

# Drag, Drop, and Deploy Low-Code AI Agents for Network Ops

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# Who is this?

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# Agenda

AgenticOps in the World of Networking

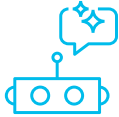
An AgenticOps Open Ecosystem, brick-by-brick

Demo 1: Agentic ChatOps for NetAuto

Demo 2: Agentic Reporting & Ticketing for NetAuto

Wrap-up

# AgenticOps in the World of Networking



## Speaking CLI

Modern LLMs already understand network CLI semantics for multiple vendors and platforms



## Reasoning about intent

“Check BGP health” or “Investigate QOS compliance” implies reasoning that LLMs can do



## No need to be a coding expert

Modern low-code tooling available for agentic workflows (“low-code” still implies SOME code ...)

# An AgenticOps Open Ecosystem for my network



## **Ollama (Local LLM runtime)**

- Open-source runtime for running models locally
- Several models supported (Llama, Qwen, Mistral, etc)
- Enables self-hosted AI



## **n8n (Low-code orchestration)**

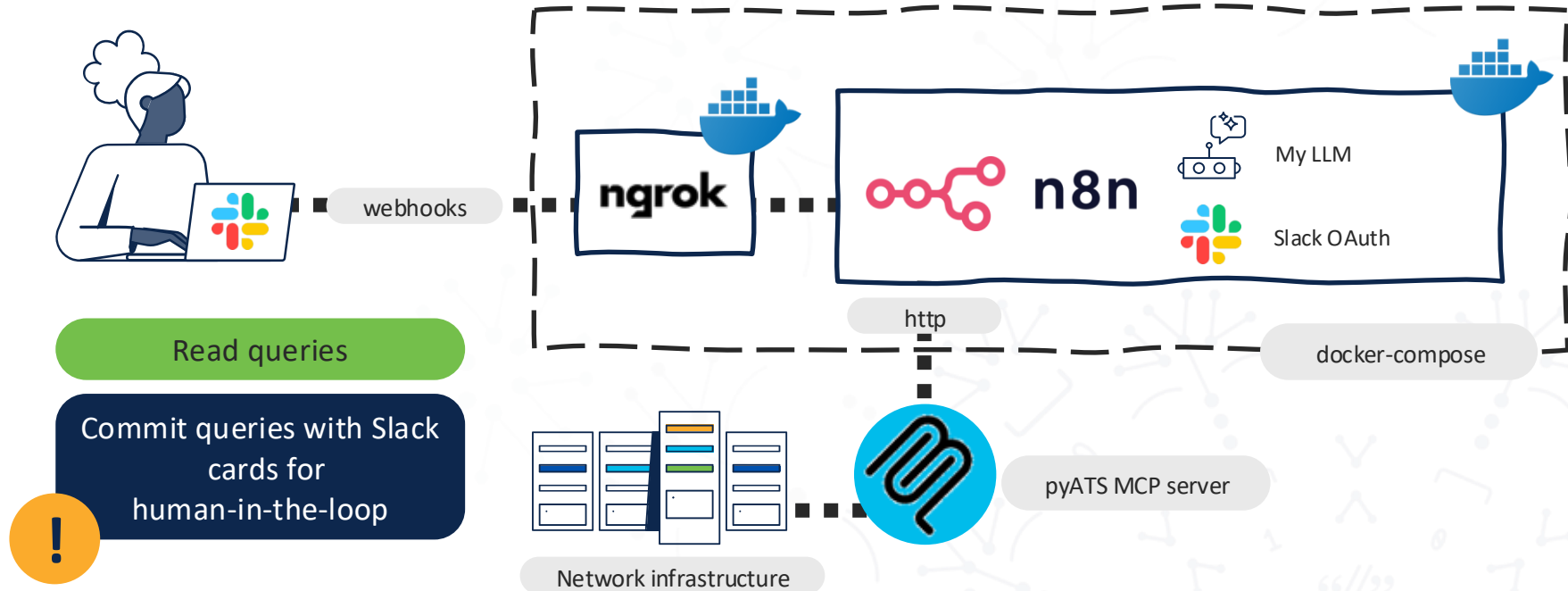
- Open-core workflow automation
- Enables auditable, guardrailed workflows
- Self-hostable and community-driven



