



<https://github.com/ArctiqTeam/network-self-healing>

Self-Healing Networks with Ansible and F5

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What are we looking to Solve?

Consistency

Error Mitigation

Agility and Efficiency

Active Documentation

Automate Issue Resolution

A New Perspective on Network Management

What's New from Ansible

Resource modules

Aggregate resources

Declarative intent

Additional platform support and modules

F5 for Network Automation

REST API

Native Ansible Modules

Super-NetOps

Automation for the Entire Application

Ecosystem

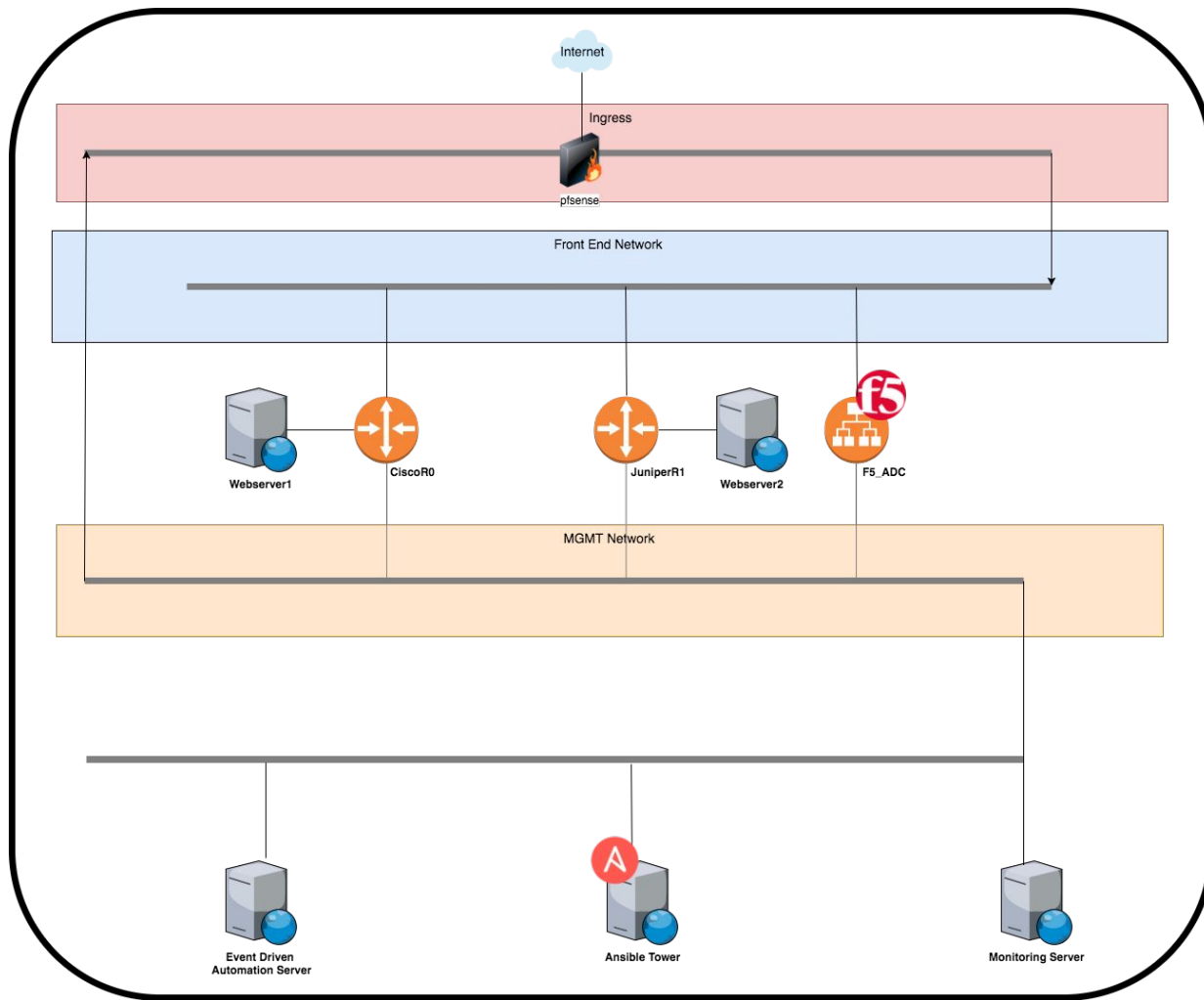
Integrate into Existing Pipelines



<https://f5.com/SuperNetOps>



Lab - Description and Applicabilities



CI/CD for Networks



StackStorm



GitHub



slack



packet



Arctiq
INTELLIGENT ARCHITECTURE

Self-Healing Networks - See it in action ...



