

Nauge API Rest Call Guide

Jinghan Guan
joy20130@gmail.com

- Authenticate

1. Get API key

Note: the authorization code is base64 encoding of “username: password”, which in the following case is base64 encoding of “csproot: telus123”, and we get “Y3Nwcm9vdDp0ZWx1czEyMw==”.

URL & Request type	GET https://209.91.90.135:8443/nuage/api/v3_2/me
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDp0ZWx1czEyMw==
Values	
response	<pre> 200 OK { "firstName": "csproot" "lastName": "csproot" "userName": "csproot" "email": "csproot@CSP.com" "mobileNumber": null "password": null "role": "CSPROOT" "enterpriseName": "CSP" "avatarType": null "avatarData": null "licenseCapabilities": "ENCRYPTION_ENABLED" "entityScope": null "externalId": null "ID": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "APIKey": "8ef7dcfc-1100-49d4-9ad9-37ac1860fc32" "APIKeyExpiry": 1456245344728 "enterpriseID": "76046673-d0ea-4a67-b6af-2829952f0812" "externalID": null }</pre>

2. Use the API key to authenticate and get the list of enterprises

Note: the authorization code is base64 encoding of "username: API key", which in the following example is base64 encoding of "csproot:8ef7dcfc-1100-49d4-9ad9-37ac1860fc32", and we get "Y3Nwcm9vdDogOGVmN2RjZmMtMTEwMC00OWQ0LTlhZDktMzdhYzE4NjBmYzMyDQo=".

URL & Request Type	GET https://209.91.90.135:8443/nuage/api/v3_2/enterprises/
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDogOGVmN2RjZmMtMTEwMC00OWQ0LTlhZDktMzdhYzE4NjBmYzMyDQo=
Values	
response	<pre>200: OK { "children": null "parentType": null "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456165943000 "creationDate": 1456165943000 "name": "NewOrg1" "description": null "avatarType": null "avatarData": null "floatingIPsQuota": 16 "floatingIPsUsed": 0 "allowTrustedForwardingClass": false "allowAdvancedQOSConfiguration": false "allowedForwardingClasses": "H" "allowGatewayManagement": false "encryptionManagementMode": "DISABLED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a" "parentID": null "externalID": null "customerID": 10006 "DHCPLeaseInterval": 24 "enterpriseProfileID": "f1e5eb19-c67a-4651-90c1-3f84e23e1d36" "receiveMultiCastListID": "081169f6-cb2f-4c6e-8e94-b701224a5141" "sendMultiCastListID": "738446cc-026f-488f-9718-b13f4390857b" "associatedGroupKeyEncryptionProfileID": "c2c2773f-723c-</pre>

	<pre>4d8e-a266-b94e87b60507" "associatedEnterpriseSecurityID": "4d78f06a-9f06-405b-a0 d8-2add5aa9d07e" "associatedKeyServerMonitorID": "99f9720b-6be0-4582-9aac -7b5859808968" "LDAPEnabled": false "LDAPAuthorizationEnabled": false } { "children": null "parentType": null "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1453153607000 "creationDate": 1453153607000 "name": "org_grace" "description": "portal dev" "avatarType": null "avatarData": null "floatingIPsQuota": 16 "floatingIPsUsed": 0 "allowTrustedForwardingClass": false "allowAdvancedQOSConfiguration": false "allowedForwardingClasses": "H" "allowGatewayManagement": false "encryptionManagementMode": "DISABLED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "3338ae3e-2cf7-4c70-a3ca-873e0de95bb5" "parentID": null "externalID": null "customerID": 10005 "DHCPLeaseInterval": 24 "enterpriseProfileID": "f1e5eb19-c67a-4651-90c1-3f84e23e 1d36" "receiveMultiCastListID": "081169f6-cb2f-4c6e-8e94-b7012 24a5141" "sendMultiCastListID": "738446cc-026f-488f-9718-b13f4390 857b" "associatedGroupKeyEncryptionProfileID": "3b88afee-bf57- 4667-b4d8-cfa7a70b9e56" "associatedEnterpriseSecurityID": "99b7f491-4da9-459c-ab d1-41905b2498eb" "associatedKeyServerMonitorID": "b493b3dc-3feb-427c-8cae -5e8398cf48ef"</pre>
--	---

