



Scrape the CLI! Getting started with Scrapli and its Flavors (Scrapli-Netconf and Nornir-Scrapli)

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AGENDA

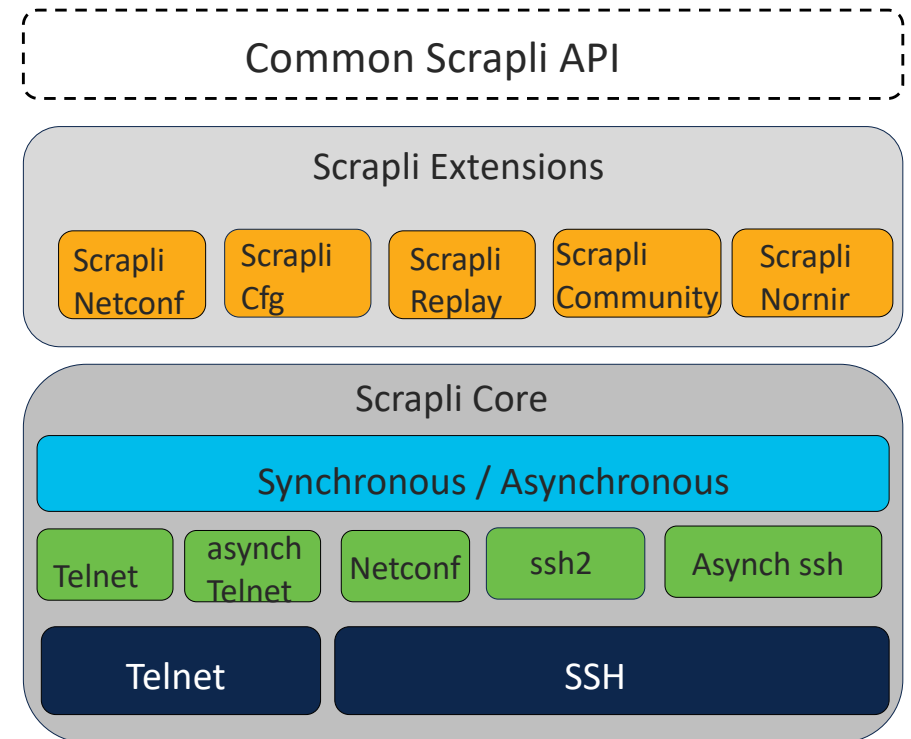
- 1 What is Scrapli ?
- 2 Why Scrapli ?
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What is Scrapli ?

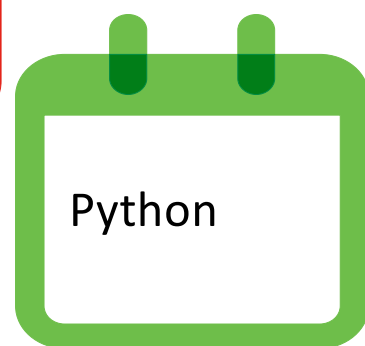
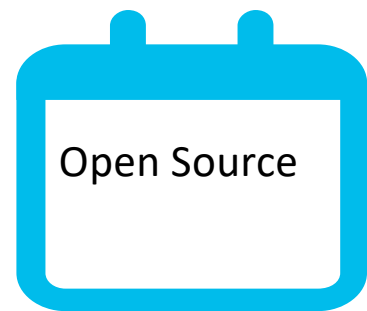
Scrapli is a python library that simplifies the process to connect multiple network devices via SSH, Telnet, or Netconf, synchronously or asynchronously for screen scraping

It is an open source, vendor-neutral network automation tool that allows to execute CLI commands programmatically

Cisco IOS-XR, Cisco IOS, Cisco NX-OS, Juniper Junos and Arista EOS



Why Scrapli ? (1/2)



Why Scrapli ? (2/2)