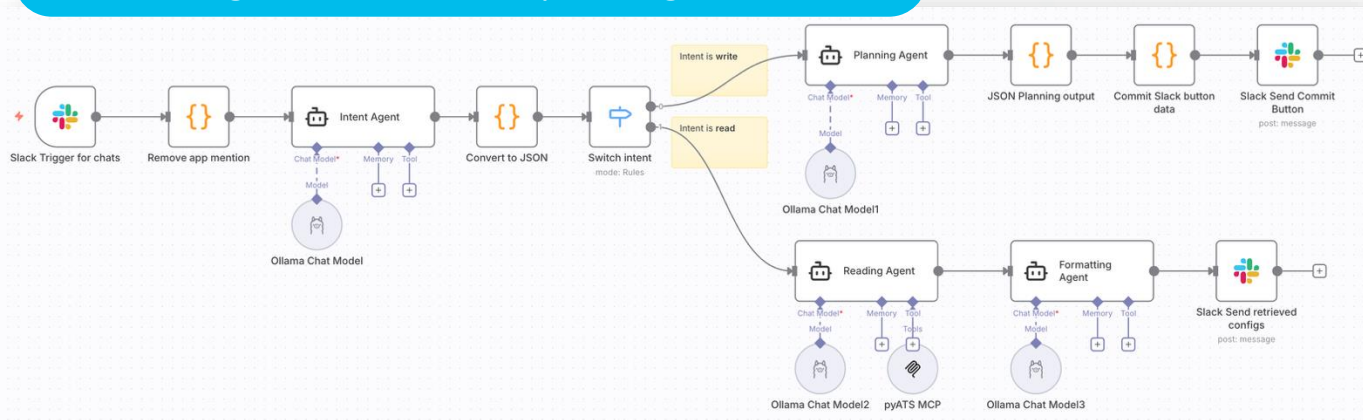
## **MCP server (based on pyATS framework)**

- Built on open-source pyATS (Apache 2.0, Cisco)
- Exposed series of tools
- Enforces safe R/W operations on real infrastructure

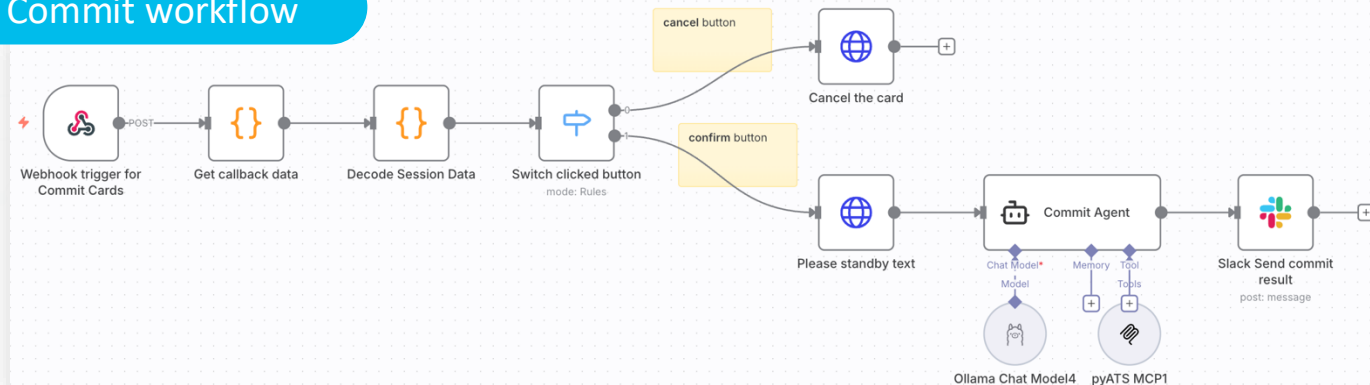
# Demo 1: Agentic ChatOps for NetAuto



## Reading + Commit intent (planning) workflow



## Commit workflow



## Reading interaction

My NetworkOps

# net-hot-gossip

Get 50% off Pro

5 days left

Threads

Huddles

Drafts & sent

Directories

Starred

Drag and drop important stuff here

Channels

# net-hot-gossip

Direct messages

Apps

packetl

Slack works better when you use it together.

Invite teammates

Messages

Add canvas

Poncho Sandoval 7:33 AM Today

Cool! @packetl please create a table with the VLANs of device SW1, including their names and other details

packetl APP 7:35 AM

Here are the VLAN details for device **SW1**:

VLAN	Name	Status	Ports
1	default	active	
10	VLAN0010	active	Et0/0, Et0/2
20	VLAN0020	active	Et0/1

Primary Secondary Type Ports

The output shows the current VLAN configuration on **SW1**, including VLAN ID, name, status, and ports associated with each VLAN. Note that some VLANs like **fddi-default**, **token-ring-default**, etc., are not user-configurable by default.