	<pre>"LDAPEnabled": false "LDAPAuthorizationEnabled": false } { "children": null "parentType": null "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1450929151000 "creationDate": 1450929151000 "name": "org_ml" "description": null "avatarType": null "avatarData": null "floatingIPsQuota": 100 "floatingIPsUsed": 0 "allowTrustedForwardingClass": true "allowAdvancedQOSConfiguration": true "allowedForwardingClasses": "A" "B" "C" "D""E" "F""G" "H" "allowGatewayManagement": false "encryptionManagementMode": "DISABLED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "14582b65-f8fe-4a5a-884d-2893a8e88650" "parentID": null "externalID": null "customerID": 10004 "DHCPLeaseInterval": 24 "enterpriseProfileID": "d2072ea2-e14b-4b2d-b478-a1ba97c1 56d9" "receiveMultiCastListID": "6082bfcb-9a43-47eb-96d3-a4f6b af67f63" "sendMultiCastListID": "c76f3503-57d6-4126-a40a-853f85c4 900e" "associatedGroupKeyEncryptionProfileID": "ed28bb98-82b6- 49d4-8b11-23d7ff4ca4a8" "associatedEnterpriseSecurityID": "59dffa38-2445-4618-9c da-51efbcba9b9e" "associatedKeyServerMonitorID": "b8b55d6f-942a-4316-8cf1 -bd0c3508a4fe" "LDAPEnabled": false "LDAPAuthorizationEnabled": false }</pre>
--	--

- Add new enterprises
 1. Authenticate and get the API key
 2. Create enterprises

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	<pre>{ "allowAdvancedQOSConfiguration": false, "allowGatewayManagement": false, "allowTrustedForwardingClass": null, "allowedForwardingClasses": null, "associatedEnterpriseSecurityID": null, "associatedGroupKeyEncryptionProfileID": null, "associatedKeyServerMonitorID": null, "avatarData": null, "avatarType": null, "customerID": null, "description" : null, "DHCPLeaseInterval": null, "enterpriseProfileID": null, "floatingIPsQuota": null, "floatingIPsUsed": null, "LDAPAuthorizationEnabled": false, "LDAPEnabled": false, "name" : "NewOrg1", "receiveMultiCastListID" : null, "sendMultiCastListID" : null }</pre>
response	201: Created <pre>{ "children": null "parentType": null "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456165943100 "creationDate": 1456165943100 "name": "NewOrg1" "description": null "avatarType": null "avatarData": null }</pre>

	<pre>"floatingIPsQuota": 16 "floatingIPsUsed": 0 "allowTrustedForwardingClass": false "allowAdvancedQOSConfiguration": false "allowedForwardingClasses": "H" "allowGatewayManagement": false "encryptionManagementMode": "DISABLED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a" "parentID": null "externalID": null "customerID": 10006 "DHCPLeaseInterval": 24 "enterpriseProfileID": "f1e5eb19-c67a-4651-90c1-3f84e23e1d36" " "receiveMultiCastListID": "081169f6-cb2f-4c6e-8e94-b701224a5141" "sendMultiCastListID": "738446cc-026f-488f-9718-b13f4390857b" " "associatedGroupKeyEncryptionProfileID": "c2c2773f-723c-4d8e-a266-b94e87b60507" "associatedEnterpriseSecurityID": "4d78f06a-9f06-405b-a0d8-2add5aa9d07e" "associatedKeyServerMonitorID": "99f9720b-6be0-4582-9aac-7b5859808968" "LDAPEnabled": false "LDAPAuthorizationEnabled": false }</pre>
--	--

