



## Auto Config Examples

### How to Use the DFA Rest APIs to Control Auto-Configuration

This example shows how to use DCNM REST APIs for auto-configuration.



Note

While reviewing the actual API calls, a section is available to provide the sample.

### Create a Network

- Step 1** Logon to get a token
- Step 2** Create a Profile
- Step 3** Create an Organization
- Step 4** Create a network under the partition.
- Step 5** Logout

### Example to Call Logon

```
URL: https://10.77.247.111/rest/logon
HTTP Method: POST
Resource Name: /rest/logon
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Authorization: Basic YWRtaW46YWRtaW4xMjM=
```

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```

Content-Length: 28
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache
{"expirationTime": 1000000}
HTTP/1.1
Status Code: 200 OK
Content-Type: application/json
{
  "token" : " NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ "
}

```

**Example to Create a Profile**

```

URL: http://10.77.247.111/rest/auto-config/profiles
HTTP Method: POST
Resource Name: /rest/auto-config/profiles
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache
{
  "profileName": "customProfile",
  "profileType": "FPVLAN",
  "profileSubType": "network:universal",
  "description": "custom Profile for a network in DFA traditional
forwarding mode.",
  "configCommands": "vlan $vlanId\r vn-segment $segmentId\r mode
fabricpath\r interface vlan $vlanId\r vrf member $vrfName\r ip
address $gatewayIpAddress/$netMaskLength tag 12345\r ip dhcp relay
address $dhcpServerAddr use-vrf $vrfDhcp\r ipv6 address
$gatewayIpv6Address/$prefixLength tag 12345\r fabric forwarding mode
anycast-gateway\r mtu $mtuValue\r no shutdown\r include profile
any\r!",
  "forwardingMode": "anycast-gateway"
}
Status Code: 202 Accepted
Content-Type: application/json
{
  "profileName": "customProfile"
}

```

**REVIEW DRAFT – CISCO CONFIDENTIAL****Example to Create an Organization**

```

URL: http://10.77.247.111/rest/auto-config/organizations
HTTP Method: POST
Resource Name: /rest/auto-config/organizations
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache
{
  "organizationName" : "organization1",
  "description" : "organization1",
  "orchestrationSource" : "vCloud Director"
}
Status Code: 202 Accepted
Content-Type: application/json
{
  "organizationName" : "organization1"
}

```

**Example to List Organizations**

```

URL: http://10.77.247.111/rest/auto-config/organizations
HTTP Method: GET
Resource Name: /rest/auto-config/organizations?detail=true
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache

```

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```

Accept: application/json
Status Code: 200 OK
Content-Type: application/json
[
  {
    "organizationName": "organization1",
    "description": "organization1",
    "orchestrationSource": "vCloud Director"
  }
  {
    "organizationName": "organization2",
    "description": "organization2",
    "orchestrationSource": "vCloud Director"
  }
]

```

**Example to Create a Partition**

```

URL:http://10.77.247.111/rest/auto-config/organizations/organization1/partitions
HTTP Method: POST
Resource Name: /rest/auto-config/organizations/organization1/partitions
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache
{
  "partitionName": "partition1",
  "description": "partition1",
  "serviceNodeIpAddress": "3.3.3.3",
  "organizationName": "organization1",
  "dnsServer": "10.10.10.1",
  "secondaryDNSServer": "20.20.20.1",
  "dciId": "23",
  "dciExtensionStatus": "Not Extended",
  "vrfProfileName": "vrf-common-universal",
  "vrfName": "organization1:partition1",
  "configArg": "$vrfName=organization1:partition1;
  $include_vrfSegmentId=;
  $include_serviceNodeIpAddress=;
  $include_borderLeafRt=65000:9999;$asn=65000"
}

```

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```

}

Status Code: 202 Accepted
Content-Type: application/json

{
  "partitionName": "partition1"
}

```

**Example to Create a Network**

```

URL: http://10.77.247.111/rest/auto-config/organizations/
organization1/partitions/partition1/networks
HTTP Method: POST
Resource Name:
/rest/auto-config/organizations/organization1/partitions/partition1/netw
orks
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu90A1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
Cache-Control: no-cache
{
  "segmentId": "444444",
  "profileName": "defaultNetworkUniversalTfProfile",
  "networkName": "organization1_net",
  "networkRole": "Host Network",
  "netmaskLength": "24",
  "gateway": "13.13.13.1",
  "gatewayIpv6Address": "12::aa",
  "prefixLength": "16",
  "configArg": "$vlanId=;$segmentId=444444;$vrfName=organization1:partition1;
$gatewayIpAddress=13.13.13.1;$netMaskLength=24;$dhcpServerAddr=10.10.10.1;$vrfDhcp=;
$gatewayIpv6Address=12::aa;$prefixLength=16;$mtuValue=22",
  "organizationName": "organization1",
  "partitionName": "partition1",
  "vSwitchControllerId": "2.2.2.2",
  "staticIpStart": "3.3.3.1",
  "staticIpEnd": "3.3.3.10",
  "dhcpScope": {
    "subnet": "13.13.13.0/24",
    "gateway": "13.13.13.1",

```

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```

    "ipRange": "13.13.13.1-13.13.13.20"
  },
  "vrfName": "organization1:partition1"
}
Status Code: 202 Accepted
Content-Type: application/json

{
  "segmentId": "444444"
}

```

**Example to Logout**

```

URL: http://10.77.247.111/rest/logout
HTTP Method: POST
Resource Name: /rest/logout
Host: 10.77.247.111
User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.3)
Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
Content-Type: application/json; charset=UTF-8
Dcnm-Token: NUVyu5Y0YHDv0tT6xFuIPd+Cu9OA1XCQ
Content-Length: 179
Cookie: JSESSIONID=4C975316B01A44215861475E1B5F9328
Pragma: no-cache
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Status Code: 202 Accepted

```