMk9UWTBaR013TkRnM1ptST06
```

```
Content-Type: application/json
```

```
{
  "user-selects-role": "false",
  "rule": [
    {
      "roles": [
        ".Administrators"
      ],
      "stop-rules-processing": "true",
      "group": {
        "group-names": [
          "PCS-QA/systems"
        ]
      },
      "name": "AdminADRoleMapping"
    }
  ],
  "user-selects-roleset": "false"
}
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 124
```

```
Content-Type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Specifying Session Validity for REST Admin Session

REQUEST

```
PUT /api/v1/configuration/administrators/admin-roles/admin-
```

```
role/%2EAdministrators/general/session-options HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
TldVNF16TmtOVEZqTkRfEk1EUXdPVGRoTlRrMk9UWTBaR0l3TkRnM1ptST06
Content-Type: application/json
{
  "idle-timeout": "5"
}

RESPONSE
HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without
warning or error!"
      }
    ]
  }
}
```

Getting Active Directory Search Groups

```
REQUEST
GET /api/v1/configuration/authentication/auth-servers/auth-
server/ADServer/ad/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json

RESPONSE
HTTP/1.1 200 OK
Content-Length: 294
Content-Type: application/json
{
  "ad-group": [
    {
```

```

    "group": "PCS-QA/core",
    "name": "PCS-QA/core",
    "sid": "S-1-5-21-3875260349-1888520165-453808128-1112"
  },
  {
    "group": "PCS-QA/systems",
    "name": "PCS-QA/systems",
    "sid": "S-1-5-21-3875260349-1888520165-453808128-1108"
  }
]
}

```

Adding Search Group to Active Directory

REQUEST

```

PUT /api/v1/configuration/authentication/auth-servers/auth-
server/ADServer/ad/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMesttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "ad-group": [
    {
      "group": "PCS-QA/systems",
      "name": "PCS-QA/systems"
    },
    {
      "group": "PCS-QA/core",
      "name": "PCS-QA/core"
    }
  ]
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {

```

```

    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}

```

Updating Active Directory Group

NOTE: To update a group, first get already available list using GET operation and append new group to it before PUT.

REQUEST

```

PUT /api/v1/configuration/authentication/auth-servers/auth-
server/ADServer/ad/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "ad-group": [
    {
      "group": "PCS-QA/core",
      "name": "PCS-QA/core",
      "sid": "S-1-5-21-3875260349-1888520165-453808128-1112"
    },
    {
      "group": "PCS-QA/systems",
      "name": "PCS-QA/systems",
      "sid": "S-1-5-21-3875260349-1888520165-453808128-1108"
    },
    {
      "group": "PCS-QA/client",
      "name": "PCS-QA/client",
      "sid": "S-1-5-21-3875260349-1888520165-453808128-1113"
    }
  ]
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}

```

Deleting Active Directory Groups

REQUEST

```

PUT /api/v1/configuration/authentication/auth-servers/auth-
server/ADServer/ad/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVodHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "ad-group": [
  ]
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}

```

```

}
}

```

Getting All LDAP Group List

REQUEST

```

GET /api/v1/configuration/authentication/auth-servers/auth-
server/LDAPServer/ldap/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json

```

Adding Groups to LDAP

REQUEST

```

PUT /api/v1/configuration/authentication/auth-servers/auth-
server/LDAPServer/ldap/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "user-group": [
    {
      "dn": "CN=Administrators,CN=Builtin,DC=pcs-
qa,DC=blrlab,DC=net",
      "group-type": "static",
      "name": "Administrators"
    },
    {
      "dn": "CN=Users,CN=Builtin,DC=pcs-qa,DC=blrlab,DC=net",
      "group-type": "static",
      "name": "Users"
    }
  ]
}

```

RESPONSE


```

HTTP/1.1 200 OK
Content-Length: 124

```

```
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Updating LDAP Source Group

 **NOTE:** To update a group, first get already available list using GET operation and append new group to it and then perform PUT operation.

REQUEST

```
PUT /api/v1/configuration/authentication/auth-servers/auth-
server/LDAPServer/ldap/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "user-group": [
    {
      "dn": "CN=Administrators,CN=Builtin,DC=pcs-
qa,DC=blrlab,DC=net",
      "group-type": "static",
      "name": "Administrators"
    },
    {
      "dn": "CN=Users,CN=Builtin,DC=pcs-qa,DC=blrlab,DC=net",
      "group-type": "static",
      "name": "Users"
    },
    {
      "dn": "CN=Guests,CN=Builtin,DC=pcs-qa,DC=blrlab,DC=net",
      "group-type": "static",
      "name": "Guests"
    }
  ]
}
```



```

    }
  ]
}

RESPONSE
HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}

```

Deleting LDAP Source Group

```

REQUEST
PUT /api/v1/configuration/authentication/auth-servers/auth-
server/LDAPServer/ldap/server-catalog/groups HTTP/1.1
Host: 10.209.116.192
Authorization: Basic
RU9jaHYwdmlqVnJibDBqeE9obTlYZDVOdHhVS2FMeSttVzBqL1pKUXh6bz06
Content-Type: application/json
{
  "user-group": [
  ]
}

RESPONSE
HTTP/1.1 200 OK
Content-Length: 124
Content-Type: application/json
{
  "result": {
    "info": [
      {

```

```

        "message": "Operation succeeded without warning or
error!"
    }
]
}
}

```

Creating a Cluster

REQUEST

```

PUT /api/v1/cluster HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
TldvNF16TmtOVEZqTkRFek1EUXdPVGRoTlRrMk9UWTBaR013TkRnM1ptST06
Content-Type: application/json
{
  "cluster-name": "cluster1",
  "cluster-password": "dana123",
  "member-name": "nodeA",
  "action": "create"
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 118
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Created cluster
'cluster1' successfully"
      }
    ]
  }
}

```

Adding a Member to Cluster

REQUEST

```
POST /api/v1/cluster/members HTTP/1.1
Host: 10.209.116.214
Authorization: Basic
THI5bmxreU50UE04MWJ6OHRhbjhFMWlPYTVuV3V5MG5XN0oyNmNWcTRhbz06
Content-Type: application/json
{
  "member-name" : "node225",
  "member-ip" : "3.209.114.225",
  "member-netmask" : "255.0.0.0",
  "member-gateway" : "3.0.0.1",
  "member-external-ip" : "2.209.114.225",
  "member-external-netmask" : "255.0.0.0",
  "member-external-gateway" : "2.0.0.1"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Length: 125
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Added member 'node225' to cluster
successfully"
      }
    ]
  }
}
```

Getting Cluster Status

REQUEST

```
GET /api/v1/cluster HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
TWN2cUEzbfRYQXcySjBSbGpKWTazdk1oa2RiTDFLUVJDUjNNdlQ0U1RJdz06
```

Content-Type: application/json

RESPONSE

HTTP/1.1 200 OK

Content-Length: 619

Content-Type: application/json

```
{
  "members": [
    {
      "enabled": true,
      "external-ip": "",
      "external-network": "",
      "internal-ip": "3.209.114.225",
      "internal-netmask": "255.0.0.0",
      "name": "node225",
      "notes": "Enabled, Unreachable",
      "status-code": "0x18"
    },
    {
      "enabled": true,
      "external-ip": "10.209.114.194",
      "external-network": "255.255.240.0",
      "internal-ip": "3.209.114.228",
      "internal-netmask": "255.0.0.0",
      "name": "nodeA",
      "notes": "Leader",
      "status-code": "0x19004"
    }
  ],
  "mode": "Active/Active",
  "name": "cluster1"
}
{
  "external-vip-ipv4": "10.204.56.76",
  "external-vip-owner": "node-51-39",
  "internal-vip-ipv4": "10.204.56.75",
  "internal-vip-owner": "node-51-39",
  "members": [
    {
      "enabled": true,
```

```

        "external-ip": "10.204.56.82",
        "external-netmask": "255.255.240.0",
        "internal-ip": "10.204.51.39",
        "internal-netmask": "255.255.240.0",
        "name": "node-51-39",
        "notes": "Leader",
        "status-code": "0x1b004"
    },
    {
        "enabled": true,
        "external-ip": "10.204.56.87",
        "external-netmask": "255.255.240.0",
        "internal-ip": "10.204.56.88",
        "internal-netmask": "255.255.240.0",
        "name": "Node-something",
        "notes": "Enabled, Unreachable",
        "status-code": "0x18"
    }
],
"mode": "Active/Passive",
"name": "TEST-CLUSTER"
}

```

Deleting Cluster Member

REQUEST

```

DELETE /api/v1/cluster/members/node225 HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
TWN2cUEzbFRYQXcySjBSbGpKWTAzdkloa2RiTDFLUVJDUjNNdlQOUlRJdz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 129
Content-Type: application/json
{
    "result": {
        "info": [

```

```

        {
            "message": "Removed member 'node225'
from cluster successfully"
        }
    ]
}
}

```

Getting Health Check Status

REQUEST

```

GET /api/v1/system/healthcheck
Host: 10.209.114.228
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: application/json
{
    "message": "Security Gateway is accessible."
}

```

REQUEST

```

GET /api/v1/system/healthcheck?status=all HTTP/1.1
Host: 10.209.114.228
Content-Type: application/json

```

RESPONSE

```

Content-Type: application/json
{
    "CPU-UTILIZATION4": 8,
    "SSL-CONNECTION-COUNT": 0,
    "MAX-LICENSED-USERS-REACHED": "NO",
    "SWAP-UTILIZATION": 1,
    "DISK-UTILIZATION": -1,
    "USER-COUNT": 0,
    "VPN-TUNNEL-COUNT": 0
}

```

REQUEST

```

GET /api/v1/system/healthcheck?status=sbr HTTP/1.1

```

```
Host: 10.209.114.228
Content-Type: application/json
RESPONSE
Content-Type: application/json
{
  "SBR-AVAILABLE": 1
}
```

Joining a Cluster

```
REQUEST
PUT /api/v1/cluster HTTP/1.1
Host: 10.209.114.228
Authorization: Basic
SkUyV1BaVjRjcGxleElRMnNiZXpYajE2dEVIUm9Oa05WWDdRWWh3MmpJZz06
Content-Type: application/json
{
  "cluster-name": "cluster",
  "cluster-password": "dana123",
  "member-address": "3.209.114.225",
  "action": "join"
}

RESPONSE
HTTP/1.1 200 OK
Content-Length: 116
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Joined cluster 'cluster' successfully"
      }
    ]
  }
}
```

VIP Failover

REQUEST