- Create Domain Template
 1. Authenticate and get the API key
 2. Get enterprise ID
 3. Create domain template

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a/domaintemplates
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	{ "associatedMulticastChannelMapID" : null, "description" : "New Domain Template", "encryption" : "DISABLED", "multicast" : "DISABLED", "name" : "NewdomainTemplate", "policyChangeStatus" : null }
response	201: Created { "children": null "parentType": "enterprise" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456168382087 "creationDate": 1456168382087 "name": "NewdomainTemplate" "description": "New Domain Template" "policyChangeStatus": null "encryption": "DISABLED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "766594cc-a1c8-4c1b-b285-6f5fe8a1ff3b" "parentID": "f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a" "externalID": null "multicast": "DISABLED" "associatedMulticastChannelMapID": null }

- Add Domain
 1. Authenticate and get the API key
 2. Get enterprise ID and template ID from get enterprises and get domainTemplate request. Note that the template ID should be the same as the ID of domainTemplate
 3. Create domain

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a/domains
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	{ "maintenanceMode": "DISABLED", "templateID": "766594cc-a1c8-4c1b-b285-6f5fe8a1ff3b", "customerID": null, "serviceID": null, "routeTarget": null, "routeDistinguisher": null, "description": "Python Test3", "name": "NewDomain", "owner": null, "parentType": null, "parentID": null, "externalID": null, "ID": null }
response	201: Created { "children": null "parentType": "enterprise" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456169140671 "creationDate": 1456169140671 "routeDistinguisher": "65534:2462" "routeTarget": "65534:25613" "name": "NewDomain" "description": "Python Test3" "maintenanceMode": "DISABLED" "dhcpServerAddresses": null "underlayEnabled": "DISABLED" "applicationDeploymentPolicy": "NONE"

```
"policyChangeStatus": null
"backHaulRouteDistinguisher": "65534:19111"
"backHaulRouteTarget": "65534:34191"
"backHaulVNID": 152963
"importRouteTarget": "65534:25613"
"exportRouteTarget": "65534:25613"
"encryption": "DISABLED"
"owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e"
"ID": "44008b43-21af-47f9-b1f5-c6bd09e1fbca"
"parentID": "f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a"
"externalID": null
"serviceID": 20029
"customerID": 10006
"DHCPBehavior": "CONSUME"
"DHCPServerAddress": null
"secondaryDHCPServerAddress": null
"labelID": 9
"multicast": "DISABLED"
"PATEnabled": "DISABLED"
"associatedMulticastChannelMapID": null
"stretched": false
"tunnelType": "VXLAN"
"ECMPCount": 1
"templateID": "766594cc-a1c8-4c1b-b285-6f5fe8a1ff3b"
"uplinkPreference": "PRIMARY_SECONDARY"
"globalRoutingEnabled": false
"leakingEnabled": false
"permittedAction": null
}
```

- Add Zone
 1. Authenticate and get the API key
 2. Get enterprise ID and corresponding domain ID
 3. Add Zone

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/domains/44008b43-21af-47f9-b1f5-c6bd09e1fbca/zones
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	<pre>{ "maintenanceMode": "DISABLED", "templateID": null, "customerID": null, "serviceID": null, "routeTarget": null, "routeDistinguisher": null, "description": "API Test1", "name": "zone1", "owner": null, "parentType": null, "parentID": null, "externalID": null, "ID": null }</pre>
response	201: Created <pre>{ "children": null "parentType": "domain" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456169678348 "creationDate": 1456169678348 "address": null "netmask": null "name": "zone1" "description": "API Test1" "maintenanceMode": "DISABLED" "publicZone": false "encryption": "INHERITED" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "eb9c8f01-4e23-4fb3-a16b-62339aea4b2d" "parentID": "44008b43-21af-47f9-b1f5-c6bd09e1fbca" }</pre>