Lightweight
Asyncio

Scrapligo

Flexible
Transport

Scrapli
Flavors

CLI/XML

Parsing
TextFSM /
ntc-templates

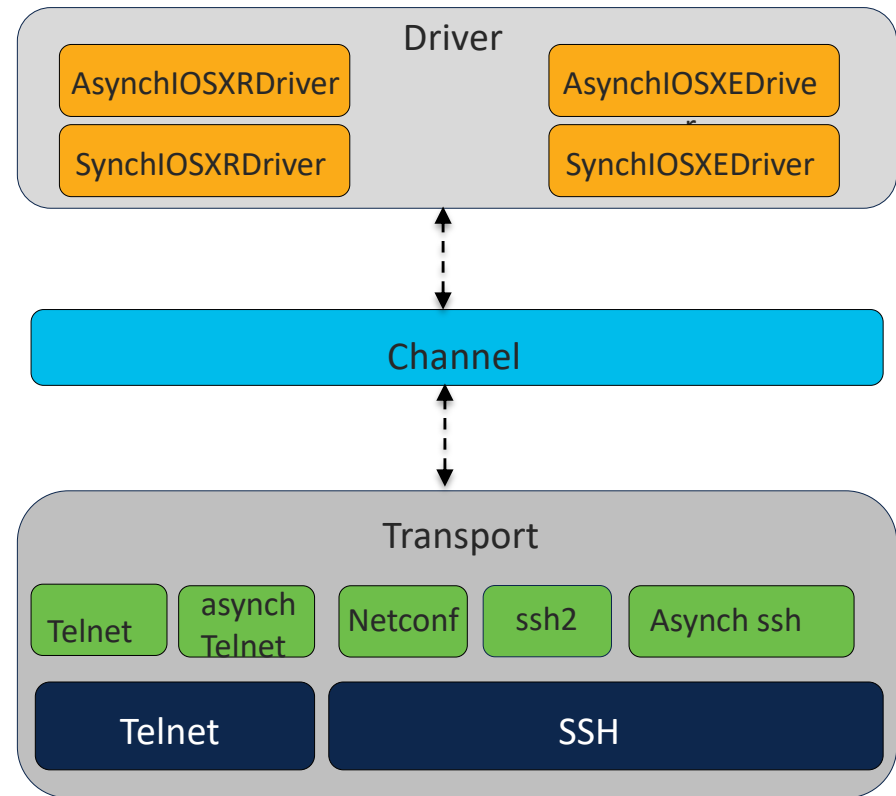
Synchronous/
Asynchronous

SSH
Telnet
Netconf

Asynssh
Asynctelnet

How Scrapli works ? (1/2)

- Driver is the interface for working with scrapli
- Specific drivers like IOSXRDriver, to interact with a specific type of equipment
- Base or generic driver to provide a minimal interface for working via SSH/Telnet
- Transport is a specific way to connect to equipment
- Channel is the next level above the transport, to send commands, receive output and other interactions with equipment



How Scrapli works ? (2/2)



Configuration backups – automate the collection of the running configuration on a scheduled basis via Netconf



Configuration rollout – push out a new configuration to several devices across the network



Configuration validation – run show commands across your network and get the response as structured output to work with it programmatically



What are Scrapli Flavors ?

- scrapli_netconf
- nornir_scrapli
- scrapli_community
- scrapli_replay
- scrapli_cfg
- scrapli_stubs
- scrapli_asynchssh
- scrapli_ssh2

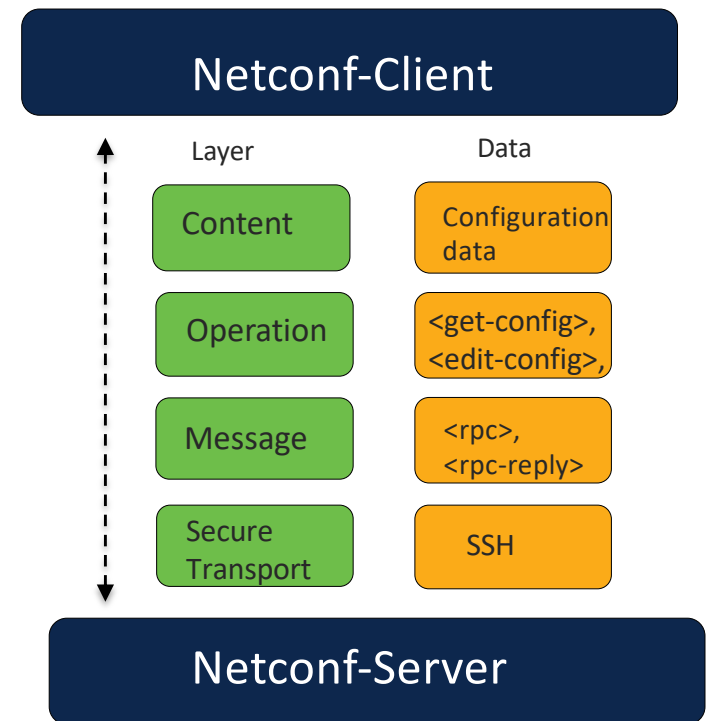
- scrapli_paramiko
- scrapli_telnetlib3
- scrapligo
- srlinux-scrapli
- scrapli[ttp]
- scrapli[genie]
- scrapli[textfsm]
- scrapli-scp

What is Scrapli-Netconf ?

Scrapli-Netconf is a Netconf driver built on top of Scrapli

It is a python package that helps to send and receive structured configuration data of the device using Netconf messages

It is fast, flexible, thoroughly tested, well typed, well documented, simple API that supports both synchronous and asynchronous usage



What is Nornir-Scrapli ?

- Nornir Scrapli is the Scrapli plugin for Nornir
- It provides support within Nornir for the majority of the Scrapli Core and Scrapli Netconf methods via Nornir tasks, along with providing an additional Nornir function
- As Nornir does not currently support asyncio (it is based on multi-threaded synchronous execution), only the synchronous transports can be used



Demo

Resources

- ❖ [Scrapli Documentation](#)
- ❖ [Scrapli GitHub repository](#)
- ❖ [Scrapli blog](#)
- ❖ [Scrapli sample scripts](#)
- ❖ [Scrapli Netconf](#)



Thank You

Live in your own way with the best attitude.

- Neelima Parakala

Questions?

