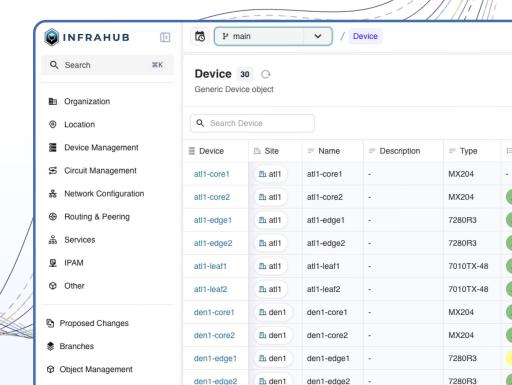




Unified data management for infrastructure automation and Al



# **The Automation Valley of Death**

## Day 1 Scripts

"It Works!"

One-time-use scripts executed manually. PoC demonstrates clear value. Team celebrates early success with approximately 80% completion achieved in just 3 months.

- Manual execution and validation
- Individual device focus
- High team excitement and buy-in

### The Gap

Reality Sets In

Critical questions emerge that weren't considered in the initial excitement. The complexity of production environments becomes apparent, and the team realizes their solution won't survive real-world operational demands.

- Auditing, logging, SSO, RBAC
- Comprehensive testing frameworks
- Knowledge transfer and ownership
- Production vs. lab environment gaps
- Version control and collaboration workflows
- Exception handling and edge cases

## Lifecycle Automation @ Scale

"It keeps working"

Multi-device orchestration with federated sources of truth.

Automated testing, CI/CD pipelines, and self-service capabilities with appropriate quardrails.

Complete observability and auditing mechanisms enabling team scaling.

- Automated testing and validation
- Integrated CI/CD pipeline
- Self-service with safety guardrails
- Full observability and monitoring
- Scalable team operations





#### **About us**

- Founded by Damien Garros, pioneer in network automation
- 20 infrastructure automation specialists across Europe and North America
- Networking & infrastructure automation expertise
- Decades of combined experience delivering large-scale network automation projects

#### **Proven at Scale**

Major Financial: \$1M+ investment, billion-dollar security requirements

Global Media Brand: 2,000-5,000 device environment

EU SP: ISO27001 certified, security audit compliance

Hedge Fund: Custom RBAC and compliance workflows



## **Automation @ Scale - Journey Requirements**



**Unify Data** 

Sync network and infrastructure device, service, and policy data into a unified SoT

Rich metadata and robust UI and API access



**Automate** 

Generate, validate, and deploy configurations

Support full lifecycle management: provisioning, upgrades, decommissioning-across vendors



Infrastructure As-a-Service Expose automation through catalogs and APIs

Speed time to delivery, reduce errors, and make infrastructure more responsive to the business

Validation

Compliance

SSO/RBAC



# Managing and automating the <u>data</u> for physical infrastructure is 100x more complex than cloud services

Generations Long tail of legacy infrastructure. **Vendors** Hundreds of vendor/model/OS variations. Physical / Hybrid Infrastructure Layers Physical, logical, virtual, etc. Data **Relationships** High degree of interconnectivity. Components Millions of individual components. Cloud Infrastructure **Cloud APIs** Abstracted, standardized, documented. Data



**Data Complexity** 

## Current solutions can't cope with this data complexity



**CMDB** 

Good for asset tracking. Not useful for automation. Not built for DevOps.



laC/Git

Good for cloud API automation. Strong DevOps support.

Data model too simple for physical infra.



Infra Mgmt Tools

Inflexible or vendor-locked. Poor DevOps support.



# **Pain Points**

#### **Data Fragmentation**

Disparate data sources and inconsistent data formats prevent a unified view and consistent automation, leading to manual reconciliation and errors.

#### **Lack of Visibility**

Without adequate monitoring and logging, teams struggle to understand automation performance, debug issues, and ensure compliance in real-time.

#### **Extended Development Cycles**

Over-reliance on manual processes and inefficient workflows drastically slows down the creation, iteration, and deployment of new automation features.

### **Not Enterprise-Ready Tooling**

Under-resourced tools often lack the necessary features, governance, security, and integration capabilities required.