	<pre>"externalID": null "IPType": "IPV4" "numberOfHostsInSubnets": 0 "associatedApplicationObjectType": null "associatedApplicationObjectID": null "associatedApplicationID": null "templateID": null "policyGroupID": 12 "multicast": "INHERITED" "associatedMulticastChannelMapID": null }</pre>
--	--

- Add Subnets
 1. Authenticate and get the API key
 2. Get enterprise ID and corresponding domain ID, then get the zone ID
 3. Add Subnet

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/zones/eb9c8f01-4e23-4fb3-a16b-62339aea4b2d/subnets
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	{ "splitSubnet": null, "proxyARP": null, "netmask": "255.255.255.0", "name": "subnet1", "multicast": "INHERITED", "IPType": "IPV4", "gateway": "10.1.1.1", "description": null, "associatedMulticastChannelMapID": null, "address": "10.1.1.0", "parentType": null, "parentID": null, "owner": null, "ID": null, "externalID": null }
response	201: Created { "children": null "parentType": "zone" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456169931361 "creationDate": 1456169931361 "address": "10.1.1.0" "netmask": "255.255.255.0" "name": "subnet1" "gateway": "10.1.1.1" "description": null "maintenanceMode": "DISABLED" "routeDistinguisher": "65534:11382" "routeTarget": "65534:24144"

```
"vnId": 991047
"underlayEnabled": "INHERITED"
"splitSubnet": false
"encryption": "INHERITED"
"owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e"
"ID": "69173861-bfed-4036-b549-bc8ab027ff9f"
"parentID": "eb9c8f01-4e23-4fb3-a16b-62339aea4b2d"
"externalID": null
"IPType": "IPV4"
"serviceID": 20031
"associatedApplicationObjectType": null
"associatedApplicationObjectID": null
"associatedApplicationID": null
"gatewayMACAddress": "68:54:ED:00:00:01"
"PATEnabled": "INHERITED"
"policyGroupID": 12
"public": false
"templateID": null
"associatedSharedNetworkResourceID": null
"proxyARP": false
"multicast": "INHERITED"
"associatedMulticastChannelMapID": null
}
```

- Add Bridge Vports
 1. Authenticate and get the API key
 2. Get enterprise ID, then get corresponding domain ID, then get the zone ID, then get the subnet ID
 3. Get the NSG gateways of the enterprise

URL & Request type	GET https://209.91.90.135:8443/nuage/api/v3_2/enterprises/3338ae3e-2cf7-4c70-a3ca-873e0de95bb5/nsgateways
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDp0ZWx1czEyMw==
Values	
response	<pre> 200 OK0: { "children": null "parentType": "enterprise" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1453153758000 "creationDate": 1453153758000 "bootstrapStatus": "NOTIFICATION_APP_REQ_SENT" "personality": "NSG" "ports": null "pending": false "enterpriseID": "3338ae3e-2cf7-4c70-a3ca-873e0de95bb5" "name": "nsg1" "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "04d72557-6fff-400b-9643-0ec2dbba3f58" "parentID": "3338ae3e-2cf7-4c70-a3ca-873e0de95bb5" "externalID": null "bootstrapID": "181b39a5-7e9a-450b-bd41-30db45c14431" "locationID": "cb6fd349-ed88-4963-8aae-c0d20d08b03c" "configurationReloadState": "UNKNOWN" "configurationStatus": "UNKNOWN" "NATTraversalEnabled": false "datapathID": "0B1C9A4D" "associatedGatewaySecurityID": "a0542481-9a39-41e2-9abf-7a678405e8da" "associatedGatewaySecurityProfileID": "b7bb24e1-7c1b-4c39-9070-84a9e489bb21" "templateID": "f20a7603-b0a1-45aa-aa40-439d0b6f68d5" "permittedAction": "ALL" "autoDiscGatewayID": null </pre>

