

Describe parsing of common data format (XML, JSON, and YAML) to Python data structures

YAML

OCG_yaml_sample.yaml

```
---
interface:
  name: GigabitEthernet2
  description: Wide Area Network
  enabled: true
  ipv4:
    address:
      - ip: 172.16.0.2
        netmask: 255.255.255.0
```

working_with_yaml.py

```
import yaml

with open("OCG_yaml_sample.yaml") as data:
    yaml_sample = data.read()

# Convert the yaml file to a dictionary
yaml_dict = yaml.load(yaml_sample, Loader=yaml.FullLoader)

# Print the dictionary
print(yaml_dict) # {'interface': {'name': 'GigabitEthernet2', 'description': 'Wide
Area Network', 'enabled': True, 'ipv4': {'address': [{'ip': '172.16.0.2', 'netmask':
'255.255.255.0'}]}}}

# Change parameters
yaml_dict["interface"]["name"] = "GigabitEthernet1"
yaml_dict["interface"]["ipv4"]["address"][0]["ip"] = "10.1.1.1"
yaml_dict["interface"]["ipv4"]["address"][0]["netmask"] = "255.255.255.255"

# Print in yaml format
print(yaml.dump(yaml_dict, default_flow_style=False))

#Output
----
interface:
  description: Wide Area Network
  enabled: true
  ipv4:
    address:
      - ip: 10.1.1.1
        netmask: 255.255.255.255
  name: GigabitEthernet1
```

```
"""
```

```
# Write to new yaml file
```

```
with open("OCG_yaml_sample_changed.yaml", "w") as data:  
    data.write(yaml.dump(yaml_dict, default_flow_style=False))
```

OCG_yaml_sample_changed.yaml

```
interface:  
  description: Wide Area Network  
  enabled: true  
  ipv4:  
    address:  
      - ip: 10.1.1.1  
        netmask: 255.255.255.255  
  name: GigabitEthernet1
```