



# SDN Connector for Cisco ACI and Nuage Networks - Release Notes

Version 1.1.5

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SDN Connector for Cisco ACI and Nuage Networks 1.1.5 Release Notes

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# Introduction

This document provides the following information for Fortinet SDN Connector for Cisco ACI and Nuage Networks 1.1.5.

The Fortinet SDN Connector for Cisco ACI and Nuage Networks is a standalone connector that connects to SDN controllers within Cisco ACI and Nuage Networks. You must configure a connection to the Fortinet SDN connector in FortiOS to query the dynamic addresses.

- [Supported models on page 5](#)
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# Supported models

Fortinet SDN Connector for Cisco ACI and Nuage Networks 1.1.5 supports FortiManager, physical FortiGate appliances, and FortiGate-VMs.

# New features

Fortinet SDN Connector supports the following new features:

- Domain search option
- DNS and NTP options (require manual input)

# Product integration and support

The following table lists version 1.1.5 product integration and support information:

<b>FortiOS</b>	<ul style="list-style-type: none"><li>• 6.4.0 and later</li><li>• 6.2.4</li><li>• 6.0.9</li></ul>
<b>Cisco ACI environment</b>	<ul style="list-style-type: none"><li>• ACI 4.2 (4I)</li></ul>
<b>Deployment environment</b>	<ul style="list-style-type: none"><li>• VMware vCenter Server 6.0</li><li>• VMware ESXi 6.0</li></ul>

# Monitoring SDN connector status using an API

You can monitor SDN connector status using a REST API that Fortinet SDN Connector for Cisco ACI and Nuage Networks provides.

## Request:

/api/status

## Response:

Format: json

Key	Type	Possible values	Description
in_sync	Boolean	<ul style="list-style-type: none"><li>true</li><li>false</li></ul>	Whether endpoints are synchronized with upstream SDN controller.
rpc_listener	String	<ul style="list-style-type: none"><li>connected</li><li>disconnected</li><li>uninitialized</li></ul>	Send and receive notifications to and from SDN Connector for Cisco ACI and Nuage Networks and FortiManager. <ul style="list-style-type: none"><li>connected: SDN connector connected to RabbitMQ for receiving and sending notifications.</li><li>disconnected: connection to RabbitMQ is down.</li><li>uninitialized: SDN connector has not initialized connection with RabbitMQ yet, during startup stage.</li></ul>
sdn_controller	String	<ul style="list-style-type: none"><li>connected</li><li>disconnected</li></ul>	Controller that the SDN connector connects to in order to get endpoint updates. <ul style="list-style-type: none"><li>connected: SDN connector connection to SDN controller is successful.</li><li>disconnected: SDN connector connection to SDN controller fails due to outage or invalid username/password or has not completed yet.</li></ul>
sdn_controller_host	String	<ul style="list-style-type: none"><li>IP address</li><li>FQDN</li></ul>	IP address or FQDN of the SDN controller that the SDN connector is connecting to.
type	String	<ul style="list-style-type: none"><li>aci</li><li>nuage</li></ul>	Current SDN controller type.
time	Integer	Epoch time in seconds	Current epoch time stamp.
usage	Dictionary		
usage.cpu	Float	0-100	SDN connector CPU usage.
usage.mem	Float	0-100	SDN connector memory usage.
version	String	x.x.x	Version number in major.minor.patch format.



The following is an example of the output:

```
{
  "in_sync": true,
  "rpc_listener": "connected",
  "sdn_controller": "connected",
  "sdn_controller_host": "x.x.x.x",
  "time": 1584398898,
  "type": "aci",
  "usage": {
    "cpu": 7.6,
    "mem": 69.7
  },
  "version": "1.1.3"
}
```

The following shows sample code for monitoring the SDN connector using this API:

```
#!/usr/bin/env python
import re
import requests

class SdnConnectorClient(object):

    def __init__(self, host, password, user="admin@sdn-connector.local"):
        self.host = host
        self.base_url = "https://" + host
        self.user = user
        self.password = password
        self.csrf = None
        self.cookies = None

    def login(self):
        login_page = requests.get(self.base_url + '/login', verify=False)
        session = login_page.cookies
        regex = re.compile(".+csrf_token=\\'(\S+)\\'."+")
        self.csrf = regex.search(login_page.text).group(1)
        form = {"email": self.user, "password": self.password,
              "csrf_token": self.csrf, "submit": "Login", "next": "/" }
        res = requests.post(self.base_url + '/login', data=form,
                          verify=False, cookies=session,
                          headers={'referer': self.base_url})
        self.cookies = res.cookies

    def get_status(self):
        res = self.get('/api/status')
        return res[1]

    def get(self, path):
        res = requests.get(self.base_url + path, cookies=self.cookies,
                          verify=False)
        return res.status_code, res.text

    def post(self, path, data):
        res = requests.post(self.base_url + path, cookies=self.cookies,
                           data=data, verify=False)
```

```
        return res.status_code, res.text

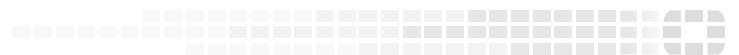
if __name__ == "__main__":
    sdn_client = SdnConnectorClient('localhost', 'xxxxxx')
    sdn_client.login()
    print sdn_client.get_status()
```

# Change log

Date	Change Description
2020-07-13	Initial release.
2020-08-20	Updated <a href="#">Introduction on page 4</a> .



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