```
PUT /api/v1/cluster
Host: 10.209.114.228
Authorization: Basic
SkUyV1BaVjRjcGxleElRMnNiZXpYajE2dEVIUm9Oa05WWDdRWHh3MmpJZz06
Content-Type: application/json
{
  "action": "vip-failover"
}
```

RESPONSE

In case of active-passive cluster:

```
{
  "result": {
    "info": [
      {
        "message": "VIP fail-over initiated"
      }
    ]
  }
}
```

In case of active-active cluster:

```
{
  "result": {
    "info": [
      {
        "message": "Node not part of an Active-Passive cluster.
Invalid operation."
      }
    ]
  }
}
```

Configuring IF MAP Server

REQUEST

```
PUT /api/v1/configuration/system/ifmap/overview/ifmap-config/
Host: xx.xxx.xxx.xxx
```



```

Authorization: Basic
SkUyV1BaVjRjcGxleElRMnNiZXpYajE2dEVIUm9Oa05WWDdRWHh3MmpJZz06
Content-Type: application/json
{
    "ifmap-config": " server "
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 116
Content-Type: application/json
{
    "result": {
        "info": [
            {
                "message": ": "Operation succeeded without warning or
error!"
            }
        ]
    }
}

```

Configuring IF MAP Client

REQUEST

```

PUT /api/v1/configuration/system/ifmap/overview/ifmap-config/
Host: xx.xxx.xxx.xxx
Authorization: Basic
SkUyV1BaVjRjcGxleElRMnNiZXpYajE2dEVIUm9Oa05WWDdRWHh3MmpJZz06
Content-Type: application/json
{
"auth-type": "basic",
    "cert": "None",
    "ifmap-config": "client",
    "password-encrypted":
"3u+UR6n8AgABAAAe9Px2XELrbvvAZACcoOJXBM1051lgG8QQLNR4hcLNrE=",
    "server-url": "https://<PPS-IP-Address>/dana-ws/soap/dsifmap",
    "username": "admin1"
}
{

```

```

    "auth-type": "cert",
    "cert": "xx.xxx.xx.xx",
    "ifmap-config": "client",
    "password-encrypted":
"3u+UR6n8AgABAAAAe9Px2XELrbvvAZACcoOJXBM1051lgG8QQLNR4hcLNR=",
    "server-url": "https://<PPS-IP_Address>/dana-ws/soap/dsifmap",
    "username": "admin1"
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 116
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": ": "Operation succeeded without warning or
error!"
      }
    ]
  }
}

```

Configuring No IF MAP Server

REQUEST

```

PUT /api/v1/configuration/system/ifmap/overview/ifmap-config/
Host: xx.xxx.xxx.xxx
Authorization: Basic
SkUyVlBaVjRjcGxleElRMnNiZXpYajE2dEVIUm9Oa05WWDdRWHh3MmpJZz06
Content-Type: application/json
{
  "ifmap-config": "no-ifmap"
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 116
Content-Type: application/json

```

```
{
  "result": {
    "info": [
      {
        "message": ": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Getting Config Without Pulse Packages (ESAP and Pulse Client Packages)

REQUEST

```
GET /api/v1/configuration/authentication/endpoint/host-
checker/esaps?expand&&excludePulsePackages HTTP/1.1
```

```
Host: 10.209.125.139
```

```
Authorization: Basic
```

```
dS9UOURJRWswZzVyMTdieUJqVnhaQnExZUpTTW9ndCtIdGZzMnczMmlzRT06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 561
```

```
Content-Type: application/json
```

```
{
  "active-version": "3.3.5",
  "default-version": "3.3.5",
  "esap": [
    {
      "esap-version": "3.3.5",
      "last-activated-time": "Sun 17 Mar 2019 23:54:12
PDT",
      "upload-time": "Sun 17 Mar 2019 23:53:35 PDT"
    },
    {
      "esap-version": "3.3.6",
      "last-activated-time": "Never",
      "upload-time": "Mon 18 Mar 2019 21:45:31 PDT"
    },
  ],
}
```

```

    {
      "esap-version": "3.3.7",
      "last-activated-time": "Never",
      "upload-time": "Mon 18 Mar 2019 21:46:12 PDT"
    }
  ],
  "force-same-esap": "false",
  "opswat-sdk-version": "4"
}

```

Backing Up Binary Configuration

REQUEST

```

GET /api/v1/system/binary-configuration HTTP/1.1
Host: 10.204.51.39
Authorization: Basic
dS9UOURJRWswZzVyMTdieUJqVnhaQnExZUpTTW9ndCtIdGZzMnczMmlzRT06

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8
Content-Length: 50753630
UESDBBQAAAAIAE9VmU4J1asqz3cDAKx3AwAKABwAc3lzdGVtLmNmZ1VUCQADvUHB
XL1BwVx1eAsAAQQAAAAABAAAAAAC4D0fwnTMa1OLV2XgACodwMAINEfP2AuIVXV
B1FhtptLC259gyNPT7WwhTQKbp2Y2+dlh1MTflQis8wbHytXP19D+SM+amX5UKeO
GDUggxgbrEQMXmwOSv8YBrvXIBShmGO5BVqfUemvdNK3OB+S/g8+LIPG5i2c3LVm
W8hY3PLQ9CJHMrFSBftgyTX2at85MGCsupxd2gOQQ9e138KrI2hBoywDzCJiRUSU
...

```

Restoring Binary Configuration (import=normal)

The import normal mode will import the binary configuration excluding the IP, network configurations and cluster configuration. The normal mode is similar to default option in binary import.

REQUEST

```

PUT /api/v1/system/binary-configuration?import=normal HTTP/1.1
Or
PUT /api/v1/system/binary-configuration HTTP/1.1
Host: 10.204.51.39
Authorization: Basic
dS9UOURJRWswZzVyMTdieUJqVnhaQnExZUpTTW9ndCtIdGZzMnczMmlzRT06

```

Content-Type: text/html; charset=utf-8

RESPONSE

HTTP/1.1 200 OK

```
{
  "result": {
    "info": [
      {
        "message": "Operation successfully completed."
      }
    ]
  }
}
```

Error Cases:

import mode specified is incorrect (other than normal or full)

Content-Length: 100

Content-Type: application/json

```
{
  "result": {
    "errors": [
      {
        "message": "Invalid import mode"
      }
    ]
  }
}
```

Content type is not a base 64 encoded binary configuration string

Content-Length: 126

Content-Type: application/json

```
{
  "result": {
    "errors": [
      {
        "message": "Error - Failed to extract configuration files"
      }
    ]
  }
}
```

Restoring Binary Configuration (import=full)

The import full mode will import everything from the binary configuration provided in the body. This is similar to full binary import.

REQUEST

```
PUT /api/v1/system/binary-configuration?import=full HTTP/1.1
```

```
Host: 10.204.51.39
```

```
Authorization: Basic
```

```
dS9UOURJRWswZzVyMTdieUJqVnhaQnExZUpTTW9ndCtIdGZzMnczMmlzRT06
```

```
Content-Type: text/html; charset=utf-8
```

```
Body data:
```

```
Base64 configuration string as received in GET request)
```

```
UESDBBQAAAAIAE9VmU4J1asqz3cDAKx3AwAKABwAc3lzdGVtLmNmZ1VUCQADvUHB
XL1BwVx1eAsAAQAAAAABAAAAAAC4D0fwnTma1OLV2XgACodwMAINEfP2AuIVXV
B1FhtptLC259gyNPT7WwhtQKbp2Y2+d1h1MTflQis8wbHytXP19D+SM+amX5UKeO
GDUggxgbrEQMXmwOSv8YBrvXIBShmGO5BVqfUemvdNK3OB+S/g8+LIPG5i2c3LVm
```

```
.....
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 112
```

```
Content-Type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "Operation successfully completed."
      }
    ]
  }
}
```

Error Cases:

```
import mode specified is incorrect (other than normal or full)
```

```
Content-Length: 100
```

```
Content-Type: application/json
```

```
{
  "result": {
    "errors": [
```

```
{
  "message": "Invalid import mode"
}
]
}
}
Content type is not a base 64 encoded binary configuration string
Content-Length: 126
Content-Type: application/json
{
  "result": {
    "errors": [
      {
        "message": "Error - Failed to extract configuration files"
      }
    ]
  }
}
```

PCS-Specific Configurations Using REST APIs

- [Creating a VLAN](#)
- [Deleting a VLAN](#)
- [Creating a User Role](#)
- [Fetching the User Login Statistics](#)
- [Updating the User Role Settings](#)
- [Deleting a User Role](#)
- [Creating a User Realm](#)
- [Deleting a User Realm](#)
- [Creating a Resource Profile](#)
- [Deleting a Resource Profile](#)
- [Creating a Resource Policy](#)
- [Fetching a Resource Policy](#)
- [Deleting a Resource Policy](#)
- [Creating an AD Authentication Server](#)
- [Deleting an AD Authentication Server](#)
- [Creating an LDAP Authentication Server](#)
- [Creating a Radius Server](#)
- [Modifying Radius Server Details](#)
- [Creating Sign-In-Policy](#)
- [Deleting Sign-In-Policy](#)
- [Disabling Sign-in-URL](#)
- [Creating a Web Bookmark for a Role](#)
- [Reordering](#)
- [Fetching the Resource with Multiple Identifiers](#)
- [Updating Resource Identified Using Multiple Identifiers](#)
- [Fetching Active Number of HTML5 Sessions](#)
- [Updating Password in Clear Text](#)
- [Applying Authcode and Downloading Licenses from PCLS on VA-SPE | PSA-V](#)
- [Applying License](#)
- [Deleting License](#)
- [Getting License Clients](#)
- [Getting License Report from License Server](#)
- [Enabling/Disabling ICE License](#)
- [Getting the Current Status of ICE License](#)
- [Exporting TOTP Users from One Device to Another Device](#)
- [Importing TOTP Users from One Device to Another Device](#)
- [Resetting TOTP User](#)
- [Unlocking TOTP User](#)
- [Sample Error Responses](#)
- [Limitations](#)

Creating a VLAN

To create a VLAN on a cluster node:

