

اتوماسیون شبکه | Network Automation

آنچه در این دوره خواهید آموخت

Module ۱: Network Automation with Python (۲۴ hours)

Module ۲: Ansible (۲۴ hours)

Module ۳: Model-driven Network Configuration (۱۲ hours)

سرفصل ها

Module ۱: Network Automation with Python

- Automating using SSH

- * The SSH protocol
- * openssh
- * Authentication types
- * Paramiko
- * Remote shell with Paramiko
- * File transfer over SFTP with Paramiko
- * Multi-vendor automation with Netmiko



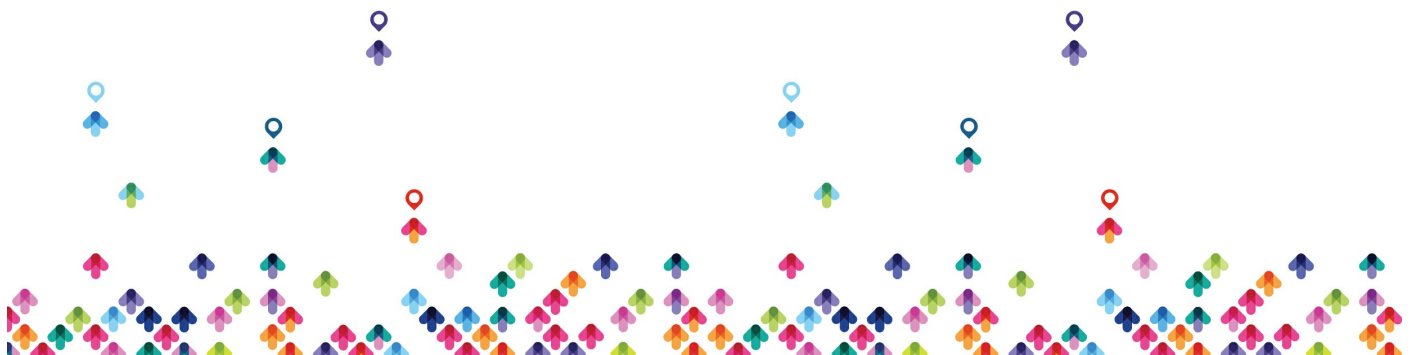
- Automating using REST interface

- * HTTP Basics
- * HTTP Communication with Python socket
- * requests module
- * XML and JSON
- * RESTful web services
- * curl
- * postman
- * Building a REST client in python
- * NXOS NXAPI
- * IOSXE REST API

Module ۲: Ansible

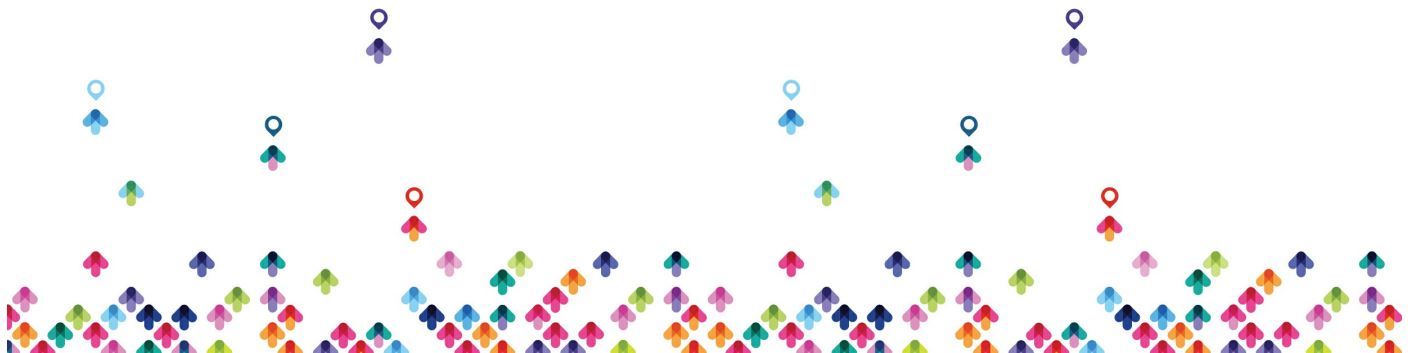
- Installation

- YAML



- Inventory
- Connection types
- Ad-hoc
- Playbook
- Tasks and Modules
- Variables
- Loops
- Facts
- Conditionals
- Templates
- Roles
- Tags
- Vault
- Cisco modules
- REST API

Module ۳: Model-driven Network Configuration



- NETCONF

- * NETCONF protocol
- * SSH as transport layer
- * Interacting with NETCONF interface
- * ncclient
- * Parsing XML messages

- RESTCONF

- * Basic Yang
- * RESTCONF interface
- * XPATH
- * IOSXE RESTCONF interface

پیش نیازها

- برنامه نویسی با پایتون



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