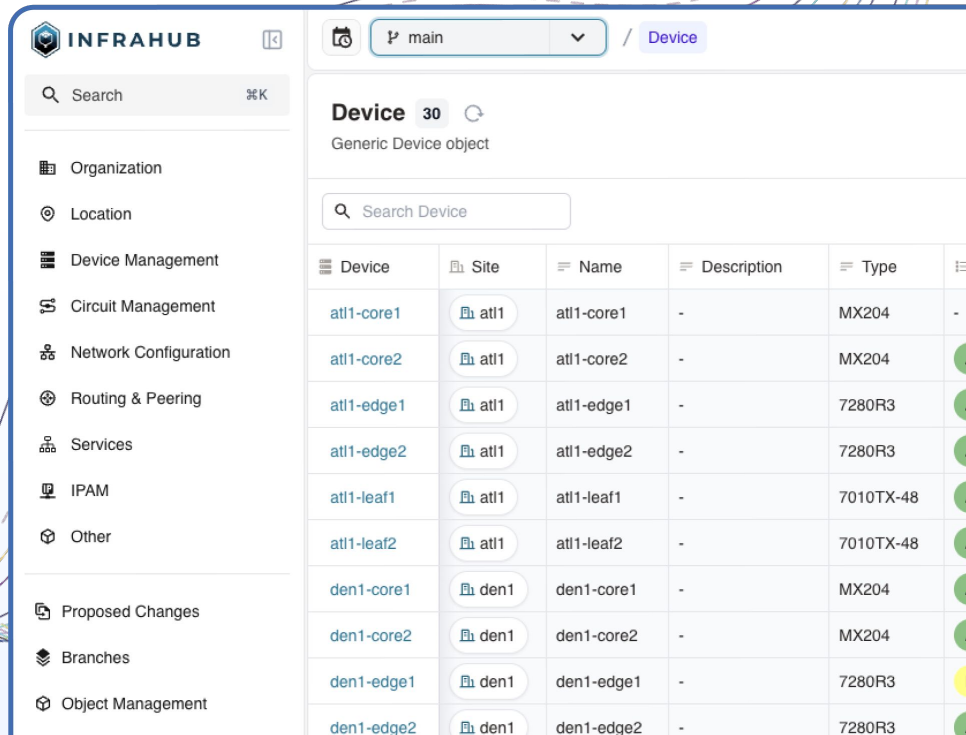
OpsMill

# INFRAHUB

Unified data management for infrastructure automation and AI



# 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 guardrails.
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