REQUEST

```
POST /api/v1/configuration/system/network/vlans/Node88/vlan/ HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
{
  "arp-cache": {
    "arp-entry": []
  },
  "name": "vlan-int-1",
  "routes": {
    "route": []
  },
  "settings": {
    "default-gateway": "2.0.0.1",
    "default-vlan-interface": "false",
    "enable-ipv6": "enabled",
    "ip-address": "2.2.2.2",
    "ipv6-address": "fc00:7777:5678:5678::222",
    "ipv6-default-gateway": "fc00:7777:5678:5678::3",
    "ipv6-prefix-length": "64",
    "is-enabled": "enabled",
    "netmask": "255.0.0.0",
    "vlan-id": "2",
    "vlan-parent": "0"
  },
  "virtual-ports": {
    "virtual-port": []
  }
}
```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 128
Content-Type: application/json
{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

Deleting a VLAN

To delete a VLAN from cluster node:

```

REQUEST

DELETE /api/v1/configuration/system/network/vlans/Node88/vlan/vlan-int-1
HTTP/1.1

Host: 10.209.113.88

Authorization: Basic
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06

Content-Type: application/json

RESPONSE

HTTP/1.1 204 NO CONTENT

Content-Length: 0

Content-Type: application/json

```

Creating a User Role

To create a user role:

```

REQUEST

POST /api/v1/configuration/users/user-roles/user-role/ HTTP/1.1

Host: 10.209.113.88

Authorization: Basic

```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
{
  "name": "rest-userrole-4",
  "web": {
    "web-bookmarks": {
      "bookmark": [
        {
          "auto-allow": "disable",
          "description": "",
          "name": "web-bm-1",
          "new-window": "false",
          "no-address-bar": "false",
          "no-tool-bar": "false",
          "parent": "--none--",
          "standard": {
            "url": "http://www.msn.com"
          }
        }
      ]
    },
    "web-options": {
      "browsing-untrusted-sslsites": "true",
      "flash-content": "false",
      "hpxproxy-connection-timeout": "1800",
      "http-connection-timeout": "240",
      "java-applets": "true",
      "mask-hostname": "false",
      "persistent-cookies": "false",
      "rewrite-file-urls": "false",
      "rewrite-links-pdf": "false",
      "unrewritten-page-newwindow": "false",
      "user-add-bookmarks": "false",
```

```

        "user-enter-url": "false",
        "users-bypass-warnings": "false",
        "warn-certificate-issues": "true",
        "websocket-connection-timeout": "900"
    }
}
}
}

```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 122
Content-Type: application/json
{
    "result": {
        "info": [
            {
                "message": "Operation succeed without
warning or error!"
            }
        ]
    }
}

```

Fetching the User Login Statistics

To fetch the user login statistics:

REQUEST

```

GET /api/v1/system/user-stats HTTP/1.1
Host: 10.209.113.88
Authorization: Basic
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Length: 169
Content-Type: application/json
{
    "user-stats": {

```

```

    "allocated-user-count": "25",
    "current-user-count": "0",
    "max-active-user-count-24hrs": "1",
    "min-active-user-count-24hrs": "0"
  }
}

```

Updating the User Role Settings

To update the user role settings:

REQUEST

```

PUT /api/v1/configuration/users/user-roles/user-role/rest-userrole-4
HTTP/1.1

```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```

{
  "name": "rest-userrole-4",
  "web": {
    "web-bookmarks": [
      "bookmark": [
        {
          "auto-allow": "disable",
          "description": "",
          "name": "web-bm-1",
          "new-window": "false",
          "no-address-bar": "false",
          "no-tool-bar": "false",
          "parent": "--none--",
          "standard": {
            "url": "http://www.yahoo.com"
          }
        }
      ]
    }
  }
}

```

```

    },
    "web-options": {
      "browsing-untrusted-sslsites": "true",
      "flash-content": "false",
      "hpxproxy-connection-timeout": "1800",
      "http-connection-timeout": "240",
      "java-applets": "true",
      "mask-hostname": "false",
      "persistent-cookies": "false",
      "rewrite-file-urls": "false",
      "rewrite-links-pdf": "false",
      "unrewritten-page-newwindow": "false",
      "user-add-bookmarks": "false",
      "user-enter-url": "false",
      "users-bypass-warnings": "false",
      "warn-certificate-issues": "true",
      "websocket-connection-timeout": "900"
    }
  }
}
}
}
}
}
}
}

```

RESPONSE

HTTP/1.1 200 OK

Content-Length: 122

Content-Type: application/json

```

{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or
error!"
      }
    ]
  }
}

```

```

    }
}

```

Deleting a User Role

To delete a user role:

REQUEST

```
DELETE /api/v1/configuration/users/user-roles/user-role/rest-userrole-4
HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
```

```
Content-Type: application/json
```

Creating a User Realm

To create a user realm:

REQUEST

```
POST /api/v1/configuration/users/user-realms/realm/ HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
{
  "accounting-server": "None",
  "authentication-group": "",
  "authentication-policy": {
    "browser": {
      "customized": "any-user-agent",
      "user-agent-patterns": {
        "user-agent-pattern": []
      }
    }
  }
}
```

```

    },
    "certificate": {
      "cert-key-value-pairs": {
        "cert-key-value-pair": []
      },
      "customized": "allow-all-users"
    },
    "host-checker": {
      "enforce-all-policies": "false",
      "enforce-policy-list": null,
      "evaluate-all-policies": "false",
      "evaluate-logic": "all-policies-must-succeed",
      "evaluate-policy-list": null
    },
    "limits": {
      "guaranteed-minimum": null,
      "limit-concurrent-users": "false",
      "max-sessions-per-user": "1",
      "maximum": null
    },
    "password": {
      "primary-password-expiration-warning-days": "14",
      "primary-password-management": "true",
      "primary-password-minimum-length": "4",
      "primary-password-restricted": "allow-passwords-of-minimum-
length",
      "secondary-password-expiration-warning-days": "14",
      "secondary-password-management": "false",
      "secondary-password-minimum-length": "4",
      "secondary-password-restricted": "allow-passwords-of-minimum-
length"
    },
    "source-ip": {
      "customized": "any-ip",

```



```

        "ips": {
            "ip": []
        }
    },
    "authentication-server": "AD server",
    "description": "",
    "device-server": "None",
    "directory-server": "AD server",
    "dynamic-policy": {
        "dynamic-policy-evaluation": "false",
        "refresh-interval": "60",
        "refresh-policies": "false",
        "refresh-roles": "false"
    },
    "editing-description": "false",
    "inbound-ifmap-attributes": "false",
    "migration-sharing-type": "enable-session-migration",
    "name": "rest-user-realm",
    "role-mapping-rules": {
        "rule": [
            {
                "name": "rest-admin-rule",
                "roles": [
                    "test1"
                ],
                "stop-rules-processing": "false",
                "user-name": {
                    "test": "is",
                    "user-names": [
                        "user1"
                    ]
                }
            }
        ]
    }

```

```

    }
  ],
  "user-selects-role": "false",
  "user-selects-roleset": "false"
},
"secondary-authentication-settings": {
  "authentication-must-succeed": "true",
  "name": "-",
  "password-input": "user",
  "predefined-password": "",
  "predefined-user-name": "",
  "user-name-input": "user"
},
"session-migration": "false"
}

```

RESPONSE

HTTP/1.1 201 CREATED

Content-Length: 122

Content-Type: application/json

```

{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or error!"
      }
    ]
  }
}

```

Deleting a User Realm

To delete a user realm:

REQUEST

```
DELETE /api/v1/configuration/users/user-realms/realm/rest-user-realm
HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
```

```
Content-Type: application/json
```

Creating a Resource Profile

To create a web resource profile:

REQUEST

```
POST /api/v1/configuration/users/resource-profiles/web-profiles/web-
profile/ HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
{
  "custom": {
    "bookmarks": {
      "bookmark": [
        {
          "apply": "all",
          "description": "",
          "name": "web-resourceprofile",
          "new-window": "false",
          "no-address-bar": "false",
          "no-tool-bar": "false",
```

```

        "roles": null,
        "url": "http://www.google.com"
    }
]
},
"client-authentication": [],
"java-acl": [],
"rewriting-options": {
    "ptp": [],
    "selective-rewriting": "false",
    "use-jsam": [],
    "use-wsam": []
},
"sso-basic-ntlm-kerberos": [],
"sso-header": [],
"sso-post": [],
"url": "http://www.google.com",
"web-compression": [],
"webacl": [
    {
        "rules": {
            "rule": [
                {
                    "action": "allow",
                    "name": "Allow http://www.google.com:80/*",
                    "resource": "http://www.google.com:80/*"
                }
            ]
        }
    }
],
"webcaching": []
},

```

```

    "description": "",
    "name": "web-resourceprofile",
    "roles": [
        "rest-userrole-3"
    ]
}

```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 128
Content-Type: application/json
{
    "result": {
        "warnings": [
            {
                "message": "The configuration has been implicitly changed"
            }
        ]
    }
}

```

Deleting a Resource Profile

To delete a web resource profile:

REQUEST

```

DELETE /api/v1/configuration/users/resource-profiles/web-profiles/web-profile/web-resourceprofile HTTP/1.1
Host: 10.209.113.88
Authorization: Basic
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json

```

Creating a Resource Policy

To create a web resource policy:

REQUEST

```
POST /api/v1/configuration/users/resource-policies/web-policies/web-acls/web-acl/ HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
{
  "action": "allow",
  "apply": "selected",
  "description": "",
  "name": "web-acl-policy",
  "parent-type": "none",
  "resources": [
    "1.1.1.1:80,443/*"
  ],
  "roles": [
    "rest-userrole-1"
  ],
  "rules": {
    "rule": []
  }
}
```

RESPONSE

```
HTTP/1.1 201 CREATED
```

```
Content-Length: 122
```

```
Content-Type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or error!"
      }
    ]
  }
}
```

```

    }
  ]
}
}

```

Fetching a Resource Policy

To fetch a web resource policy:

REQUEST

```
GET /api/v1/configuration/users/resource-policies/web-policies/web-
accls/web-acl/name=web-acl-policy,parent-type=none HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 245
```

```
Content-Type: application/json
```

```

{
  "action": "allow",
  "apply": "selected",
  "description": "",
  "name": "web-acl-policy",
  "parent-type": "none",
  "resources": [
    "1.1.1.1:80,443/*"
  ],
  "roles": [
    "rest-userrole-1"
  ],
  "rules": {
    "rule": []
  }
}

```

Deleting a Resource Policy

To delete a web resource policy:

REQUEST

```
DELETE /api/v1/configuration/users/resource-policies/web-policies/web-
accls/web-acl/name=web-acl-policy,parent-type=none HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
```

```
Content-Type: application/json
```