	<pre>"redundancyGroupID": null "systemID": "11.28.154.77" } { "children": null "parentType": "enterprise" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 "bootstrapStatus": "NOTIFICATION_APP_REQ_SENT" "personality": "NSG" "ports": null "pending": false "enterpriseID": "3338ae3e-2cf7-4c70-a3ca-873e0de95bb5" "name": "nsg2" "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "parentID": "3338ae3e-2cf7-4c70-a3ca-873e0de95bb5" "externalID": null "bootstrapID": "ab1eb259-6dda-4b9c-971c-6e0204b232e6" "locationID": "bb752fac-b605-45dc-ad89-37a652173377" "configurationReloadState": "UNKNOWN" "configurationStatus": "UNKNOWN" "NATTraversalEnabled": true "datapathID": "8DCE66C6" "associatedGatewaySecurityID": "4bc671ea-f4cf-492d-a643-9534e647321" "associatedGatewaySecurityProfileID": "ff60b4ab-950c-41d3-bb26-ef0ae9f69e46" "templateID": "f20a7603-b0a1-45aa-aa40-439d0b6f68d5" "permittedAction": "ALL" "autoDiscGatewayID": null "redundancyGroupID": null "systemID": "141.206.102.198" }</pre>
--	---

2. Get NSPorts ID of the NSG gateway

URL & Request type	GET https://209.91.90.135:8443/nuage/api/v3_2/nsgateways/62ffa615-2e66-42b0-b506-c6d0e71943a2/nsports
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDp0ZWx1czEyMw==
Values	
response	<pre> 200 OK { "children": null "parentType": "nsgateway" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 "name": "Port1-WAN" "physicalName": "port1" "portType": "NETWORK" "associatedRedundantPortID": null "status": "INITIALIZED" "userMnemonic": null "useUserMnemonic": false "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "6c8a82dd-8604-4e4c-b53c-9fe11531574c" "parentID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "externalID": null "templateID": "1a63d26d-b334-4de8-81e2-69dd648e66c8" "infrastructureProfileID": "d42e3ecd-e4ad-490e-9c30-5f51c10d916d" "associatedVSCProfileID": "993d2fe5-491b-43de-8490-924fe00f2a25" "permittedAction": "ALL" "VLANRange": "" "associatedEgressQOSPolicyID": null } { "children": null "parentType": "nsgateway" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 </pre>

	<pre> "name": "Port2-LAN" "physicalName": "port2" "portType": "ACCESS" "associatedRedundantPortID": null "status": "INITIALIZED" "userMnemonic": null "useUserMnemonic": false "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "44acc3c6-a576-4405-9822-c8c96b39803c" "parentID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "externalID": null "templateID": "c7aedef3b-893e-4506-8fa9-e3ada04d59ad" "infrastructureProfileID": "d42e3ecd-e4ad-490e-9c30-5f51c10d916d" "associatedVSCProfileID": null "permittedAction": "ALL" "VLANRange": "0-4094" "associatedEgressQOSPolicyID": null } { "children": null "parentType": "nsgateway" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 "name": "Port3-LAN" "physicalName": "port3" "portType": "ACCESS" "associatedRedundantPortID": null "status": "INITIALIZED" "userMnemonic": null "useUserMnemonic": false "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "6c25d820-8126-48af-9888-0d129f99e95d" "parentID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "externalID": null "templateID": "5e58ff8a-bed9-4605-834f-c511f44bc56f" "infrastructureProfileID": "d42e3ecd-e4ad-490e-9c30-5f51c10d916d" "associatedVSCProfileID": null "permittedAction": "ALL" </pre>
--	---

	<pre>"VLANRange": "0-4094" "associatedEgressQOSPolicyID": null } { "children": null "parentType": "nsgateway" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 "name": "Port4-LAN" "physicalName": "port4" "portType": "ACCESS" "associatedRedundantPortID": null "status": "INITIALIZED" "userMnemonic": null "useUserMnemonic": false "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "940181b9-3925-45e5-9ca5-cbf88d6740d0" "parentID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "externalID": null "templateID": "86b5738f-42b8-437a-b0a7-b2efdf7825a4" "infrastructureProfileID": "d42e3ecd-e4ad-490e-9c30-5f51c10d916d" "associatedVSCProfileID": null "permittedAction": "ALL" "VLANRange": "0-4094" "associatedEgressQOSPolicyID": null }</pre>
--	---