Use Case 1: Lab Reset and Standup with Ansible Tower

A rectangular road sign with a black border and a yellow background. The sign is divided horizontally by a thick black line. The top half is solid yellow and contains the word "NOW" in large, bold, dark blue capital letters. The bottom half has a yellow background with a red diagonal line running from the bottom-left to the top-right. The word "Later" is written in large, bold, dark blue letters across this section, with the red line passing through it. The sign is mounted on a metal pole against a blue sky with some clouds.

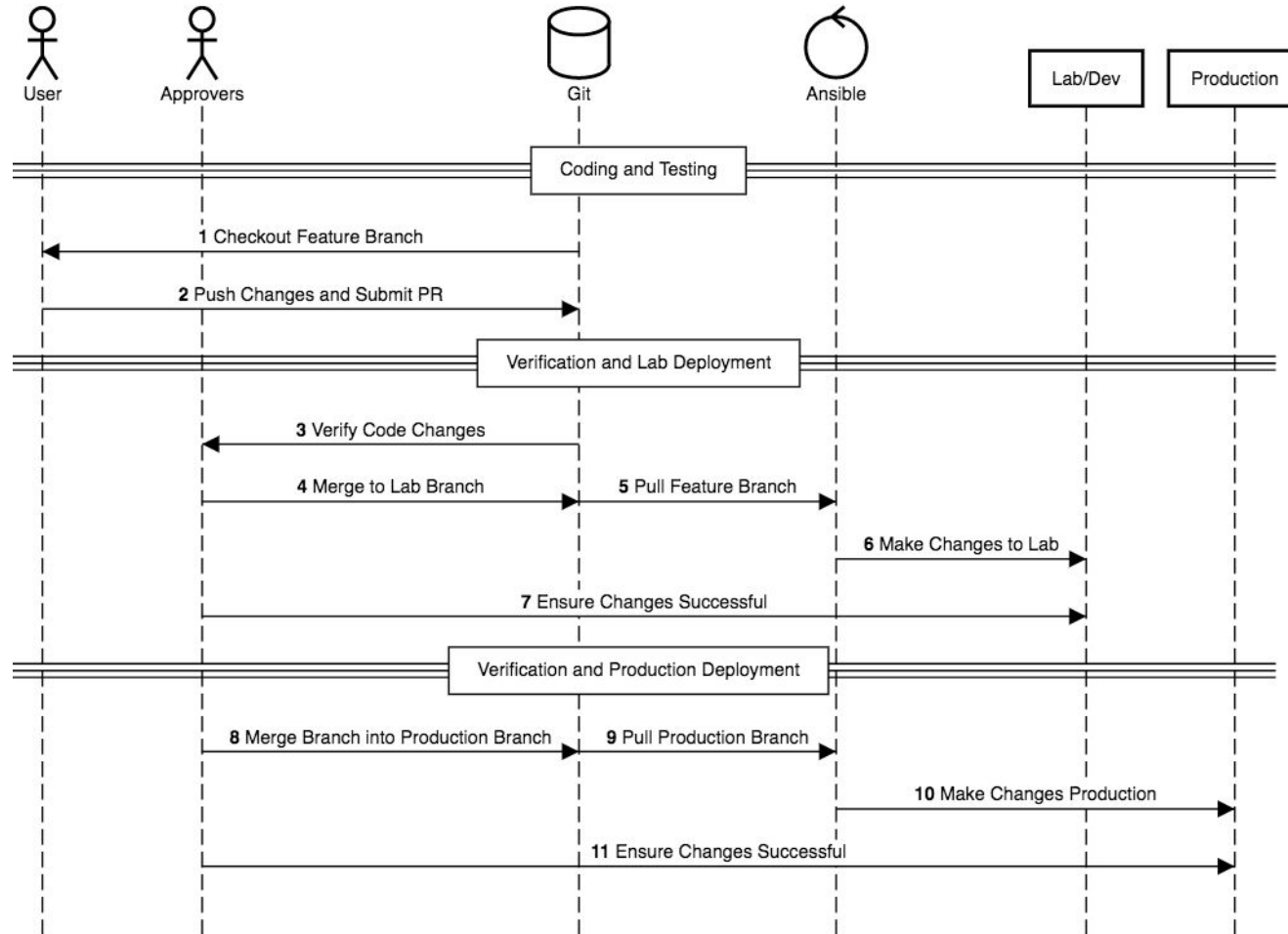
Use Case 1 - Demo

NOW

Later

Use Case 2: GitHub / Webhook Integration - Consistency / IAAC

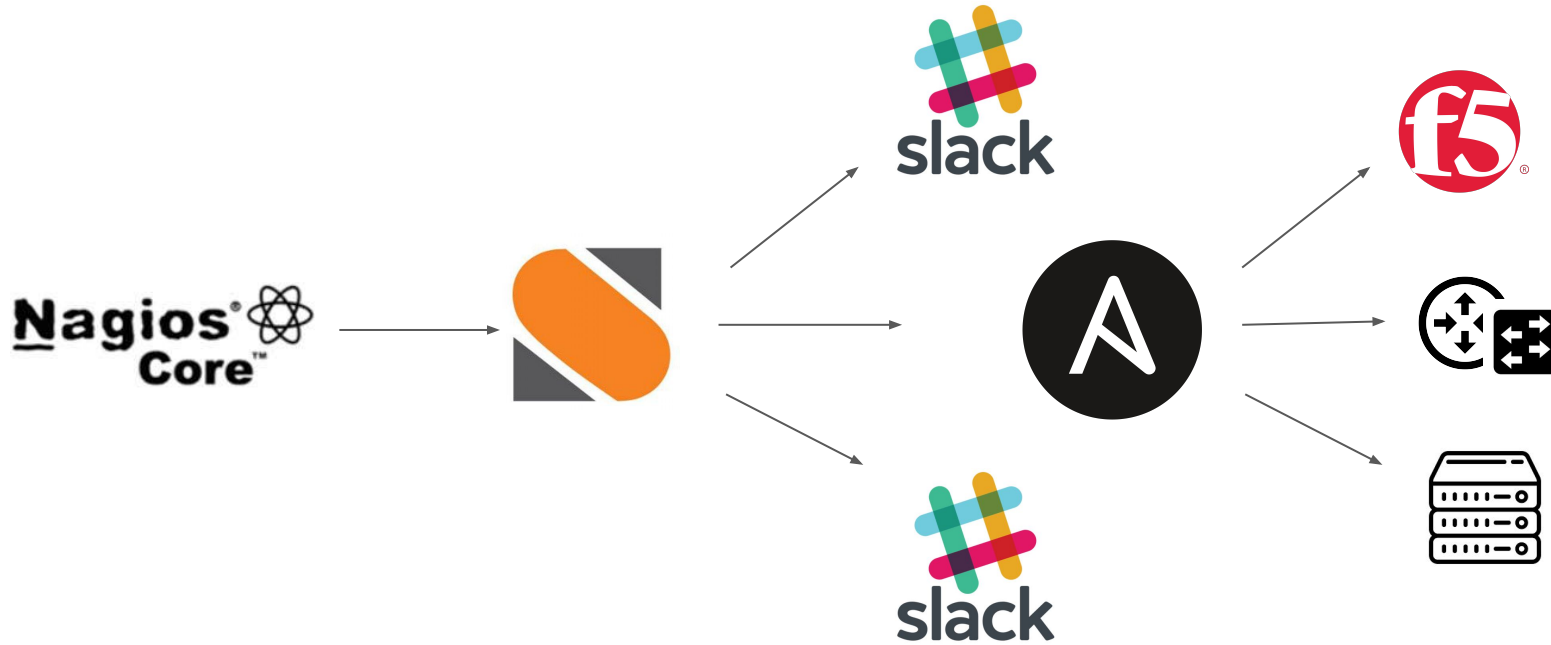