Creating an AD Authentication Server

REQUEST

```
POST /api/v1/configuration/authentication/auth-servers/auth-server
HTTP/1.1
```

```
Host: 10.209.114.152
```

```
Authorization: Basic
```

```
QmJYZlZ6eER2Tzhodjh4NzhlU28vU1NNZ0tHelJJUHhsbC9pdjcrZlRxcz06
```

```
Content-Type: application/json
```

```
{
  "ad": {
    "server-catalog": {
      "custom-variables": {
        "custom-variable": []
      },
      "expressions": {
        "custom-expression": []
      },
      "groups": {
        "ad-group": []
      }
    },
    "settings": {
```



```

    "additional-options": {
      "allow-trusted-domains": "false",
      "change-machine-password-after-every": "0",
      "enable-ntlm-protocol": "true",
      "enable-periodic-password-change-of-machine-account":
"false",
      "kerberos": "true",
      "max-domain-connections": "5",
      "ntlm-protocol": "ntlmv2"
    },
    "container-name": "Computers",
    "domain": "TEST",
    "kerberos-realm": "TEST.SAQACERTSERV.COM",
    "nodenames": [
      {
        "computer-name": "0332MWK0NRP111",
        "machine-hardware-id": "0332MOGWK0NRP111S",
        "node": "localhost2"
      }
    ],
    "password-encrypted":
"3u+UR6n8AgABAAAyCaUPKhCg3J/y46bhB4wz6mnupQH0oTHOTfTexJxP2k=",
    "save-credentials": "true",
    "username": "Administrator"
  }
},
"logical-name": "",
"name": "AD-Server",
"user-record-sync": "false"
}

```

RESPONSE

HTTP/1.1 201 CREATED

Content-Length: 128

Content-Type: application/json

```

{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

```

    }
}

```

Deleting an AD Authentication Server

REQUEST

```
DELETE /api/v1/configuration/authentication/auth-servers/auth-server/AD-Server HTTP/1.1
```

```
Host: 10.209.114.152
```

```
Authorization: Basic
```

```
QmJYZlZ6eER2Tzhodjh4NzhlU28vU1NNZ0tHelJJUHhsbC9pdjcrZlRxcz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
```

```
Content-Type: application/json
```

Creating an LDAP Authentication Server

REQUEST

```
POST /api/v1/configuration/authentication/auth-servers/auth-server HTTP/1.1
```

```
Host: 10.209.114.152
```

```
Authorization: Basic
```

```
QmJYZlZ6eER2Tzhodjh4NzhlU28vU1NNZ0tHelJJUHhsbC9pdjcrZlRxcz06
```

```
Content-Type: application/json
```

```

{
  "ldap": {
    "server-catalog": {
      "attributes": {
        "user-attribute": [
          {
            "name": "cn"
          },
          {
            "name": "department"
          }
        ]
      }
    }
  }
}

```

```

        {
            "name": "departmentNumber"
        },
        {
            "name": "employeeNumber"
        },
    },
    {
        {
            "name": "o"
        },
        {
            "name": "ou"
        },
        {
            "name": "sAMAccountName"
        },
        {
            "name": "uid"
        },
        {
            "name": "homeDirectory"
        },
        {
            "name": "homeDrive"
        },
        {
            "name": "wWWHomePage"
        }
    ]
},
"custom-variables": {
    "custom-variable": []
},

```

```

    "expressions": {
      "custom-expression": []
    },
    "groups": {
      "user-group": []
    }
  },
  "settings": {
    "admin-dn":
"CN=Administrator,CN=Users,DC=test,DC=saqacertserv,DC=com",
    "admin-password-encrypted":
"3u+UR6n8AgABAAAAQkYh+Te/ebXL7gSn+W6IEPOV2YFsaaiKH2SVxkb81TKzWhS1EPFlsNXBpuQP5sW
XfeOYfjmhQRSZ5DP/z9UhQ/116DDne9/u7Lw67HyE/8Q=",
    "attribute-to-update-at-server": "",
    "attribute-type": "type-integer",
    "attribute-value-to-update-at-server": "<LOGINTIMELDAP>",
    "authentication-required-to-search-ldap": "true",
    "backup-port-1": null,
    "backup-port-2": null,
    "backup-server-1": "",
    "backup-server-2": "",
    "connection-timeout": "15",
    "connection-type": "plain",
    "enable-attribute-update-at-server": "false",
    "group-base-dn": "",
    "group-filter": "",
    "ldap-server-type": "active-directory",
    "meetings": {
      "email-address": "mail",
      "full-name": "displayname",
      "name-attribute-mapping": "",
      "user-name": "samaccountname"
    },
    "member-attribute": "",
    "nested-group-level": "0",
    "port": "389",
    "query-attribute": ""
  }
}

```

```

    "reverse-group-search": "false",
    "search-timeout": "60",
    "server": "10.209.124.88",
    "server-catalog": "catalog",
    "test-user-dn": "",
    "user-base-dn": "DC=test,DC=sagacertserv,DC=com",
    "user-filter": "samaccountname=<USER>",
    "validate-referral-cert": "verifyserverconfigured",
    "validate-server-cert": "false"
  }
},
"logical-name": "",
"name": "LDAP-Server",
"user-record-sync": "false"
}

```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 128
Content-Type: application/json
{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

Creating a Radius Server

REQUEST

```

POST /api/v1/configuration/authentication/auth-servers/auth-server
HTTP/1.1
Host: 10.209.114.152
Authorization: Basic
QmJYZlZ6eER2Tzhodjh4NzhlU28vU1NNZ0tHelJJUHhsbC9pdjcrZlRxcz06
Content-Type: application/json
{
  "logical-name": "",

```

```

"name": "Radius-Server",
"radius": {
  "server-catalog": {
    "attributes": {
      "user-attribute": []
    },
    "custom-variables": {
      "custom-variable": []
    },
    "expressions": {
      "custom-expression": []
    }
  },
  "settings": {
    "accounting-port": "1813",
    "authenticate-with-tokens-onetimepassword": "false",
    "authentication-port": "1812",
    "backup-accounting-port": "1813",
    "backup-authentication-port": "1812",
    "backup-server": "10.209.126.179",
    "backup-shared-secret-encrypted":
"3u+UR6n8AgABAAAA2Th1sUV9vXDS9gRdMt1yCB40l6tacMTwhWsTlIFd7Q4=",
    "custom-radius-rules": {
      "custom-radius-rule": []
    },
    "interim-update-interval": null,
    "load-balance-auth": "false",
    "nasid": "",
    "nasipaddr": "10.209.113.88",
    "process-radius-disconnect": "false",
    "retries": "0",
    "server": "10.209.126.179",
    "shared-secret-encrypted":
"3u+UR6n8AgABAAAA2Th1sUV9vXDS9gRdMt1yCB40l6tacMTwhWsTlIFd7Q4=",
    "timeout": "30",
    "use-nc-assigned-ip": "false",
    "use-subsession-interim-update": "false",
    "user-name": "<USER>(<REALM> [<ROLE SEP=\", \"]"
  }
},

```

```

    "user-record-sync": "false"
  }

RESPONSE
HTTP/1.1 201 CREATED
Content-Length: 128
Content-Type: application/json
{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

Modifying Radius Server Details

```

REQUEST
PUT /api/v1/configuration/authentication/auth-servers/auth-server/Radius-Server HTTP/1.1
Host: 10.209.114.152
Authorization: Basic
QmJYZlZ6eER2Tzhodjh4NzhlU28vU1NNZ0tHelJJUHhsbC9pdjcrZlRxcz06
Content-Type: application/json
{
  "name": "Radius-Server",
  "radius": {
    "settings": {
      "backup-accounting-port": "1814",
      "backup-authentication-port": "1816",
      "backup-server": "2.2.2.2"
    }
  }
}

RESPONSE
HTTP/1.1 200 OK
Content-Length: 128
Content-Type: application/json

```

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Creating Sign-In-Policy

REQUEST

POST /api/v1/configuration/authentication/signin/urls/access-
urls/access-url/ HTTP/1.1

Host: 10.209.113.89

Authorization: Basic

MEthMXM0MmJraHpjYms0WFZCZ29Xb3k1Nk5NL3JqaDBwQ05iTmFhUlh5ST06

Content-Type: application/json

```
{
  "description": "",
  "enabled": "true",
  "page": "Default Sign-In Page",
  "realm-select": "pick-list",
  "url-pattern": "test/url3/",
  "user": {
    "enable-new-ux-pages": "false",
    "meeting-url": "*/meeting/",
    "post-authentication-signin-notification-id": "None",
    "post-authentication-signin-notification-skip": "false",
    "pre-authentication-signin-notification-id": "None",
    "realms": [
      "Users"
    ]
  }
}
```


RESPONSE

HTTP/1.1 201 CREATED

Content-Length: 128

Content-Type: application/json

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Deleting Sign-in-Policy

REQUEST

DELETE /api/v1/configuration/authentication/signin/urls/access-
urls/access-url/test%5C%2Furl3%5C%2F HTTP/1.1

Host: 10.209.113.89

Authorization: Basic

MEthMXM0MmJraHpjYms0WFZCZ29Xb3k1Nk5NL3JqaDBwQ05iTmFhUlh5ST06

Cache-Control: no-cache

RESPONSE

HTTP/1.1 204 NO CONTENT

Content-Length: 0

Content-Type: application/json

Disabling Sign-in-URL

REQUEST

PUT /api/v1/configuration/authentication/signin/urls/access-urls/access-
url/test%5C%2Furl1%5C%2F/enabled HTTP/1.1

Host: 10.209.113.89

Authorization: Basic

MEthMXM0MmJraHpjYms0WFZCZ29Xb3k1Nk5NL3JqaDBwQ05iTmFhUlh5ST06

```
Content-Type: application/json
```

```
{
  "enabled": "false"
}
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Length: 128
```

```
Content-Type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Creating a Web Bookmark for a Role

To create a web bookmark for a role:

REQUEST

```
POST /api/v1/configuration/users/user-roles/user-role/rest-userrole-
1/web/web-bookmarks/bookmark HTTP/1.1
```

```
Host: 10.209.113.88
```

```
Authorization: Basic
```

```
MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06
```

```
Content-Type: application/json
```

```
Cache-Control: no-cache
```

```
{
  "auto-allow": "disable",
  "description": "",
  "name": "webbm",
  "new-window": "false",
  "no-address-bar": "false",
  "no-tool-bar": "false",
```

```

    "parent": "--none--",
    "standard": {
        "url": "http://www.yahoo.com"
    }
}

```

RESPONSE

