

Internet2 WFO Update

Internet2
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Internet2 — WFO Implementation Update

Overview

- Internet2 is adopting orchestrator-core to replace its Cisco NSO + homegrown reconciliation framework — now in active build, working toward production readiness

Build Progress

- Built a first proof-of-concept — then scrapped it: early in the March ESnet onboarding it was clear the architecture needed a ground-up redesign
- Redesigned from scratch at the April WFO Partners Meeting; rebuilt on a clean baseline — repo reset, first product modeled (Node skeleton, merged)
- In review: upgrade to orchestrator-core v5

Design, Modeling & Community

Design & Modeling

- Aligned the team on a shared "Guiding Principles" doc before rebuilding
- Settled core virtual-network modeling questions — e.g., representing a virtual-network space as static configuration rather than a product; combining VN router + L3 connection into a single subscription
- Built an ownership taxonomy (Authoritative / Manages / Knows) and a lifecycle litmus test for product vs. reference decisions; studied GÉANT's public service-orchestrator as a reference

Design, Modeling & Community

Community & Collaboration

- Two on-site weeks at ESnet (Berkeley): WFO onboarding (March) and WFO Partners Meeting / community code sprint (April) — alongside SURF, GÉANT, and ESnet
- Internet2's first upstream contributions to orchestrator-core: documentation improvements + contributor PR checklist
- Helped shape community docs direction (versioned docs, Zensical)
- VN-modeling whiteboard with SURF

What's Next

- Continue core service modeling and build out additional products — the Node skeleton is the first
- Work toward production readiness