## Commit interaction

My NetworkOps

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Poncho Sandoval 7:38 AM Today

Perfect! Now @packetl, please create a new primary VLAN on SW1. The name shall be MGMT. Attach it to port Ethernet0/1

packetl APP 7:39 AM

**Configuration Plan for SW1**

Create primary VLAN 1 named MGMT and assign it to Ethernet0/1 interface

Risk Level: MEDIUM

Commands to execute:

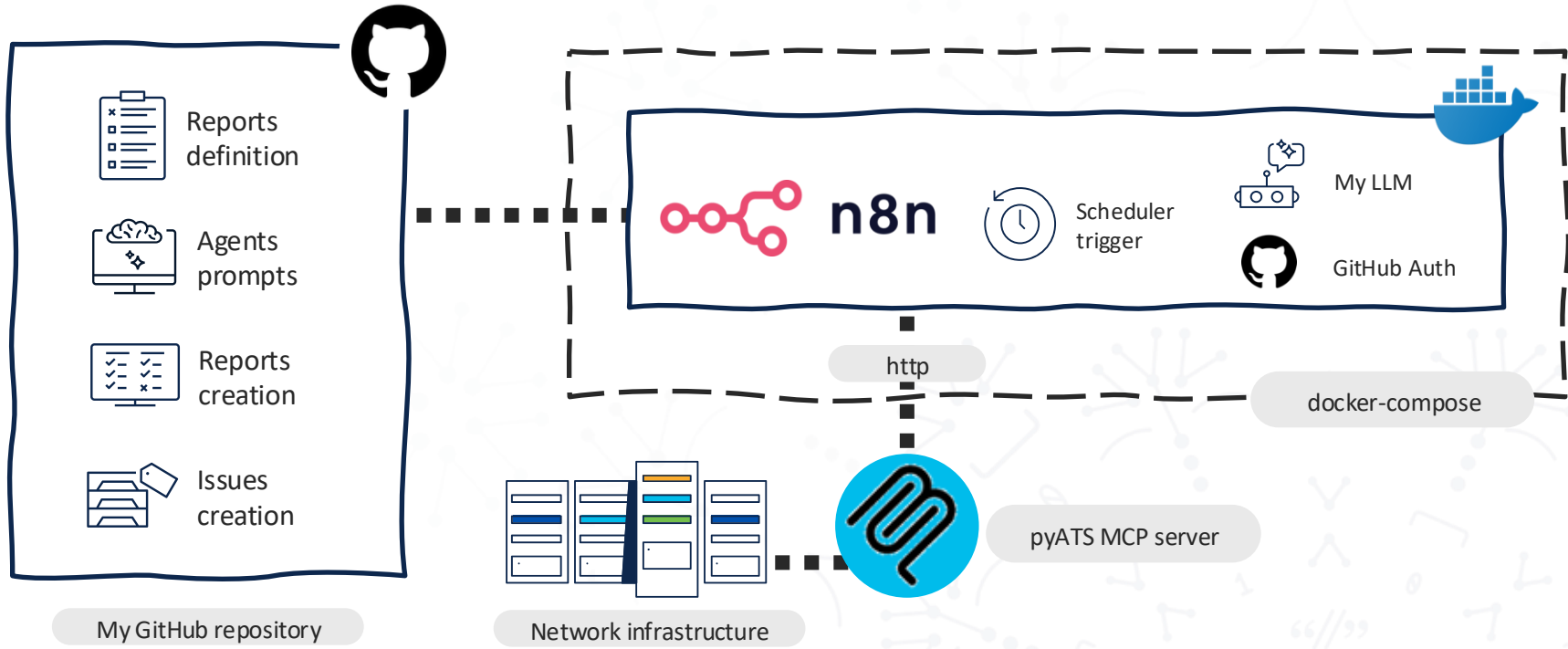
```
configure terminal
vlan database
vlan 1 name MGMT
exit
interface Ethernet0/1
switchport mode access
switchport access vlan 1
end
```

