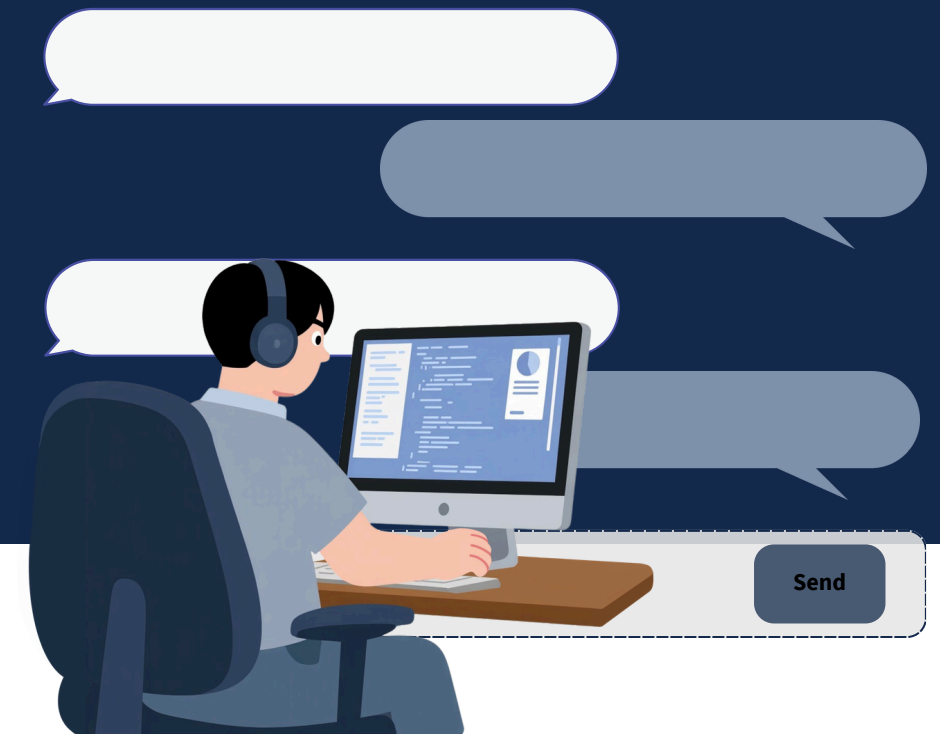




Intent Studio

Say what your network should do. Know that it does.

A written, versioned record of what your network is meant to do, built with the people who run it, checked before every change and against the live network after.



Find Us



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NETWORK INTENT GOES MISSING

Every network was built to do something. Over time, the reasons behind it get lost, and changes are judged by what they alter, not by what the network is meant to do.

It lives in people's heads
Why a rule exists is rarely written down. When people move on, the reason goes with them.

Changes are checked line by line
Reviews look at configuration differences, so side effects on other goals slip through.

Drift goes unnoticed
Hand fixes and new devices pile up until an outage or an audit finds them.

THE IDEA

Keep a written, versioned record of what your network should do. Build it from a conversation with the people who run the network, and from the network itself. Check every change against it before it goes out and check the live network against it afterwards.

HOW IT WORKS

Built for the whole lifecycle: Design, Onboarding, Operations, and Migration

Four steps, repeated for every change, from first design through day-to-day operations.

1 Describe
Operators say what they want in plain language. The assistant asks follow-up questions, including about values it would otherwise have to guess.

Conflict: energy vs availability

AP-01 sales floor and AP-02 stockroom carry Guest Wi-Fi (VLAN 40) and Staff handhelds (VLAN 20). The capture shows Staff handhelds in use during 23:00-06:00, so someone works overnight.

Which way should this go?

Switch off only Guest Wi-Fi; keep the access points on

Keep both and accept the risk

Switch off only Guest Wi-Fi; keep the access points on

2 See the Impact
Each answer is checked against current intent and observed traffic. Conflicts and gaps come up as questions while the context is fresh.

Impact

Coverage

2

Modified

3

New

0

Removed

2

Open

Compared with intent set v1; effects measured at STORE-017

Conflict: resilience vs cost

During a broadband outage, all traffic would run over WAN LTE (backup)

3 Review and Roll Out
Changes from different people are reviewed together, then turned into inputs for the configuration and validation tools you already use.

Changes / Releases / R-2

Release R-2

1 change. Approving creates the next version of the intent set.

Changes in this release

CHG-2 [Store resilience and guest Wi-Fi](#)

Maya

Modified Tills keep working when broadband fails: switch to LTE within 5 seconds; only Tills (POS) use LTE

Was: If WAN broadband (primary) fails, all traffic moves to WAN LTE (backup) (detected within about 90s

Outage detection: about 90s → 5s

> Details

New Keep LTE data costs down

A policy constraint: used when checking other intents for conflicts

Closes a gap Guest Wi-Fi can't reach the tills

3 attempts seen in the capture, all already blocked

> Details

New Alert the team when a store's tills get slow

Set up in your monitoring system as an aleart of report

New Staff handhelds can't reach Tills (POS)

32 connections (31.6 KB) seen in the capture would be block.

Checks across the release

✓ No open issues inside any change

✓ No conflicts between changes

☐ Batfish validation runs on the generated config (Validate)

Rollout

STORE-017

14 config blocks. Receive this release's changes

STORE-031

14 config blocks. Receive this release's changes

Approval

Your name

4 Verify and Watch for Drift
After rollout, every intent is verified site by site. Drift shows up as a finding, with a way to fix the network or update the intent.

Release R-2

Declared intent (v1) compared with observed intent, inferred from the latest configs and traffic. Fix the network, or adopt what's there through a change

All 3 Behavior 0 Config 2 Coverage 1 Stale 0

Config drift: Store-017

Guest Wi-Fi is block from the Internal networks I-10

Declared

Blocked Guest Wi-Fi → internal networks (all traffic)

Observed

udp/53 is still allowed by GUEST-IN line 109

store-017.cfg: 110 deny ip 10.17.40.0 0.0.0.255 10.0.0.0 0.255.255.255

store-017.cfg: 109 deny udp 10.17.40.0 0.0.0.255 any eq 53

Re-apply the intent

Change the intent instead

What drift is checked against

Verification is only as good as the data. Sites in design, onboarding or migration aren't checked.

Store-017 config Oct 22, 03:05 AM, 1 capture

Store-031 config Oct 22, 03:05 AM, no capture

HELP US SHAPE IT

This is an early concept with a working prototype. Before building further, we want to hear from the people who would use it. Ten minutes of your time would help.

WHO IT IS FOR



QUESTIONS WE WOULD LOVE YOUR VIEW ON

- ? Where does your network's intent live today: documents, tickets, people's heads?
- ? What breaks most often when a change goes out?
- ? How do you find out that the network has drifted from what it should do?
- ? Which tools would this need to work with for you to try it?
- ? What would you need to trust it with your production network?