



CASE STUDY : A NATIONAL HEALTHCARE ORGANIZATION

Weeks of Investigation, Answered in Five Minutes

A national healthcare organization uses NetBrain's AI-assisted diagnosis and automated change validation to find root cause in minutes instead of weeks and to validate high-risk changes across a critical national network before they reach production.

KEY RESULTS

~5

minutes to root cause after weeks without one

3

AI-assisted workflows in production, from diagnosis to change validation

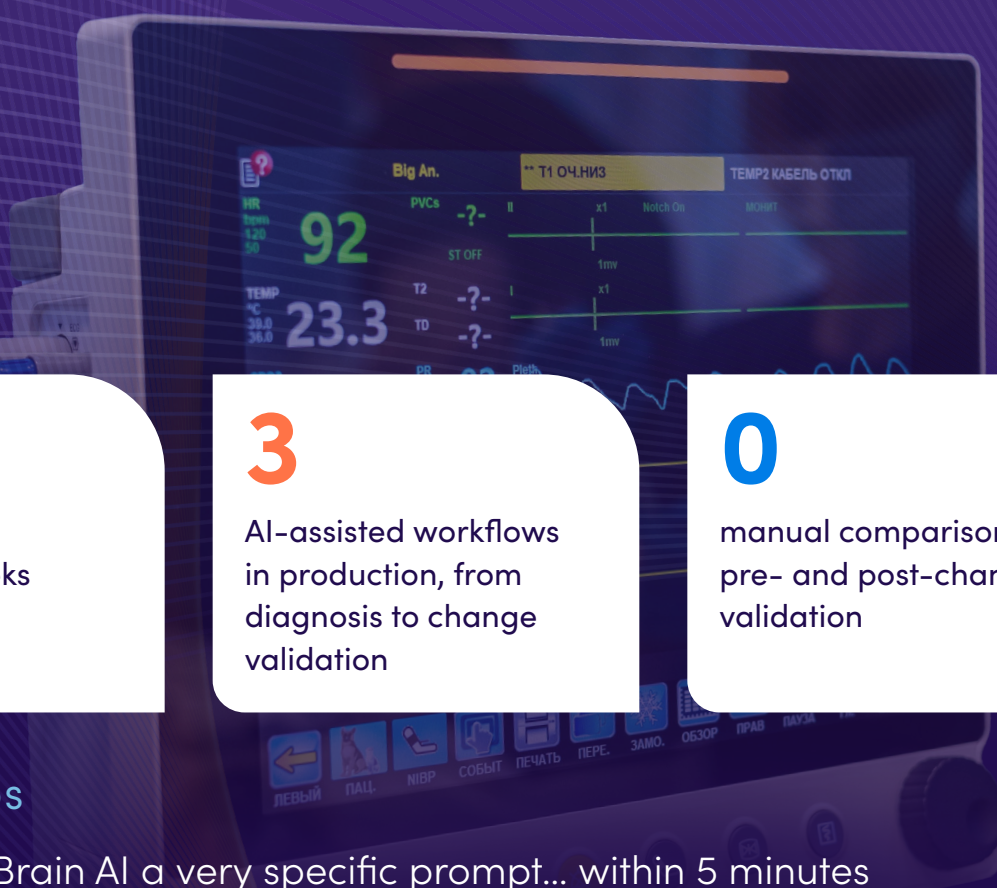
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manual comparison in pre- and post-change validation

IN THEIR WORDS

"I provided NetBrain AI a very specific prompt... within 5 minutes it provided an answer as to why the tunnel refused to establish and a recommendation to fix."

– Network Engineer



THE CHALLENGE

A VPN tunnel that would not establish — and no one could say why

The Network Services team had spent weeks investigating a VPN tunnel that refused to come up on a perimeter firewall, and still could not name the cause. In an environment absorbing hundreds of changes a month, root cause analysis routinely consumed hours from the team's most experienced engineers.

THE SOLUTION

One prompt, and the full configuration analyzed autonomously

An engineer prompted NetBrain Deep Diagnosis in plain language: tell me why the VPN on this firewall is not working. NetBrain analyzed the full configuration autonomously and returned root cause in roughly five minutes: a pre-shared-key mismatch between the device and the plan, with remediation attached. The tunnel came up immediately. The engineer confirmed the diagnosis, then passed it to a colleague unprompted.

HOW DEEP DIAGNOSIS WORKS

An engineer asks a question in plain language. NetBrain reads the live configuration against the network's intended state, isolates where reality has diverged from the plan and returns the deviation with a remediation path—not a list of things to check. The same mechanism runs on change and on live state: asked what was destabilizing a data center fabric, it correlated a firewall failover with the BGP sessions flapping around it.

BEFORE NETBRAIN

- Hundreds of network changes per month, each with cascading blast-radius potential
- Root cause analysis after change-induced outages consuming hours of senior engineer time
- Pre- and post-change device state compared by hand, with compliance gaps hard to see until an audit surfaced them

OPERATIONAL IMPACT

- **Root cause on a weeks-old VPN issue** identified in roughly five minutes from a single prompt
- **Automated pre- and post-change validation** with zero manual comparison, including a full switch-estate firmware upgrade verified end to end
- **A data center BGP flap traced to a firewall failover event** in a single conversational query, during a live outage

These results are running in production at a national healthcare organization today. Learn more at: <https://www.netbrain.com/>