```

HTTP/1.1 201 CREATED
Content-Length: 122
Content-Type: application/json
{
    "result": {
        "info": [
            {
                "message": "Operation succeed without warning or error!"
            }
        ]
    }
}

```

Reordering

For re-ordering existing ordered elements in the configuration, a PUT API can be used with an 'order' suffix. This API can be used to reorder any ordered element in the configuration including role-mapping-rules, resource policies and ACLs.

Example: Reorder existing role-mapping-rules in a specific realm.

REQUEST

```

PUT /api/v1/configuration/users/user-realms/realm/testRealm/role-
mapping-rules/rule/order HTTP/1.1
Host: 10.209.112.106
Authorization: Basic
Y1VPZE1XZ1ZubVEvVnIrcWwrd3lJY3F0Y05WTGhDVkx1M0wrdk5YR3hzVT06
Content-Type: application/json
{
    "rule": [
        {
            "href": "/api/v1/configuration/users/user-

```

```
realms/realm/testRealm/role-mapping-rules/rule/rule3"
    },
    {
        "href": "/api/v1/configuration/users/user-
realms/realm/testRealm/role-mapping-rules/rule/rule1"
    }
]
}
```

RESPONSE

```
HTTP/1.1 200 OK
content-length: 122
content-type: application/json
{
    "result": {
        "info": [
            {
                "message": "Operation succeed without warning or error!"
            }
        ]
    }
}
```

Fetching the Resource with Multiple Identifiers

Example: Retrieve one of SNMP Trap server configured on PCS device

REQUEST

```
GET /api/v1/configuration/system/log/snmp/localhost2/trap-servers/trap-
server/ip=1.1.1.1,port=162 HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
T0o1dzVpK3g4U0dKV0d1TkJCdWlwVzREaUc0SjZvbkeXmVljc0RtNU14bz06
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
content-length: 65
```

```
content-type: application/json
```

```
{
  "community": "public",
  "ip": "1.1.1.1",
  "port": "162"
}
```

Updating Resource Identified Using Multiple Identifiers

Example: Updating the community string for specific SNMP trap server identified by IP and port

REQUEST

```
PUT /api/v1/configuration/system/log/snmp/localhost2/trap-servers/trap-server/ip=1.1.1.1,port=162/community HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
T0o1dzVpK3g4U0dKV0d1TkJCdWlwVzREaUc0SjZvbkeXmV1jc0RtNU14bz06
```

```
Content-Type: application/json
```

```
{
  "community": "pulsesecure"
}
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
content-length: 122
```

```
content-type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeed without warning or error!"
      }
    ]
  }
}
```

Fetching Active Number of HTML5 Sessions

REQUEST

```
GET /api/v1/stats/active-html5-sessions HTTP/1.1
```

```
Host: 10.96.116.40
```

```
Authorization: Basic
```

```
b1hBV3FaTktKQzhaOU5MNTNsLzJGQXZmNWZ1TGhFSUUyUlVJVdlaRnFVYz06
```

```
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
```

```
content-length: 32
```

```
content-type: application/json
```

```
{  
  "active-html5-sessions": 3  
}
```

Updating Password in Clear Text

Example: Updating password of System Local User.

REQUEST

```
PUT /api/v1/configuration/authentication/auth-servers/auth-server/System%20Local/local/users/user/user0001/password-cleartext HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
T0o1dzVpK3g4U0dKV0d1TkJCdWlwVzREaUc0SjZvbKExMVljc0RtNU14bz06
```

```
Content-Type: application/json
```

```
{  
  "password-cleartext": "Psecure"  
}
```

RESPONSE

```
HTTP/1.1 200 OK
```

```

content-length: 128

content-type: application/json

{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

Applying Authcode and Downloading Licenses from PCLS on VA-SPE|PSA-V

In PCS 8.3R4|PPS 5.4R4, this REST API can be used to download the license key from PCLS and install on the Virtual Appliance.

REQUEST

```

PUT /api/v1/license/auth-code HTTP/1.1
Host: 10.209.125.7
Authorization: Basic
TnBDUk1veFFFQTJKZjM0S2ZxV2JKUlhRaDJaWGFrYnkvWVpTR3hhNTdmbz0=
Content-Length: 35
Content-Type: application/json
{
  "auth-code": "<auth-code-to-apply>"
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 191
{
  "result": {
    "info": [

```

```

    {"message": "Installed new license key \"landmark utility
prestige trip mayor diesel faucet summer prestige income heritage\""}
  ]
}
}

```

Applying License

REQUEST

```

PUT /api/v1/license/license-key?action=install HTTP/1.1
Host: 10.209.125.7
Authorization: Basic
TnBDUklveFFFQTJKZjM0S2ZxV2JKUlhRaDJJaWGFrYnkvWVpTR3hhNTdmbz0=
Content-Type: application/json

```

```

{
  "keys": [
    "key1",
    "key2",
    ...
  ]
}

```

Example:

```

{
  "keys": [
    "operation tree crayon holiday kingdom lasso doorway square
dish modem gecko",
    "buffalo safety inch topaz banquet nitrogen garnish step
recital wedge trace"
  ]
}

```

RESPONSE

```

HTTP/1.1 200 OK
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Installed licenses"
      }
    ]
  }
}

```


Deleting License

REQUEST

```
PUT /api/v1/license/license-key?action=delete HTTP/1.1
Host: 10.209.125.7
Authorization: Basic
TnBDUk1veFFFQTJKZjM0S2ZxV2JKUlhRaDJJaWGFrYnkvWVpTR3hhNTdmbz0=
Content-Type: application/json
```

```
{
  "keys": [
    "key1",
    "key2",
    ...
  ]
}
```

Example:

```
{
  "keys": [
    "operation tree crayon holiday kingdom lasso doorway square
dish modem gecko",
    "buffalo safety inch topaz banquet nitrogen garnish step
recital wedge trace"
  ]
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Deleted <number> licenses"
      }
    ]
  }
}
```

Getting License Clients

REQUEST

```
GET /api/v1/license/license-clients HTTP/1.1
Host: 10.209.125.7

Authorization: Basic
TnBDUk1veFFFQTKZjM0S2ZxV2JKUlhRaDJJaWGFrYnkvWVpTR3hhNTdmbz0=

Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "license_clients": [
    {
      "feature_capacities": [
        {
          "feature_name": "add_user_count",
          "leased_value": 25
        },
        {
          "feature_name": "onboard",
          "leased_value": 0
        },
        {
          "feature_name": "embeddedrdpapplet",
          "leased_value": 0
        },
        {
          "feature_name": "vm_cores_leasable",
          "leased_value": 4
        },
        {
          "feature_name": "add_meeting_user_count",
          "leased_value": 0
        },
        {
          "feature_name": "cloudsecure_count",
          "leased_value": 0
        },
        {
          "feature_name": "named_user_count",
          "leased_value": 0
        }
      ]
    }
  ]
}
```

```

        "feature_name": "ueba",
        "leased_value": 0
    }
],
"last_renewal": "Wed, 04 Dec 2019 06:32:26 GMT",
"machine_id": "VASPH3944M9D8551S",
"name": "va_spe_3_3_125_4"
},
{
    "feature_capacities": [
        {
            "feature_name": "add_user_count",
            "leased_value": 25
        },
        {
            "feature_name": "onboard",
            "leased_value": 0
        },
        {
            "feature_name": "embeddedrdpapplet",
            "leased_value": 0
        },
        {
            "feature_name": "vm_cores_leasable",
            "leased_value": 4
        },
        {
            "feature_name": "add_meeting_user_count",
            "leased_value": 0
        },
        {
            "feature_name": "cloudsecure_count",
            "leased_value": 0
        },
        {
            "feature_name": "named_user_count",
            "leased_value": 0
        },
        {
            "feature_name": "ueba",
            "leased_value": 0
        }
    ],
    "last_renewal": "Thu, 05 Dec 2019 13:45:31 GMT",
    "machine_id": "VASPHXVK2E117PM8S",
    "name": "va_spe_3_3_125_8"
},
]

```

}

Getting License Report from License Server

REQUEST

```
GET /api/v1/license/report HTTP/1.1
Host: 10.209.125.7
Authorization: Basic
TnBDUk1veFFFQTJKZjM0S2ZxV2JKUlhRaDJaWGFrYnkvWVpTR3hhNTdmbz0=
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
```

License Usage Report

```
{
  "LicenseUsageReport": {
    "MachineID": "VASPMMXXXXXXXX",
    "build-number": "4762",
    "cumulative-report": {...},
    "granular-report": {...},
    "cluster-granular-report": {...},
    "time-stamp": "Mon Jan 13 20:04:40 2020",
    "version": "9.1"
  }
}
```

Cumulative Report

<https://<license-server>/api/v1/license/report/cumulative-report>

```
{
  "cumulative-report": {
    "add-meeting-user-count": {
      "Year": [
        {
          "Month": [
            {
              "Date": [
                {
                  "Leased": "0",
                  "Maximum": "30",
                  "id": "06"
                }
              ]
            },
            {...},
            {...},
            {...},
            {...}
          ]
        }
      ]
    }
  }
}
```

```

        "Leased": "0",
        "Maximum": "30",
        "id": "Jan",
    }
    {...}
]
    "id": "2020"
}
    {...}
]
}
}

```

Granular Report

<https://<license-server>/api/v1/license/report/granular-report>

```

{
  "license-client": [
    {
      "add-user-count": {
        "Year": [
          {
            "Month": [
              {
                "Date": [
                  {...},
                  {...},
                  {...},
                  {...}
                ]
                "Leased": "0",
                "Maximum": "0",
                "id": "Jan"
              }
            ],
            "id": "2020"
          }
        ],
        "name": "PSA_V_10_209_125_101",
        "software-version": "7.4"
      },
      {...}
    }
  ]
}

```

Cluster Granular Report

<https://<license-server>/api/v1/license/report/cluster-granular-report>

```

{
  "add-user-count": {
    "Year": [

```

```

    {
      "Month": [
        {
          "Date": [
            {
              "Leased": "40",
              "Maximum": "21",
              "client-node": "node631c,node661c",
              "id": "24"
            },
            {
              "Leased": "40",
              "Maximum": "1",
              "client-node": "node631c,node661c",
              "id": "25"
            },
            {
              "Leased": "40",
              "Maximum": "1",
              "client-node": "node631c,node661c",
              "id": "26"
            }
          ],
          "Leased": "40",
          "Maximum": "21",
          "id": "Feb"
        }
      ],
      "id": "2020"
    }
  ],
  "cluster-name": "liccluster"
}

```

The following extensions of the API are supported:

1. /api/v1/license/report - entire license report in JSON
2. /api/v1/license/report/cumulative-report - The cumulative report.
 - Following trace-down options available here
 - i. /api/v1/license/report/cumulative-report/<license-feature-type>
 - ii. /api/v1/license/report/cumulative-report/<license-feature-type>/<year>
 - iii. /api/v1/license/report/cumulative-report/<license-feature-type>/<year>/<month>
 - iv. /api/v1/license/report/cumulative-report/<license-feature-type>/<year>/<month>/<day>
3. /api/v1/license/report/granular-report - License usage report per license client.
 - Following trace-down options available here
 - i. /api/v1/license/report/granular-report/<license-client>
 - ii. /api/v1/license/report/granular-report/<license-client>/<add-user-count>

- iii. /api/v1/license/report/granular-report/<license-client>/<add-user-count>/<year>
- iv. /api/v1/license/report/granular-report/<license-client>/<add-user-count>/<year>/<month>
- v. /api/v1/license/report/granular-report/<license-client>/<add-user-count>/<year>/<month>/<day>

Example:

API - /api/v1/license/report/granular-report/node63lc/add-user-count/2020/Mar/20

```
{
  "Leased": 40,
  "Maximum": 14,
  "id": "20"
}
```

4. /api/v1/license/report/cluster-granular-report - License usage report per license client cluster.