3. Get Vlan ID of the NSPorts

URL & Request type	GET https://209.91.90.135:8443/nuage/api/v3_2/nsports/6c25d820-8126-48af-9888-0d129f99e95d/vlans
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDp0ZWx1czEyMw==
Values	
response	<pre> 200 OK { "children": null "parentType": "nsport" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455286586000 "creationDate": 1455286586000 "status": "INITIALIZED" "userMnemonic": null "useUserMnemonic": false "description": null "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "3725934f-535d-497b-9313-cf1de55c6f25" "parentID": "6c25d820-8126-48af-9888-0d129f99e95d" "externalID": null "value": 0 "templateID": "1a3b12e0-c61c-4b28-80cc-fa1aa9a0fd3c" "gatewayID": "62ffa615-2e66-42b0-b506-c6d0e71943a2" "permittedAction": "ALL" "vportID": "651569a9-942f-4344-97e8-62b9ad44772b" "readonly": false "restricted": false "associatedEgressQOSPolicyID": null } </pre>

4. Use the Vlan ID to create Bridge Vports

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/f2dcec7d-1e2b-4b92-b714-a6c3c63c1b3a/domaintemplates
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQ0OWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	{ "active" : null, "addressSpoofing": "ENABLED", "associated_floating_ip_id" : null, "associated_multicast_channel_map_id" : null, "description" : "New Port", "domain_id" : null, "has_attached_interfaces" : null, "multi_nic_vport_id" : null, "multicast" : null, "name" : "NewPort", "operational_state" : null, "send_multi_cast_channel_map_id" : null, "system_type" : null, "type" : "BRIDGE", "VLANID" : "3725934f-535d-497b-9313-cf1de55c6f25", "zone_id" : null }
response	201: Created { "children": null "parentType": "subnet" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1455983960622 "creationDate": 1455983960622 "name": "NewPort" "description": " New Port " "type": "BRIDGE" "systemType": "SOFTWARE" "addressSpoofing": "ENABLED" "active": false "operationalState": "INIT" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "651569a9-942f-4344-97e8-62b9ad44772b" "parentID": "c6d7d64c-3575-4ed2-984b-53977b9cae68"

	<pre>"externalID": null "domainID": "e55e79d8-4207-4910-8d53-6d5dc3d08142" "zoneID": "58f4306b-8ede-4b09-a5ff-f0e938acfdef" "multiNICVPortID": null "VLANID": "3725934f-535d-497b-9313-cf1de55c6f25" "associatedFloatingIPID": null "hasAttachedInterfaces": false "multicast": "INHERITED" "associatedMulticastChannelMapID": null</pre>
--	---

- Add Bridge Interface
 1. Authenticate and get the API key
 2. Get enterprise ID and corresponding domain ID, then get the zone ID, subnet ID, and the Vport ID
 3. Add Bridge Interface

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/vports/651569a9-942f-4344-97e8-62b9ad44772b/bridgeinterfaces
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDo4ZWY3ZGNmYy0xMTAwLTQ5ZDQtOWFkOS0zN2FjMTg2MGZjMzI= Content-Type: application/json
Values	{ "associatedFloatingIPAddress" : null, "attachedNetworkID" : null, "attachedNetworkType" : null, "domainID" : null, "domainName" : null, "gateway" : null, "name" : "BridgeInterface", "netmask" : null, "networkName" : null, "policyDecisionID" : null, "tierID" : null, "VPortID" : null, "VPortName" : null, "zoneID" : null, "zoneName" : null }
response	201: Created { "children": null "parentType": "vport" "entityScope": "ENTERPRISE" "lastUpdatedBy": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "lastUpdatedDate": 1456172564177 "creationDate": 1456172564177 "name": "BridgeInterface" "policyDecisionID": "eeb313ba-db30-46a7-bdcf-0f9cffacfd51" "domainName": "Grace_L3D1" "zoneName": "Zone Template 0" "attachedNetworkType": "SUBNET" "netmask": "255.255.255.0" "gateway": "10.1.1.1"