The absence of comprehensive, automated testing frameworks results in unstable automation that frequently breaks in production environments.

#### **Inability to Scale**

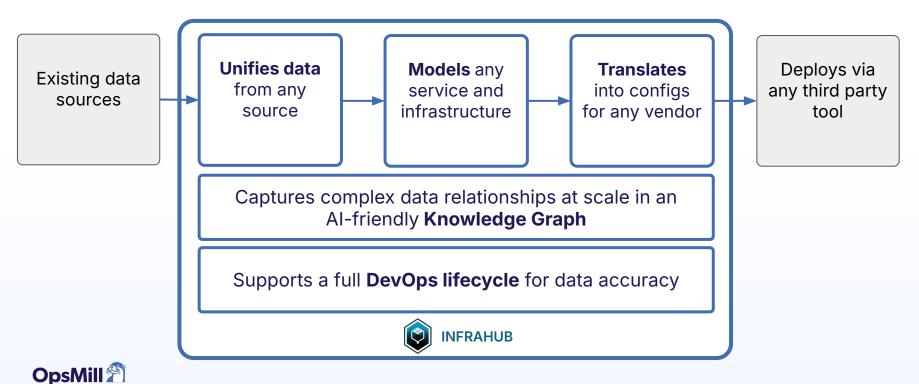
Solutions built for isolated environments often lack the architecture to handle increasing workloads, device counts, or diverse operational demands.

#### **Rigidity & Lack of Extensibility**

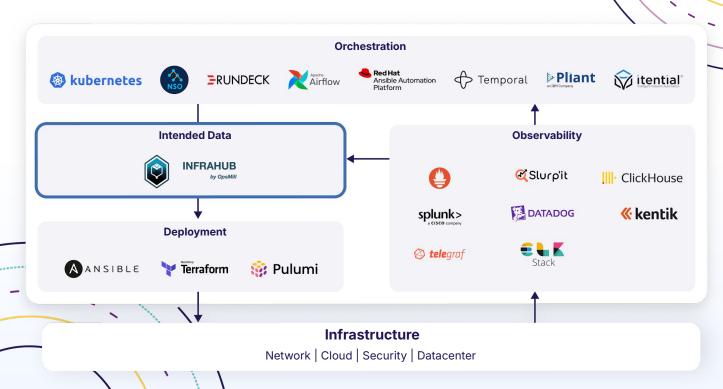
Automation solutions are frequently inflexible, making them difficult to customize, extend, or adapt to evolving business requirements without significant refactoring.



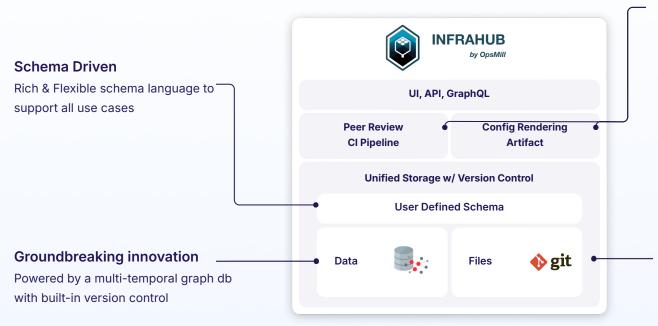
# Infrahub is a purpose-built data management platform for physical infrastructure automation and AIOps



Infrahub is at the center of the ecosystem and integrates with everything



# The Infrahub differentiators



#### **Purpose-Built Platform**

Designed from the ground up as the data management layer for infrastructure automation and Al.

#### **Future-Proof**

Built on widely adopted open-source foundations (Neo4j, Git) and designed for extensibility across on-prem and cloud.

#### **Natively Versionable**

All data, automation, and tests are version-controlled with branching, peer review, and full audit history.



# **Infrastructure/Network Automation Journey**

Beginner

Haven't started their automation journey

## **Infrahub Sweet Spot**

Intermediate

Using Git and/or Rigid SoT

Advanced

Struggling to build & maintain internally

Expert

Committed to building it internally

**Open Source Infrahub Project** 

https://github.com/opsmill/infrahub