- Following trace-down options available here

- i. /api/v1/license/report/cluster-granular-report/<license-client>
- ii. /api/v1/license/report/cluster-granular-report/<license-client>/<add-user-count>
- iii. /api/v1/license/report/cluster-granular-report/<license-client>/<add-user-count>/<year>
- iv. /api/v1/license/report/cluster-granular-report/<license-client>/<add-user-count>/<year>/<month>
- v. /api/v1/license/report/cluster-granular-report/<license-client>/<add-user-count>/<year>/<month>/<day>

Example:

API - /api/v1/license/report/cluster-granular-report/liccluster/add-user-count/2020/Mar/22

```
{
  "Leased": 40,
  "Maximum": 16,
  "cluster-member": [
    "node63lc",
    "node66lc"
  ],
  "id": "22"
}
```

Enabling/Disabling ICE License

Enabling ICE License

Content of ice_enable.json file:

```
more ice_enable.json
{
  "mode": "enabled"
}
```

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/license/ice -X PUT -H
"Content-Type: application/json" -d @ice_enable.json
```

Example:

```
curl -k -u TVGJ9xV9XvuA1JDB1nPkJC5BilAQAhUMn2dPHLZgP/o=:
https://10.209.125.4/api/v1/license/ice -X PUT -H "Content-Type:
application/json" -d @ice_enable.json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "ICE license is enabled"
      }
    ]
  }
}
```

Disabling ICE License

Content of ice_disable.json file:

```
more ice_disable.json
{
  "mode" : "disabled"
}
```

REQUEST

```
curl -k -u TVGJ9xV9XvuA1JDB1nPkJC5BilAQAhUMn2dPHLZgP/o=:
https://10.209.125.4/api/v1/license/ice -X PUT -H "Content-Type:
application/json" -d @ice_disable.json
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "ICE license is disabled"
      }
    ]
  }
}
```



```

    }
  ]
}
}

```

Getting the Current Status of ICE License

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/license/ice
```

Example:

```
curl -k -u TVGJ9xV9XvuA1JDB1nPkJC5BilAQAhUMn2dPHLZgP/o=:
https://10.209.125.4/api/v1/license/ice
```

RESPONSE

ICE License Enabled

HTTP/1.1 200 OK

Content-Type: application/json

```
{
  "mode": "enabled"
}
```

ICE License Disabled

HTTP/1.1 200 OK

Content-Type: application/json

```
{
  "mode": "disabled"
}
```

Exporting TOTP Users from One Device to Another Device

REQUEST

```
curl -k -u <api-key>: https://pcs-ip>/api/v1/totp/<TOTP-AUTH-SERVER-NAME>/users
```

NOTE: This API can be executed only on TOTP server configured as Local (and not Remote).

Example:

```
curl -k -u X103oczUMJbhI8ba30v0McD54QCwBgwpSHwOGUVu5Ck=:
https://10.209.115.20/api/v1/totp/Google%20TOTP%20Auth%20Server/users
```

RESPONSE

HTTP/1.1 200 OK

Content-Length: 191

Content-Type: application/json

```
{
  "users":
  "21ubWxSvAwABAAAAlx9igwcQok9s+MV0zg/b+oer3z7Kj0iXbVzJ+qDMiguTtWZaxnGHGTGQE
cHD7BTMGjz1QYb00zBF+6DGp2y/9pj+8Wf4SXTQbYIeDomT4w2Kl4oc1EZhFruWLWn1l+58x2
```

```
b0kxsURCb+P0It8K+msqFXBhOEDY7l0W4+P+A8UZaz6In/gMq8Qd766i7RN1oZ+hzHUMYJUB72
tzIQ+CiA8tTv6aweC6TGy9/a9C6vVbLY0+ZUgGTffWzJxcoZbEbdwiCFoZyex5UWTUFIj0Z4XA
PoZ4HTWZsxp5YwXcJpsnbOzCqW/dTB6WpYWYp6R+MUN2yu/hZeu7z1qVhXlr8bK5LifH/u6J76
SpErL1eELh1bYF17DWPfo6xspG7rffhs2k9vPVB1oq2kud+42hPo6vZaMfcwaz9lKRrftIgaU2
o3JBjfdNhrUTou2+Y6Qmc0in6MfIBNNrVr9D6hdWmIdrNr7PXHa4uJoP+CAuOp3OamTox2sgmv
E7YNjC0S1SPgyFfx0kfzCb2K3Mrcq1UuJUJLhK7L3lne4f1QiWkoZ8q8zluaV+eRSJHBez9Pjo
+LzBpYwoXStduOC20FVY4+KCHDasufdAOCD/Lga4mFFE5ItAuil8ObOfRtxLvoZUIuGS8w019m
bRaNd1Va52sUzuZBClqx+4lueBCQYEUNrDrHVG0AzqUBbAeL+WV8VRJrxVW8sIlArqY8n29pD6
6BozsGKoxBqXSe/fZxEdu9ZqI4xfzSCCsfgTiv0LAM4p+cZekhcjvRwtuImNjX+qj7A=="
```

```
}
```

Importing TOTP Users from One Device to Another Device

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/totp/<TOTP-AUTH-SERVER-NAME>/users -H
"Content-Type: application/json" -d @totp_users.json -X POST
```

NOTE: This API can be executed only on TOTP server configured as Local (and not Remote).

Example:

```
curl -k -u K7Z7xA54AKnv1++kcViamCCiUrEBgMSP+sHKar4EcKY=:
https://10.209.125.4/api/v1/totp/TOTP_SERVER/users -H "Content-Type:
application/json" -d @totp_users.json -X POST
```

```
{
  "users":
  "21ubWxSvAwABAAAAlx9igwcQok9s+MV0zg/b+oer3z7Kj0iXbVzJ+qDMiguTtWZaxnGHGTGQE
cHD7BTMGjz1QYb000zBF+6DGp2y/9pj+8Wf4SXTQbYIeDomT4w2Kl4oc1EZhfFruWLWnl1+58x2
b0kxsURCb+P0It8K+msqFXBhOEDY7l0W4+P+A8UZaz6In/gMq8Qd766i7RN1oZ+hzHUMYJUB72
tzIQ+CiA8tTv6aweC6TGy9/a9C6vVbLY0+ZUgGTffWzJxcoZbEbdwiCFoZyex5UWTUFIj0Z4XA
PoZ4HTWZsxp5YwXcJpsnbOzCqW/dTB6WpYWYp6R+MUN2yu/hZeu7z1qVhXlr8bK5LifH/u6J76
SpErL1eELh1bYF17DWPfo6xspG7rffhs2k9vPVB1oq2kud+42hPo6vZaMfcwaz9lKRrftIgaU2
o3JBjfdNhrUTou2+Y6Qmc0in6MfIBNNrVr9D6hdWmIdrNr7PXHa4uJoP+CAuOp3OamTox2sgmv
E7YNjC0S1SPgyFfx0kfzCb2K3Mrcq1UuJUJLhK7L3lne4f1QiWkoZ8q8zluaV+eRSJHBez9Pjo
+LzBpYwoXStduOC20FVY4+KCHDasufdAOCD/Lga4mFFE5ItAuil8ObOfRtxLvoZUIuGS8w019m
bRaNd1Va52sUzuZBClqx+4lueBCQYEUNrDrHVG0AzqUBbAeL+WV8VRJrxVW8sIlArqY8n29pD6
6BozsGKoxBqXSe/fZxEdu9ZqI4xfzSCCsfgTiv0LAM4p+cZekhcjvRwtuImNjX+qj7A=="
}
```

RESPONSE

```
HTTP/1.1 200 OK
content-length →47
Content-Type: application/json
{
  "message" => 'Successfully imported user data'
}
```

Resetting TOTP User

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/totp/<TOTP-AUTH-SERVER-
NAME>/users/<totp-user>?operation=reset -X PUT
```

Example:

```
curl -k -u nNuALLLWajGujVF2yT4qyP4nYxy/nwXxBKp0CHu2AZQ=:
https://3.3.125.4/api/v1/totp/TOTP_SERVER/users/qauser1001?operation=reset
-X PUT
```

RESPONSE**Scenario: TOTP user reset**

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json
```

```
{
  "result": {
    "info": [
      {
        "message": "TOTP user 'qauser1001' under Authserver
'TOTP_SERVER' has been reset"
      }
    ]
  }
}
```

Scenario: TOTP user does not exist

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json
```

```
{
  "result": {
    "errors": [
      {
        "message": "TOTP user 'qauser1001' is not present under
Authserver 'TOTP_SERVER'"
      }
    ]
  }
}
```

Unlocking TOTP User

REQUEST

```
curl -k -u <api-key>: https://<pcs-ip>/api/v1/totp/<TOTP-AUTH-SERVER-
NAME>/users/<totp-user>?operation=unlock -X PUT
```

Example:

```
curl -k -u nNuALLLWajGujVF2yT4qyP4nYxy/nwXxBKp0CHu2AZQ=:
https://3.3.125.4/api/v1/totp/TOTP_SERVER/users/qauser1001?operation=unlock
-X PUT
```

RESPONSE**Scenario: TOTP user unlocked**

```
HTTP/1.1 200 OK
```

```
Content-Type: application/json
```

```
{
```

```

"result": {
  "info": [
    {
      "message": "TOTP user 'qauser1001' under Authserver
'TOTP_SERVER' has been unlocked"
    }
  ]
}

```

Scenario: TOTP user cannot be unlocked

HTTP/1.1 200 OK

Content-Type: application/json

```

{
  "result": {
    "errors": [
      {
        "message": "Error: Only locked users can be unlocked"
      }
    ]
  }
}

```

Sample Error Responses

400 BAD REQUEST

REQUEST

PUT /api/v1/configuration/users/user-realms/realm/testRealm/role-mapping-rules/rule/rule1 HTTP/1.1

Host: 10.209.112.106

Authorization: Basic

Y1VPZE1XZ1ZubVEvVnIrcWwrd3lJY3F0Y05WTGhDVkx1M0wrck5YR3hzVT06

Content-Type: application/json

```

{
  "name": "rule1",
  "roles": [
    "Users"
  ],
  "stop-rules-processing": "false",
  "user-name": {
    "test": "is",

```

```

    "user-names": [
        "*"
    ]
}
}

```

RESPONSE

HTTP/1.1 400 BAD REQUEST

content-length: 92

content-type: application/json

```

{
  "message": "The browser (or proxy) sent a request that this server
could not understand."
}

```

Solution: Invalid JSON body content in Request. Please check if JSON is valid.

