NetAuto Group

Enthusiasts about Network Automation

Everyone from everywhere and every background is welcome!

Monthly Events to network, discuss and learn from each other!　　*Events locally in Rhein Main area*
First Thursday of the month

GitHub Bootcamp for beginner and to refresh knowledge

Discord Server for communications

Network Automation

Florian Löhden

DevOps Consultant
@Logicalis Connected GmbH

Table of contents

Introduction

Definition by Cisco

Network automation refers to the process of automating deployment, configuration, testing/validation and operation of network devices, that can be physical (routers, switches, access points, firewalls, etc) or virtual (public cloud networking, virtual machines, containers, virtual network functions, etc). Network automation can be applied to a broad range of enterprise and service provider network services.

History

Phase 1: Scripting and CLI Automation

Phase 2: Network Management Solution

Phase 3: Software Defined Networking (SDN) & Intent Based Networking

Phase 4: Cloud Computing and virtualization

Phase 5: Artificial Intelligence and Machine Learning in Network Automation

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Maturity

1. Manual device configuration

2. Basic configuration automation

3. Controller-based-per-domain automated provisioning

4. Controller-based, network-wide automated provisioning

5. Automated provisioning of devices in a self-origanized, self-diagnosing and dynamically updated network

Benefits

Response to requirements

Reliability

Operational Expenses

Standardized Configurations

Network Changes

Offsite IT teams

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Risks

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Negligance of security and compliance

Unclear objectives

Error Handling and Logging

Network Documentation

Scalability

Discussion

What are your experiences?

What do you think are the most important basics?

When is it useful? When not?

What can we automate and what not?

Sources

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Thank you!