Confirm & Apply Cancel

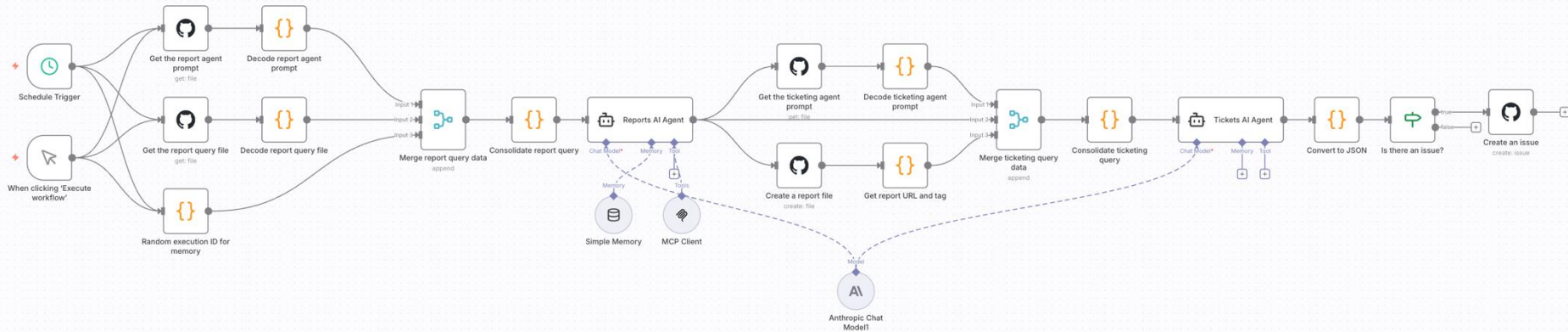
Message #net-hot-gossip



## Demo 2: Agentic Reporting & Ticketing for NetAuto



## Reporting & ticketing workflow





ponchotitlan interfaces\_status report gen

Preview

Code

Blame

95 lines (70 loc) · 4.28 KB

Report generation

## Network Interface Status Summary Report

### Executive Summary

Analysis of interface operational states across the network infrastructure reveals **14 operational interfaces** and **4 administratively down interfaces** across 4 devices. The network demonstrates healthy connectivity with active traffic on management interfaces and no packet drops or queue congestion detected.

### Scope & Assumptions

- **Scope:** Complete interface status analysis for all devices ( R1 , R2 , SW1 , SW2 )
- **Data Source:** Real-time interface status via `show ip interface brief` and `show interfaces summary`
- **Assessment Period:** Current operational state snapshot

### Environment Overview

#### Infrastructure Components:

- **Routers:** 2 IOS-XE devices ( R1 , R2 )
- **Switches:** 2 IOS-XE devices ( SW1 , SW2 )
- **Total Interfaces:** 18 interfaces analyzed
- **Platform:** IOL (IOS on Linux) virtual environment

# [interfaces\_status report gen] [!medium] Address interface redundancy and documentation gaps on Router R1 #17

[Edit](#)[New issue](#)[Open](#)

## Issue creation



ponchotitlan opened last week

Owner ...

### Context

Router R1 interface analysis reveals healthy operations with 3/4 interfaces functional and zero errors. However, several operational improvements are needed to enhance network reliability and maintainability.

### Key Issues Identified

- **Single Point of Failure:** Ethernet0/3 remains unused, reducing redundancy options
- **Documentation Gap:** Missing interface descriptions on Ethernet0/0 and Ethernet0/1
- **Traffic Concentration:** All traffic flowing through only 3 active interfaces
- **Monitoring Gap:** Lack of standardized interface monitoring

### Action Items

#### Immediate Actions

- ☐ Add descriptions to Ethernet0/0 and Ethernet0/1 for operational clarity ...
- ☐ Evaluate Ethernet0/3 - determine if it should be activated for redundancy or permanently removed ...

#### Operational Improvements

- ☐ Implement regular interface health checks focusing on error counters and utilization trends ...
- ☐ Establish consistent interface naming and description conventions ...

#### Assignees



No one - [Assign yourself](#)

#### Labels



No labels

#### Projects



No projects

#### Milestone



No milestone

#### Relationships



None yet

#### Development



Code with agent mode

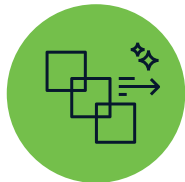
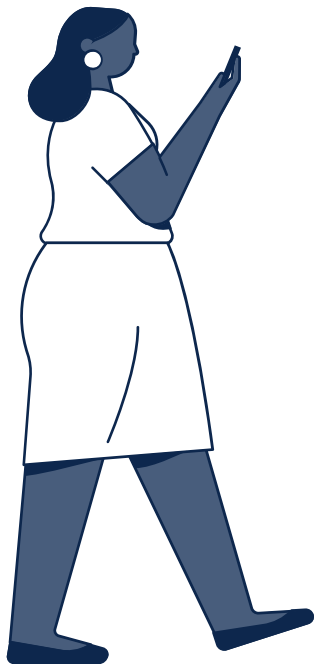
[Create a branch](#) for this issue or link a pull request.

#### Notifications

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Start small: build single-purpose agents for well-defined operational tasks



Treat LLM agents like junior network engineers: restrict what they can touch and how



Build agents on top of real network tools (CLI, APIs, pyATS) – Also, low-code is your ally!



About n8n

*[docs.n8n.io/](https://docs.n8n.io/)*

About pyATS

*[developer.cisco.com/docs/pyats/](https://developer.cisco.com/docs/pyats/)*

Our demo repo: pyATS loves AgenticOps

*[cs.co/pyATS-loves-agenticops](https://cs.co/pyATS-loves-agenticops)*



**FOSDEM**



The bridge to possible