OpsMill

# OpsMill

## 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

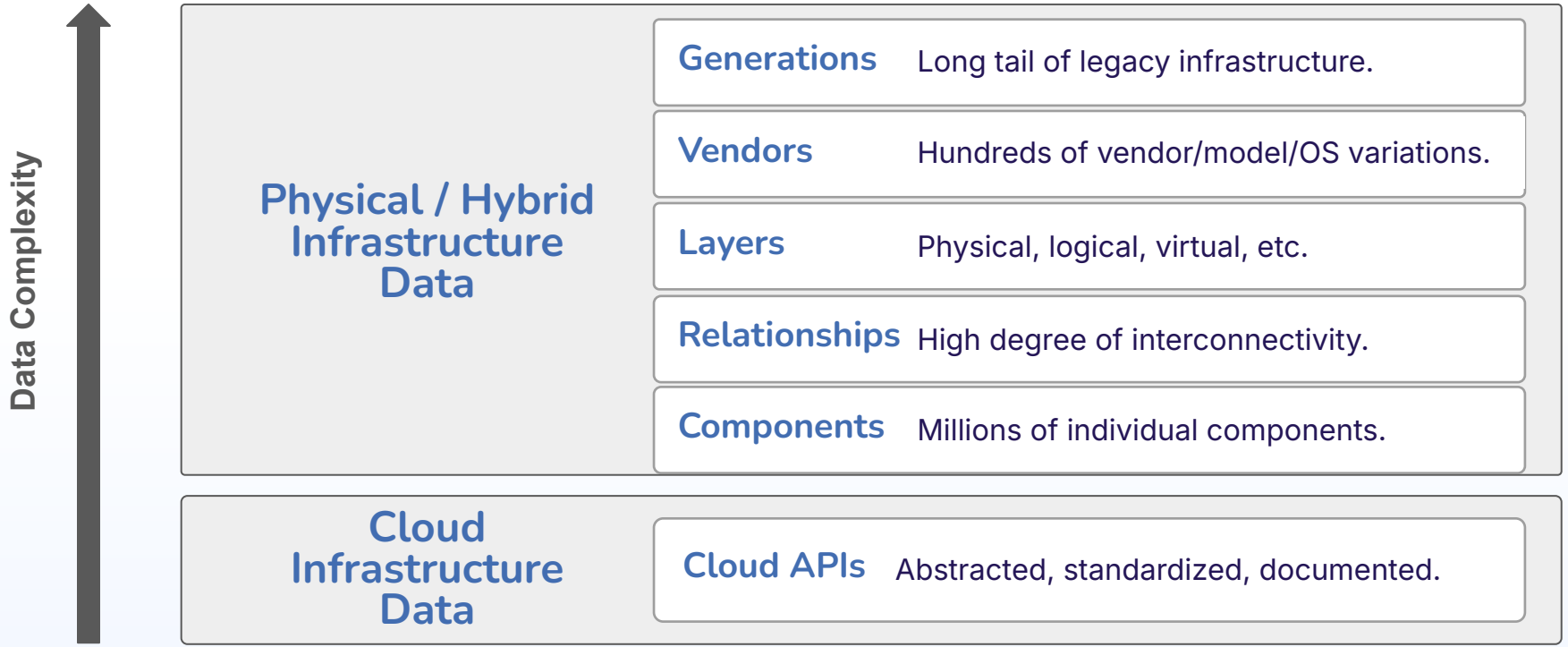
Validation

Compliance

SSO/RBAC

OpsMill

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




OpsMill

# Current solutions can’t cope with this data complexity

**CMDB**

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

**IaC/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

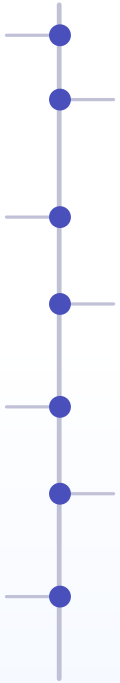
Without adequate monitoring and logging, teams struggle to understand automation performance, debug issues, and ensure compliance in real-time.

### 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.



### Testing Gap

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

### Inability to Scale

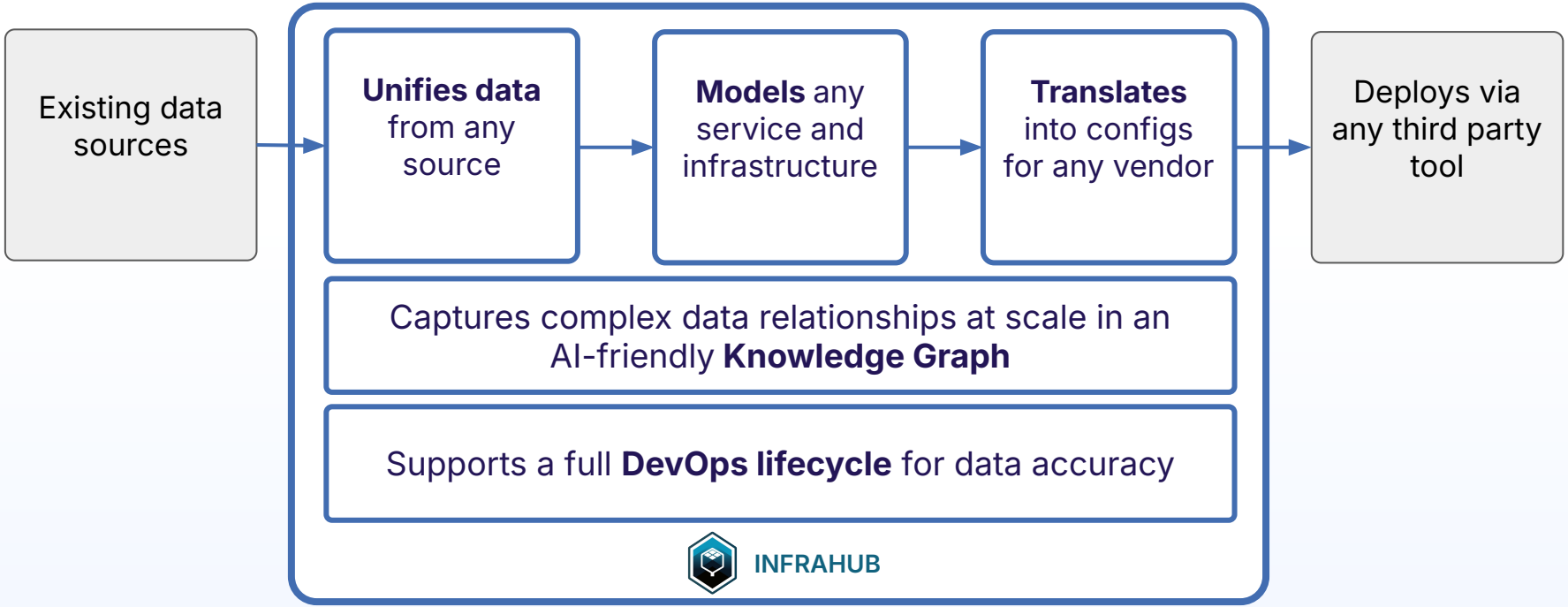
Solutions built for isolated environments often lack the architecture to handle increasing workloads, device counts, or diverse operational demands.