REQUEST

PUT /api/v1/configuration/users/user-roles/user-role/rest-userrole-1
HTTP/1.1

Host: 10.209.113.88

Authorization: Basic

MVhDbDJTSUhkV3ZjUkd6WXM1T1V3MU5wbHNmemJPbTJxSHI2NVZCdXp5bz06

```

{
  "name": "rest-userrole-1",
  "web": {
    "web-bookmarks": {
      "bookmark": [
        {
          "auto-allow": "disable",
          "description": "",
          "name": "web-bm-1",
          "new-window": "false",
          "no-address-bar": "false",
          "no-tool-bar": "false",
          "parent": "--none--",
          "standard": {

```

```

        "url": "http://www.yahoo.com"
      }
    }
  ],
},
"web-options": {
  "browsing-untrusted-sslsites": "true",
  "flash-content": "false",
  "hpxproxy-connection-timeout": "1800",
  "http-connection-timeout": "240",
  "java-applets": "true",
  "mask-hostname": "false",
  "persistent-cookies": "false",
  "rewrite-file-urls": "false",
  "rewrite-links-pdf": "false",
  "unrewritten-page-newwindow": "false",
  "user-add-bookmarks": "false",
  "user-enter-url": "false",
  "users-bypass-warnings": "false",
  "warn-certificate-issues": "true",
  "websocket-connection-timeout": "900"
}
}
}

```

RESPONSE

HTTP/1.1 400 BAD REQUEST

Content-Length: 99

Content-Type: application/json

```

{
  "result": {
    "errors": [
      {
        "message": "Accepts only JSON."
      }
    ]
  }
}

```

```

        }
    ]
}
}

```

Note: Include the “Content-Type” header in the request with a value “application/json” as used in the examples above.

403 Forbidden

REQUEST

```

GET /api/v1/auth HTTP/1.1
Host: 10.209.112.106
Authorization: Basic YWRtaW5kYjpkYW5hMTIz
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 403 Forbidden
cache-control: no-store
connection: Keep-Alive
content-type: text/html; charset=utf-8
expires:-1
keep-alive: timeout=15
strict-transport-security max-age=31536000
transfer-encoding: chunked

```

Solutions:

1. Make sure admin user used for authentication has "Allow access to REST APIs" option enabled from admin UI
2. Admin Username and Password passed in Authorization header are correct
3. If api_key is available, use api_key value as username and password as empty in authorization header

404 NOT FOUND

REQUEST

```

GET /api/v1/configuration/users/user-realms/realm/testRealm/role-
mapping-rules/rule HTTP/1.1

```

```

Host: 10.209.112.106

Authorization: Basic
Y1VPZE1XZ1ZubVEvVnIrcWwrd3lJY3F0Y05WTGhDVkx1M0wrdk5YR3hzVT06

RESPONSE

HTTP/1.1 404 NOT FOUND

content-length: 213

content-type: application/json

{
  "result": {
    "errors": [
      {
        "message": "Invalid resource path; use \"users/user-
realms/realms/testRealm/role-mapping-rules/rule/<resource-id>\" to access
a specific resource"
      }
    ]
  }
}

```

Solution: Resource-id should be passed in Resource path as shown in example below.

```

REQUEST

GET /api/v1/configuration/users/user-realms/realms/testRealm/role-
mapping-rules/rule/rule1 HTTP/1.1

Host: 10.209.112.106

Authorization: Basic
Y1VPZE1XZ1ZubVEvVnIrcWwrd3lJY3F0Y05WTGhDVkx1M0wrdk5YR3hzVT06

RESPONSE

HTTP/1.1 200 OK

content-length: 167

content-type: application/json

{
  "name": "rule1",
  "roles": [
    "Users"
  ],

```



```

"stop-rules-processing": "false",
"user-name": {
  "test": "is",
  "user-names": [
    "*"
  ]
}
}

```

Solution: Invalid JSON body content in Request. Please check if JSON is valid.

422 UNPROCESSABLE ENTITY

REQUEST

```
POST /api/v1/configuration/users/user-realms/realm/testRealm/role-
mapping-rules/rule/ HTTP/1.1
```

```
Host: 10.209.112.106
```

```
Authorization: Basic
```

```
Y1VPZE1XZ1ZubVEvVnIrcWwrd3lJY3F0Y05WTGhDVkx1M0wrkd5YR3hzVT06
```

```
Content-Type: application/json
```

```

{
  "name": "rule2",
  "roles": [
    "Users",
    "testRole1"
  ],
  "stop-rules-processing": "false",
  "user-name": {
    "test": "is",
    "user-names": [
      "user1"
    ]
  }
}

```

RESPONSE

```
HTTP/1.1 422 UNPROCESSABLE ENTITY
```

```
content-length: 368
content-type: application/json
{
  "result": {
    "errors": [
      {
        "message": "[/users/user-
realms/realm[name=testRealm]/role-mapping-rules/rule[name=rule2]/roles]
Invalid reference: no 'User Roles' object found with identifier
'testRole1'."
      },
      {
        "message": "Failed to resolve path references"
      },
      {
        "message": "Commit failed"
      }
    ]
  }
}
```

Solution: Make sure to have all the referenced resources are created first using POST call and then repeat.

Limitations

1. Configuration of large data objects is not qualified- ESAP, Pulse Client package, Custom Sign-in page, applets, and so on.
2. Resource names similar to resource tags e.g. vlans, roles, etc. should be avoided while creating new resources.

PPS-Specific Configurations Using REST APIs

- [Creating the HC Policy](#)
- [Deleting the HC Policy](#)
- [Creating the Infranet Enforcer](#)
- [Deleting the Infranet Enforcer](#)
- [Creating a Resource Policy](#)
- [Deleting a Resource Policy](#)
- [Creating a RADIUS Client](#)
- [Deleting a RADIUS Client](#)
- [Creating a RADIUS Attribute Policy](#)
- [Deleting a RADIUS Attribute Policy](#)
- [Creating SNMP Device](#)
- [Deleting SNMP Device](#)
- [Creating SNMP Policy](#)
- [Deleting SNMP Policy](#)
- [Creating Device Group - TACACS+](#)
- [Deleting Device Group- TACACS+](#)
- [Creating TACACS+ Client](#)
- [Deleting TACACS+ Client](#)
- [Creating Shell Policies](#)
- [Deleting Shell Policies](#)
- [Creating Admission Control Client](#)
- [Deleting Admission Control Client](#)
- [Creating Admission Control Policy](#)
- [Deleting Admission Control Policy](#)
- [Getting Authentication API Key](#)
- [Pulse Policy Secure Alert Based Admission Control APIs](#)
- [Profiler REST APIs](#)

Creating the HC Policy

REQUEST

```

POST api/v1/configuration/authentication/endpoint/host-
checker/policies/policy HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVlk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "policy-name": "HC",
  "regular": {
    "platforms": {
      "chromeos": {
        "dashboard": {
          "consider-for-reporting": "true"
        },
        "remediation": {
          "custom-instructions": "",
          "enable-custom-instructions": "false",
          "send-reason-strings": "true"
        }
      },
      "windows": {
        "dashboard": {
          "consider-for-reporting": "true"
        },
        "remediation": {
          "custom-instructions": "",
          "delete-files": "false",
          "enable-custom-instructions": "false",
          "files": null,
          "kill-processes": "false",
          "processes": null,
          "send-reason-strings": "true"
        },
        "rule-expression": {
          "custom-expression": "",
          "requirement": "all"
        },
        "rules": {
          "advancedRule": [],
          "firewall-rules": {
            "firewall-rule": [
              {
                "needs-monitoring": "false",
                "product-list": null,
                "product-selection-option":
"specific",
                "rule-name": "rule1",
                "select-specific-product": "false",
                "select-specific-vendor": "true",
                "selected-product-list": {
                  "product-info": [
                    {
                      "product-name":
"Windows Firewall (10.x)",
                      "turn-on-firewall":
"true"
                    }
                  ]
                }
              }
            ]
          }
        }
      }
    }
  }
}

```


Creating the Infranet Enforcer

REQUEST

```
POST api/v1/configuration/uac/infranet-
enforcer/connections/infranet-enforcer HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "idp-for-local-sessions-only": "true",
  "junos": {
    "location-group": "- No 802.1X -",
    "password-encrypted":
"3u+UR6n8AgABAAAAofSnIBrU19vdwUslG5LG4cg1QH6CbXDSmY4ZW0x85HY="
  },
  "name": "SRX",
  "serial-number": [
    "ABCNWPWFS"
  ],
  "severity-filter": "medium",
  "use-idp": "false"
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Deleting the Infranet Enforcer

REQUEST

```
DELETE api/v1/configuration/uac/infranet-
enforcer/connections/infranet-enforcer/SRX HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating a Resource Policy

REQUEST

```
POST api/v1/configuration/uac/infranet-enforcer/resource-access-
policies/resource-access-policy/ HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "action": "allow-access",
  "apply": "all-roles",
  "apply-ie-options": "all-options",
  "deny-message": "",
  "description": "",
  "ie-options": [],
  "infranet-enforcer": [
    "(all)"
  ],
  "name": "Resource Policy",
  "resources": [
    "10.25.15.0/24:*"
  ],
  "roles": null,
  "vsys": ""
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Deleting a Resource Policy

REQUEST