Git/Ansible Network Workflow





Use Case 2 - Demo

Self Healing Workflow



Use Case 3: Catastrophic Network Failure / F5 VIP down

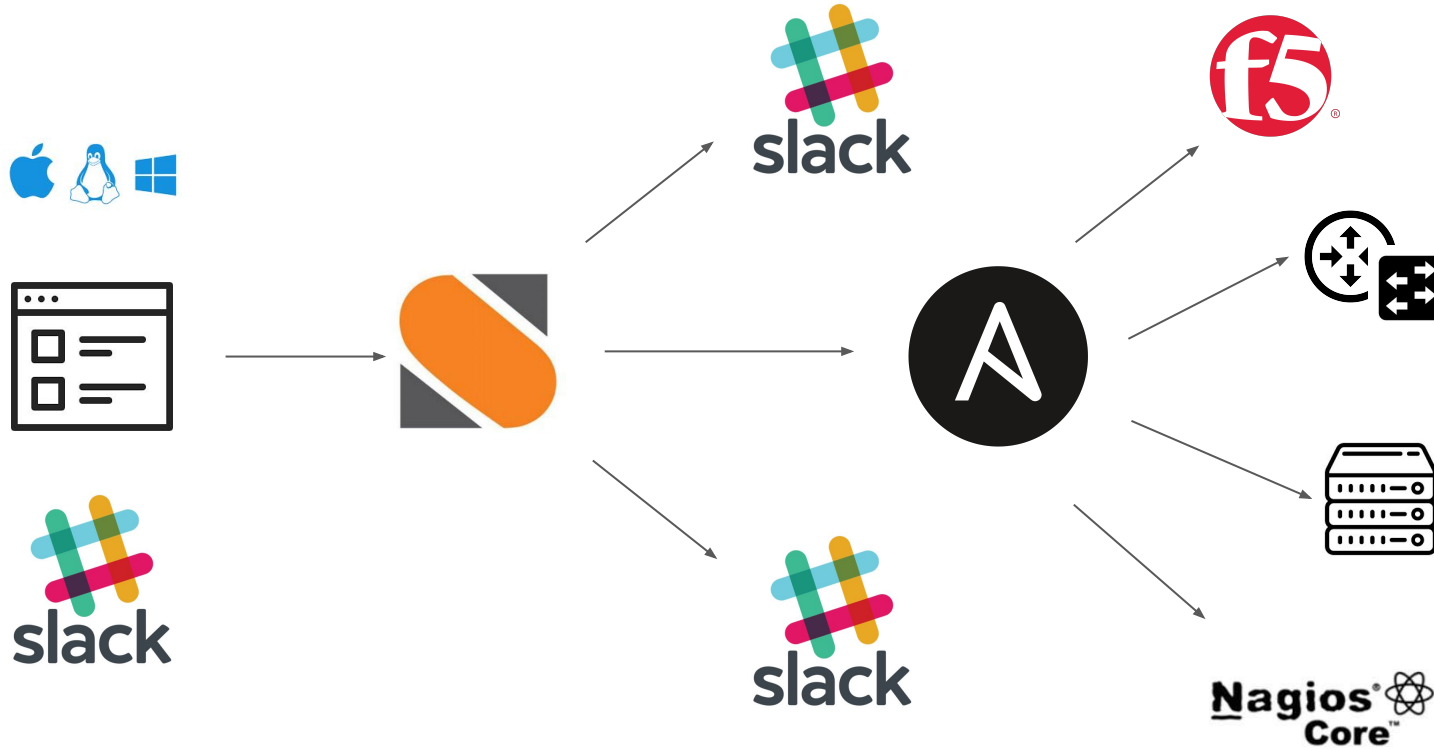
Use Case 3 - Demo

Use Case 4: WebApp Integrity Enforcement

A world map rendered in a dark blue, crumpled paper texture. A semi-transparent magnifying glass is positioned over the European continent. The text "Use Case 4 - Demo" is centered over the map in a white, sans-serif font.


Use Case 4 - Demo

Automated Provisioning Workflow





Where are we headed?



Many, many, many more
apps

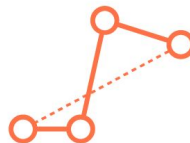
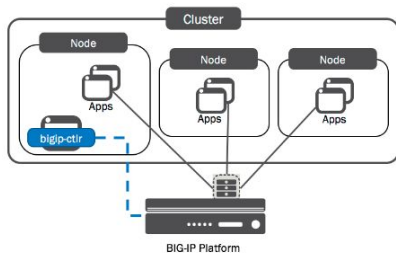
With much more Open
Source


INTELLIGENT ARCHITECTURE

Enterprise Support for Open Source Solutions



Integrate F5 ADC into the development workflow



Additional Use Cases:

Dynamic Network Configuration

Pipeline / Release Management

Full Stack Deployments

The background of the slide is a close-up photograph of an artist's palette and several tubes of paint. The palette is covered in various colors of paint, including blue, yellow, and red. There are several tubes of paint, some of which are squeezed out, and a paintbrush is visible. The image is overlaid with a semi-transparent blue filter.

Get Creative - It's the ONLY Limitation

Find a Use Case
Convert MOPs into Playbooks
Low Barrier to Entry



THANK YOU

Presentation and all example code available online
<https://github.com/ArctiqTeam/network-self-healing>

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