### Rigidity & Lack of Extensibility

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

OpsMill

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




OpsMill

# Features for developers

**Security & Compliance**

- RBAC
- Metadata

**Abstraction**

- Template
- Profile

**CI Pipeline**

- Proposed Changes
- User Checks
- Tests (Unit & Integration)

**Idempotency**

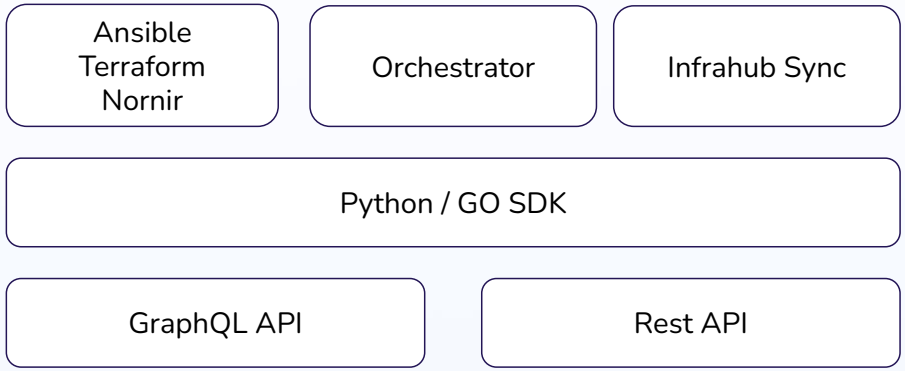
- Resource Manager
- Generator
- Config Generation (Artifact)

- Git Integration
- Version Control
- GraphQL
- Flexible Schema

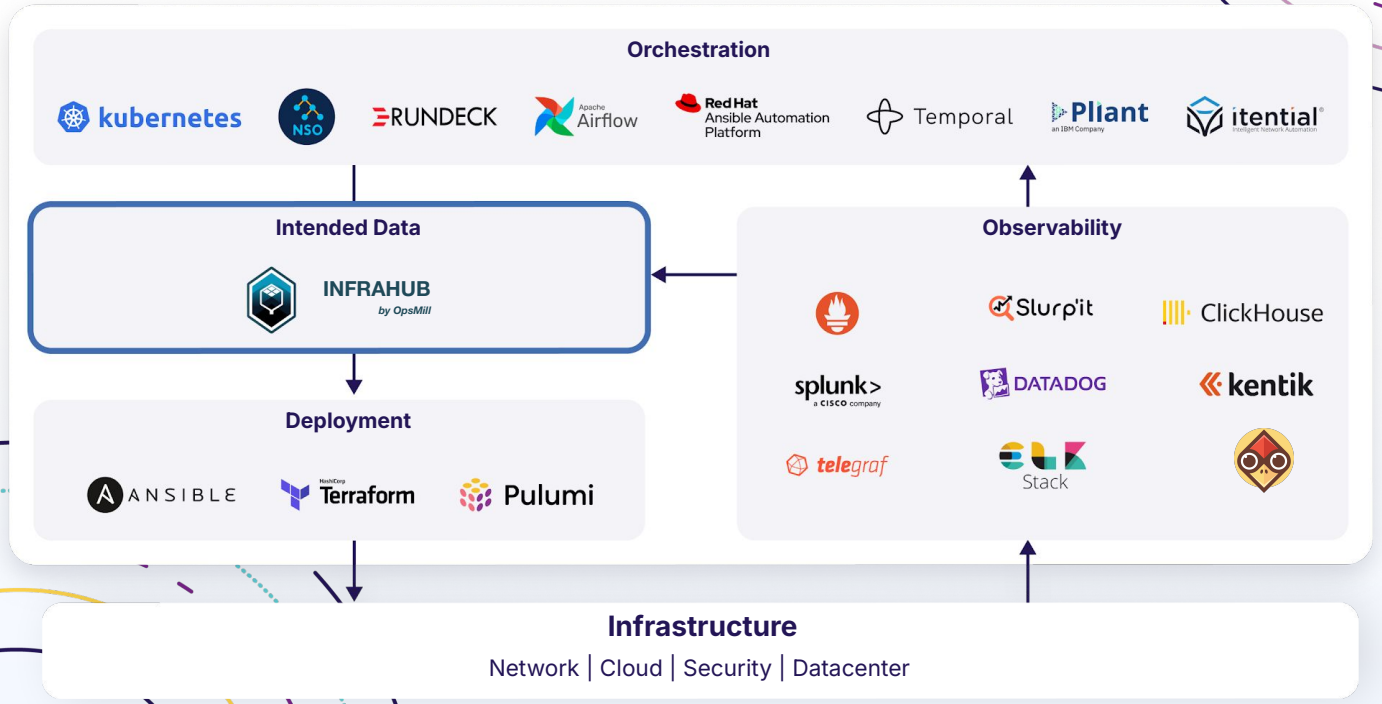
# Deployment Integration

Infrahub adopts an API-first approach and all features in the frontend are available via our GraphQL or REST APIs.

