



SDN Connector for Cisco ACI and Nuage Networks - Release Notes

Version 1.1.6

FORTINET DOCUMENT LIBRARY

<https://docs.fortinet.com>

FORTINET VIDEO GUIDE

<https://video.fortinet.com>

FORTINET BLOG

<https://blog.fortinet.com>

CUSTOMER SERVICE & SUPPORT

<https://support.fortinet.com>

FORTINET TRAINING & CERTIFICATION PROGRAM

<https://www.fortinet.com/support-and-training/training.html>

NSE INSTITUTE

<https://training.fortinet.com>

FORTIGUARD CENTER

<https://fortiguard.com/>

END USER LICENSE AGREEMENT

<https://www.fortinet.com/doc/legal/EULA.pdf>

FEEDBACK

Email: techdoc@fortinet.com



November 19, 2020

SDN Connector for Cisco ACI and Nuage Networks 1.1.6 Release Notes

01-643-678699-20201119

TABLE OF CONTENTS

Introduction	4
Supported models	5
New features	6
Product integration and support	7
Monitoring SDN connector status using an API	8
Change log	11

Introduction

This document provides the following information for Fortinet SDN Connector for Cisco ACI and Nuage Networks 1.1.6.

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](#)
- [New features on page 6](#)
- [Product integration and support on page 7](#)

Supported models

Fortinet SDN Connector for Cisco ACI and Nuage Networks 1.1.6 supports FortiManager, physical FortiGate appliances, and FortiGate-VMs.

New features

Fortinet SDN Connector supports the following new feature:

- Stronger cipher suite

Product integration and support

The following table lists version 1.1.6 product integration and support information:

FortiOS	<ul style="list-style-type: none">• 6.4.3• 6.2.6• 6.0.11
Cisco ACI environment	<ul style="list-style-type: none">• ACI 4.2 (5I)
Deployment environment	<ul style="list-style-type: none">• VMware vCenter Server 6.0• VMware ESXi 6.0

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">truefalse	Whether endpoints are synchronized with upstream SDN controller.
rpc_listener	String	<ul style="list-style-type: none">connecteddisconnecteduninitialized	Send and receive notifications to and from SDN Connector for Cisco ACI and Nuage Networks and FortiManager. <ul style="list-style-type: none">connected: SDN connector connected to RabbitMQ for receiving and sending notifications.disconnected: connection to RabbitMQ is down.uninitialized: SDN connector has not initialized connection with RabbitMQ yet, during startup stage.
sdn_controller	String	<ul style="list-style-type: none">connecteddisconnected	Controller that the SDN connector connects to in order to get endpoint updates. <ul style="list-style-type: none">connected: SDN connector connection to SDN controller is successful.disconnected: SDN connector connection to SDN controller fails due to outage or invalid username/password or has not completed yet.
sdn_controller_host	String	<ul style="list-style-type: none">IP addressFQDN	IP address or FQDN of the SDN controller that the SDN connector is connecting to.
type	String	<ul style="list-style-type: none">acinuage	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

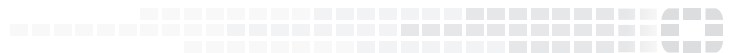
if __name__ == "__main__":
    sdn_client = SdnConnectorClient('localhost', 'xxxxxx')
    sdn_client.login()
    print sdn_client.get_status()
```

Change log

Date	Change Description
2020-11-19	Initial release.



FORTINET[®]



Copyright© 2020 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., in the U.S. and other jurisdictions, and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. In no event does Fortinet make any commitment related to future deliverables, features or development, and circumstances may change such that any forward-looking statements herein are not accurate. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.