



The bridge to possible

Exploring Cisco Intersight PowerShell and Python SDK with Jupyter Notebook

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Agenda

- Introduction – Intersight SDKs
- Lab Setup and SDK Install
 - <https://github.com/dsoper2/DEVWKS-2254>
- Connect/Query/Configure
- Code Gen
- Next Steps

Intersight SDK Overview

Intersight SDKs

- <https://www.intersight.com/apidocs>
 - Overview and usage instructions including Query examples
- <https://developer.cisco.com/site/intersight/>
 - DevNet example code, Learning Labs, and Sandboxes
- Python Package: <https://pypi.org/project/intersight/>
 - `pip install intersight`
- PowerShell Module:
<https://www.powershellgallery.com/packages/Intersight.PowerShell>
 - `Install-Module -Name Intersight.PowerShell`

Lab Setup

- git clone <https://github.com/dsoper2/DEVWKS-2254.git>
- cd DEVWKS-2254
- <https://intersight.com> (guest<n>@intersighttme.com SSO)
 - System->Settings->API Keys->Generate API Key (use a version 3 key)
 - Copy API Key ID to clipboard and create src/ApiKeyIdFile
 - echo 596cc79e5d9...0b8e7564612d336bc594 > src/ApiKeyIdFile
 - Save Secret Key to src/SecretKey.txt
- make build; make run
- <http://localhost:1001?arg=secret> and `./conf.sh`

Connect
Query
Configure

Jupyter Notebook

- Run cells and make edits as needed

- PowerShell auth:

```
$onprem = @{
    BasePath = "https://intersight.com"
    ApiKeyId = Get-Content('./ApiKeyIdFile')
    ApiKeyFilePath = Resolve-Path('./SecretKey.txt')
    HttpSigningHeader = @("(request-target)", "Host", "Date", "Digest")
}
```

- Python auth:

```
with open('./ApiKeyIdFile', 'r') as file:
    api_key_id = file.read().rstrip()

configuration = intersight.Configuration(
    signing_info=intersight.HttpSigningConfiguration(
        key_id=api_key_id,
        private_key_path='./SecretKey.txt',
        signing_scheme=intersight.signing.SCHEME_HS2019,
        signed_headers=[intersight.signing.HEADER_HOST,
                        intersight.signing.HEADER_DATE,
                        intersight.signing.HEADER_DIGEST,
                        intersight.signing.HEADER_REQUEST_TARGET
                        ]
    )
)
```

Code Gen

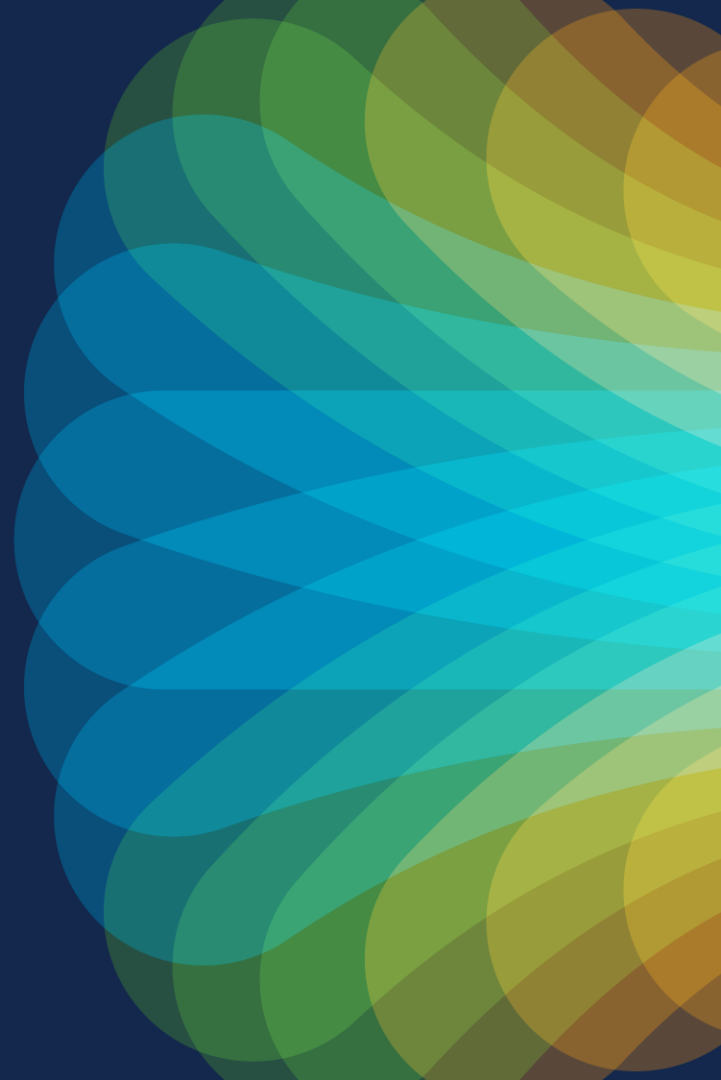


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Thank you

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The background is a vibrant, abstract graphic. It features a series of overlapping, wavy bands of color in a rainbow spectrum, transitioning from red and orange on the left to yellow and green on the right. On the right side, there is a bright, multi-colored sunburst or starburst effect that radiates outwards, creating a sense of energy and movement. The overall composition is dynamic and celebratory.

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Let's go

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