OpsMill provides SDKs (Python, GO) and libraries to facilitate integration with ecosystem automation tools.



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



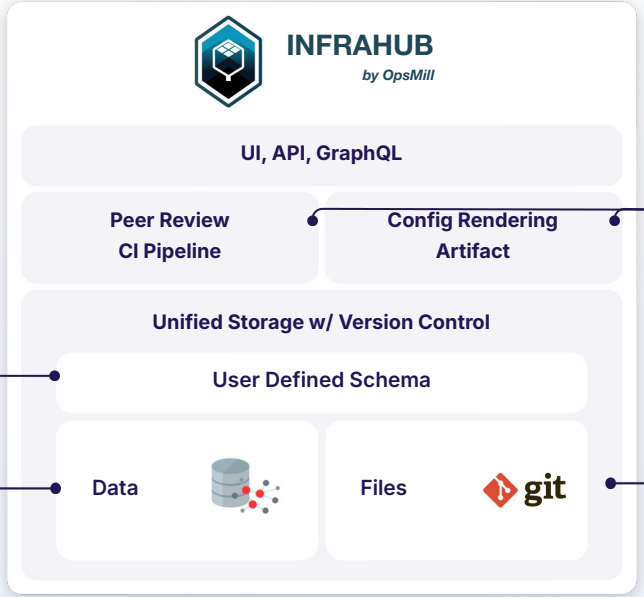
# The Infrahub differentiators

### Schema Driven

Rich & Flexible schema language to support all use cases

### Groundbreaking innovation

Powered by a multi-temporal graph db with built-in version control




### Purpose-Built Platform

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

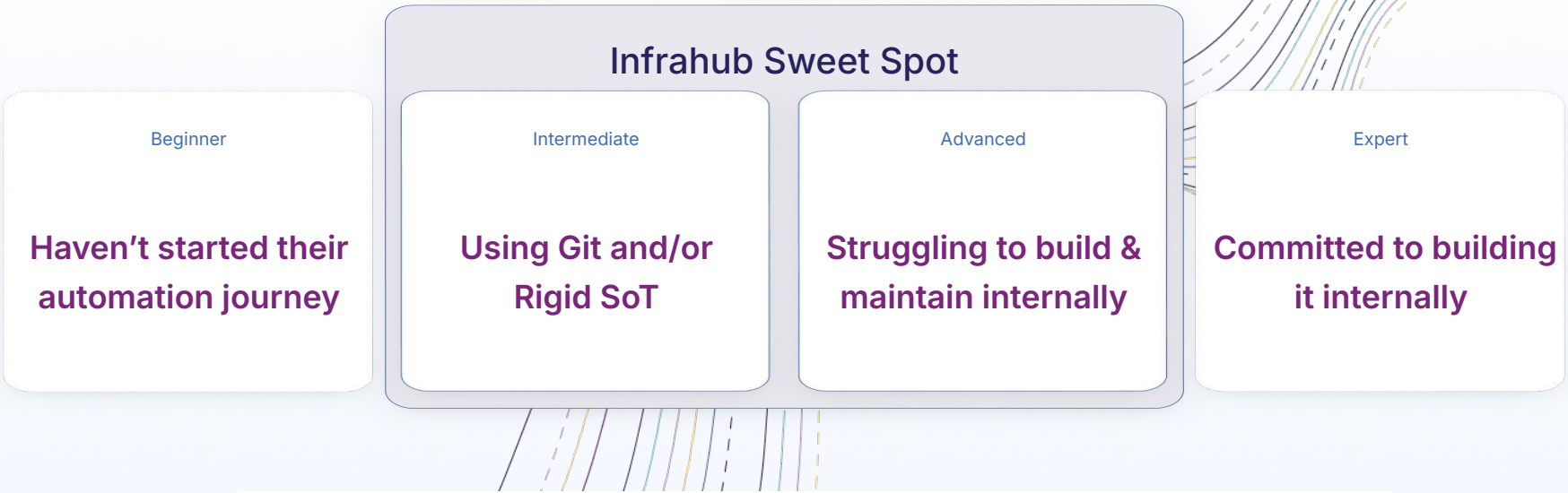
### Future-Proof

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




**Open Source Infrahub Project** https://github.com/opsmill/infrahub