	<pre>"networkName": "subnet1" "owner": "8a6f0e20-a4db-4878-ad84-9cc61756cd5e" "ID": "113c2572-ae75-4e4c-a176-7ff6ae0b7697" "parentID": "651569a9-942f-4344-97e8-62b9ad44772b" "externalID": null "associatedFloatingIPAddress": null "domainID": "e55e79d8-4207-4910-8d53-6d5dc3d08142" "attachedNetworkID": "c6d7d64c-3575-4ed2-984b-53977b9cae68" "zoneID": "58f4306b-8ede-4b09-a5ff-f0e938acfdef" "VPortID": "651569a9-942f-4344-97e8-62b9ad44772b" "tierID": null "VPortName": "NewPort" }</pre>
--	--

- Ingress Service Policy

1. Authentic

2. Get enterprise ID with Get request:

https://209.91.90.135:8443/nuage/api/v3_2/enterprises/

3. Get domain templates ID with

Get request: https://209.91.90.135:8443/nuage/api/v3_2/enterprises/{id}/domaintemplates

4. Create ingress acltemplates for domain template

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/domaintemplates/{id}/ingressacltemplates
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDozYzRjOGQ0NC0yMGY4LTQ1MDEtYWZmNy1jYjRmNGVhZmM5ZmQ= Content-Type: application/json
Values	{ "active" : true, "allow_l2_address_spoof" : true, "assoc_acl_template_id" : null, "default_allow_ip" : true, "default_allow_non_ip" : true, "description" : "An ACL template", "master_id" : null, "name" : "AnotherTemplate", "policy_state" : "LIVE", "priority" : null, "priority_type" : null }

- Add User
 1. Authenticate
 2. Get enterprise ID with Get request:
https://209.91.90.135:8443/nuage/api/v3_2/enterprises/
 3. Create User to certain enterprise

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/{id}/users
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDozYzRjOGQ0NC0yMGY4LTQ1MDEtYWMzNy1jYjRmNGVhZmM5ZmQ= Content-Type: application/json
Values	{ "avatarData ": null, "avatarType" : null, "disabled" : false, "email" : "123@org.com", "firstName" : "User1", "lastName" : "User1", "managementMode" : "DEFAULT", "mobileNumber" : null, "password" : "40bd001563085fc35165329ea1ff5c5ecbdbbeef", "userName" : "user1" }

- Create NSGateway

1. Get template ID with GET request :

https://209.91.90.135:8443/nuage/api/v3_2/nsgatewaytemplates

2. Get enterprise ID

3. Create NSGateway:

URL & Request type	POST https://209.91.90.135:8443/nuage/api/v3_2/enterprises/3338ae3e-2cf7-4c70-a3ca-873e0de95bb5/nsgateways
Headers	X-Nuage-Organization: csp Authorization: XREST Y3Nwcm9vdDozYzRjOGQ0NC0yMGY4LTQ1MDEtYWMzNy1jYjRmNGVhZmM5ZmQ= Content-Type: application/json
Values	<pre> { "associatedGatewaySecurityID" : null, "associatedGatewaySecurityProfileID" : null, "autoDiscGatewayID" : null, "bootstrapID" : null, "configurationReloadState" : null, "configurationStatus" : null, "datapathID" : null, "description" : null, "enterpriseID" : null, "locationID" : null, "name" : "nsg3", "NATTraversalEnabled" : false, "pending" : false, "permittedAction" : "ALL", "personality" : null, "ports" : null, "redundancyGroupID" : null, "systemID" : null, "templateID" : "f20a7603-b0a1-45aa-aa40-439d0b6f68d5" } </pre>