```
DELETE api/v1/configuration/uac/infranet-enforcer/resource-access-
policies/resource-access-policy/Resource%20Policy HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating a RADIUS Client

REQUEST

```
POST /api/v1/configuration/uac/network-access/radius-clients/radius-
client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "coa-support": "false",
  "description": "",
  "disconnect-support": "true",
  "dynamic-auth-port": "3799",
  "enable": "true",
  "gatewayid": "",
  "ip-address": "10.204.88.12",
  "ip-address-range": "1",
  "kek-encrypted": "",
  "key-wrap-format": "HEX",
  "key-wrap-support": "false",
  "location-group": "Default",
  "mack-encrypted": "",
  "make-model": "Ruckus Wireless",
  "name": "Ruckus",
  "ruckus-certificate-verification": "false",
  "ruckus-password-encrypted": "",
  "shared-secret-encrypted":
"3u+UR6n8AgABAAAofSnIBrU19vdwUslG5LG4cg1QH6CbXDSmY4ZW0x85HY="
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

Deleting a RADIUS Client

REQUEST

```
Delete /api/v1/configuration/uac/network-access/radius-clients/radius-
client/Ruckus HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```


Creating a RADIUS Attribute Policy

REQUEST

```
POST /api/v1/configuration/uac/network-access/radius-attribute/radius-attributes-policies/radius-attribute-policy HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "apply": "all",
  "description": "",
  "location-group": [
    "Guest"
  ],
  "name": "Return Attribute policy",
  "network-interface": "automatic",
  "open-port": "false",
  "return-attribute-flag": "false",
  "return-attributes": {
    "return-attribute": []
  },
  "roles": null,
  "send-session-timeout-by-default": "false",
  "send-termination-action-by-default": "false",
  "vlan": "65",
  "vlan-check": "true"
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}
```

Deleting a RADIUS Attribute Policy

REQUEST

```
DELETE /api/v1/configuration/uac/network-access/radius-attribute/radius-attributes-policies/radius-attribute-policy/Return%20Attribute%20policy/HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
```

```
Content-Length: 0
Content-Type: application/json
```

Creating SNMP Device

REQUEST

```
POST /api/v1/configuration/uac/snmpEnforcement/clients/client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "default-vlan": "0",
  "description": "",
  "enable": "true",
  "ip-address": "10.204.88.12",
  "location-group": "none",
  "model": "Ruckus Wireless",
  "name": "ruckus",
  "read-auth-password-encrypted": "",
  "read-auth-protocol": "md5",
  "read-priv-password-encrypted": "",
  "read-priv-protocol": "",
  "read-security-level": "auth",
  "read-username": "public",
  "snmp-enforcement": "false",
  "snmp-version": "V2",
  "ssh-passphrase-encrypted": "",
  "ssh-port-number": "22",
  "ssh-private-key-encrypted": "",
  "ssh-user-name": "",
  "ssh-user-password-encrypted": "",
  "sys-contact": "https://support.ruckuswireless.com/contact_us",
  "sys-description": "Ruckus Wireless ZD1200",
  "sys-location": "350 West Java Dr. Sunnyvale, CA 94089 US",
  "sys-name": "ruckus",
  "trap-auth-password-encrypted": "",
  "trap-auth-protocol": "md5",
  "trap-priv-password-encrypted": "",
  "trap-priv-protocol": "",
  "trap-security-level": "auth",
  "trap-username": "public",
  "use-samecredential": "true",
  "write-auth-password-encrypted": "",
  "write-auth-protocol": "md5",
  "write-priv-password-encrypted": "",
  "write-priv-protocol": "",
  "write-security-level": "auth",
  "write-username": "public"
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
```

```
error!"
    }
  ]
}
}
```

Deleting SNMP Device

REQUEST

```
DELETE
/api/v1/configuration/uac/snmpEnforcement/clients/client/ruckus/HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating SNMP Policy

REQUEST

```
POST /api/v1/configuration/uac/snmpEnforcement/snmpPolicies/policy
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

```
{
  "apply-to-roles": "selected",
  "description": "",
  "location-group": "Guest Wired",
  "name": "SNMP policy",
  "roles": [
    "Guest Wired Restricted"
  ],
  "vlan": "65"
}
```

RESPONSE

```
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or
error!"
      }
    ]
  }
}
```

}

Deleting SNMP Policy

REQUEST

```
DELETE
/api/v1/configuration/uac/snmpEnforcement/snmpPolicies/policy/SNMP%20policy
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating Device Group - TACACS+

REQUEST

```
POST /api/v1/configuration/uac/networkDeviceAdministration/groups/group/
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

```
{
  "admin-realm": "Admin Users",
  "description": "",
  "name": "Device Group"
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}
```

Deleting Device Group- TACACS+

REQUEST

```
DELETE
/api/v1/configuration/uac/networkDeviceAdministration/groups/group/Device%20Group
HTTP/1.1
Host xx.xx.xx.xx
```

```
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating TACACS+ Client

REQUEST

```
POST api/v1/configuration/uac/networkDeviceAdministration/clients/client
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

```
{
  "description": "",
  "deviceGroup": "Device Group",
  "enable": "true",
  "ipAddress": "10.204.88.244",
  "ipAddressRange": "1",
  "name": "TACACS client",
  "shared-secret-encrypted":
  "3u+UR6n8AgABAAAofSnIBrU19vdwUslG5LG4cg1QH6CbXDSmY4ZW0x85HY="
}
```

RESPONSE

```
{
  "result": {
    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}
```

Deleting TACACS+ Client

REQUEST

```
DELETE
/api/v1/configuration/uac/networkDeviceAdministration/clients/client/TACACS
%20client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

Creating Shell Policies

REQUEST

```
POST /api/v1/configuration/uac/networkDeviceAdministration/policies/policy
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "apply-action": "deny",
  "apply-groups": "all",
  "apply-roles": "all",
  "commandSets": {
    "command-set": []
  },
  "defaultPrivilege": "1",
  "description": "",
  "groups": null,
  "maxPrivilege": "1",
  "name": "TACACS policy",
  "roles": null
}
```

RESPONSE

```
{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}
```

Deleting Shell Policies

REQUEST

```
DELETE
/api/v1/configuration/uac/networkDeviceAdministration/policies/policy/TACACS%20policy
HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
```

RESPONSE

```
HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json
```

RESPONSE

```
{
  "result": {
```

```

    "warnings": [
      {
        "message": "The configuration has been implicitly changed"
      }
    ]
  }
}

```

Creating Admission Control Client

REQUEST

```

POST /api/v1/configuration/uac/admissionControl/clients/client HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVks5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "description": "",
  "enable": "true",
  "ipAddress": "10.204.88.12",
  "name": "FORTINET",
  "templateID": "fortigate-text.itmpl"
}

```

RESPONSE

```

{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}

```

Deleting Admission Control Client

REQUEST

```

DELETE /api/v1/configuration/uac/admissionControl/clients/client/FORTINET HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVks5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json

```

Creating Admission Control Policy

REQUEST

```

POST /api/v1/configuration/uac/admissionControl/policies/policy/ HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "action": "ignore",
  "apply": "selected",
  "count": "1",
  "event": "utm:ips",
  "name": "policy1",
  "replacementRole": null,
  "replacementType": "Permanent",
  "roles": null,
  "severity": "critical",
  "templateID": "fortigate-text.itmpl"
}

```

RESPONSE

```

{
  "result": {
    "info": [
      {
        "message": "Operation succeeded without warning or error!"
      }
    ]
  }
}

```

Deleting Admission Control Policy

REQUEST

```

DELETE /api/v1/configuration/uac/admissionControl/policies/policy/policy1 HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic
VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json

```

RESPONSE

```

HTTP/1.1 204 NO CONTENT
Content-Length: 0
Content-Type: application/json

```

Getting Authentication API Key

REQUEST

```
GET <PPS-IP Address>/api/v1/auth
```

RESPONSE

```
"api_key": "NAIq3DNqOh7aDTsXJbZRuo4b+tILb1vpf5sasdasdfao="
```

REQUEST

```
GET <PPS-IP Address>/api/v1/auth/profiler/auth
```

RESPONSE

```
"api_key": "NAIq3DNqOh7aDTsXJbZRuo4b+tILb1vpf5sasdasdfao="
```


Pulse Policy Secure Alert Based Admission Control APIs

Checking Status of PPS Server

REQUEST

```
GET <PPS-IP Address>/api/v1/integration/status
```

RESPONSE

```
{"message": "API server is up"}
```

Getting Session Details for Endpoint Based on IP Address

REQUEST

```
GET <PPS-IP Address>/api/v1/integration/sessions/<endpoint-IP Address>
```

RESPONSE

```
{
  "data": [
    {
      "ip": "10.xxx.xx.xx",
      "macaddr": "00-56-65-bf-0b-cx",
      "switch_ip": "",
      "switch_port": "",
      "username": "user1"
    }
  ]
}
```

Note: This sample response is for Juniper SDSN.

Getting Session Details for Endpoint Based on MAC Address

REQUEST

```
GET <PPS-IP Address>/api/v1/integration/sessions/<endpoint-MAC Address>
```

RESPONSE

```
{
  "data": [
    {
      "macaddr": "00-56-65-bf-0b-cx",
      "switch_ip": "",
      "switch_port": ""
    }
  ]
}
```

Sending Alert Event to PPS

REQUEST

```
PUT /api/v1/integration/sessions
```

For example:

Sample PUT request Payload for Juniper SDSN is {"event-name":"block-endpoint", "srcip":"10.xxx.xx.xxx"}.

Note: The event-names and field to parse the source-IP from the event should be

defined in the admission control template.

RESPONSE

HTTP/1.1 204 NO CONTENT

Profiler REST APIs

Approving Devices

REQUEST

```
PUT api/v1/profiler/endpoints/simplified/xx:xx:xx:xx:xx:xx HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "status": "approved"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "Successfully updated."
}
```

Updating Device Attributes

REQUEST

```
PUT api/v1/profiler/endpoints/simplified/xx:xx:xx:xx:xx:xx HTTP/1.1
Host xx.xx.xx.xx
Authorization: Basic VU9qSTlGTzNrYVk5d0t2aXpBN1dPZ0FyZlN1S3FmTkNnQUh0R0ZuR0xSbz06
Content-Type: application/json
{
  "manufacturer": "Windows",
  "os": "Windows"
}
```

RESPONSE

```
HTTP/1.1 200 OK
Content-Type: application/json
{
  "Successfully updated."
}
```