



ACHIEVE NOC
EFFICIENCY THROUGH
NETWORK AUTOMATION

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

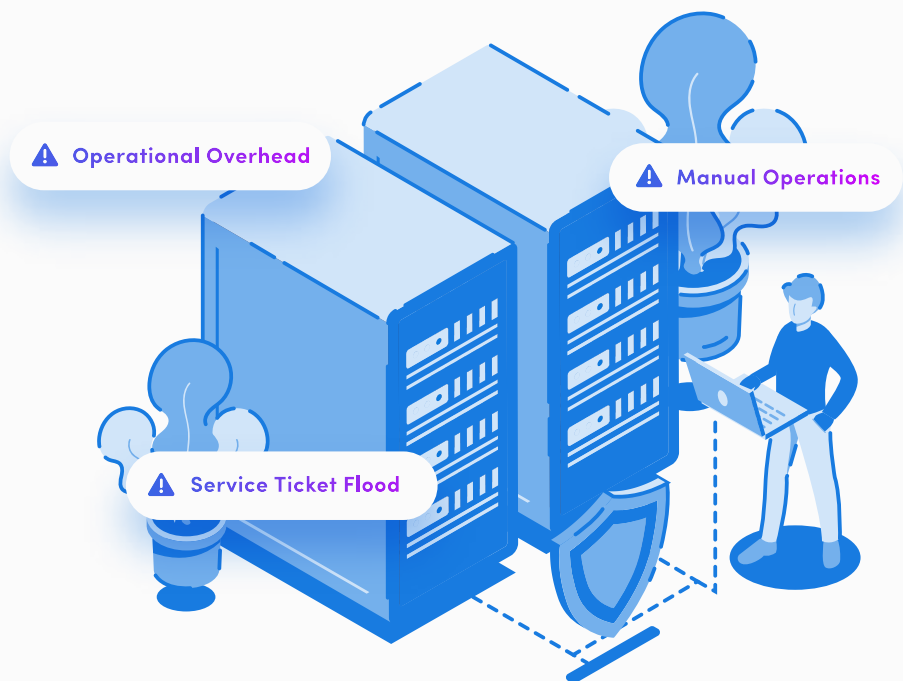
Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

ACHIEVE NOC EFFICIENCY THROUGH NETWORK AUTOMATION

Your business relies on its hybrid Network Infrastructure to be up and running 24 hours a day, 365 days a year. It's the lifeblood of your operations. These hybrid networks support edge, data centers, cloud-based services, and a litany of software-defined networking technologies, dramatically increasing the complexity and operational overhead.



Manual operations processes leave network operations unable to keep up with the constant flood of network service tickets often numbering in the hundreds or thousands weekly, many of which are repetitive issues. With an average Mean-Time-To-Repair (MTTR) of several hours, operational resources quickly reach their limit.

Meanwhile, operations spends too much time and resources on repetitive, false positive monitoring events, and transient incidents. But, what if the know-how to resolve known incidents could be easily harnessed and automatically applied to similar occurrences?

ACHIEVE NOC EFFICIENCY THROUGH NETWORK AUTOMATION

Network automation can help you achieve the desired results - higher service availability, lower operational costs, shorter task duration, and more accurate ticket resolutions - without adding more resources or long development projects.



**Low Operational
Costs**



**Shorter Task
Duration**



**Higher Service
Availability**



**Accurate
Ticket Resolution**

The era of do-it-yourself automation and scripts is transitioning to platform-driven approaches, that combine the flexibility of high-code customization with enhanced accessibility, without compromising on power or flexibility. More importantly, automation drives collaboration and network-wide scale, and is no longer limited to highly-skilled engineers.

64%

**of network automation leaders
prefer low-code or no-code solutions**

A recent Enterprise Management Associates (EMA) survey of 350 IT professionals found that 64% of network automation leaders prefer low-code or no-code solutions to empower all personnel to interact with their automation solutions.

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

THE ADVENT OF NO-CODE NETWORK AUTOMATION FOR SERVICE EXCELLENCE

Automation is helping address the most pressing NOC challenges, yet, until now, it hasn't been able to fulfill the scalable, collaborative and self-service operation's needs. This is due to the constraints of the predominant manual custom scripting approach using Python.

With limitations such as long development cycles and lack of service-delivery awareness, enterprise NOCs can't keep up.



What's needed is an automation platform that can understand your live network and let you capture, replicate, and enforce hybrid-cloud network knowledge (all without code) and automatically check against known problems.

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

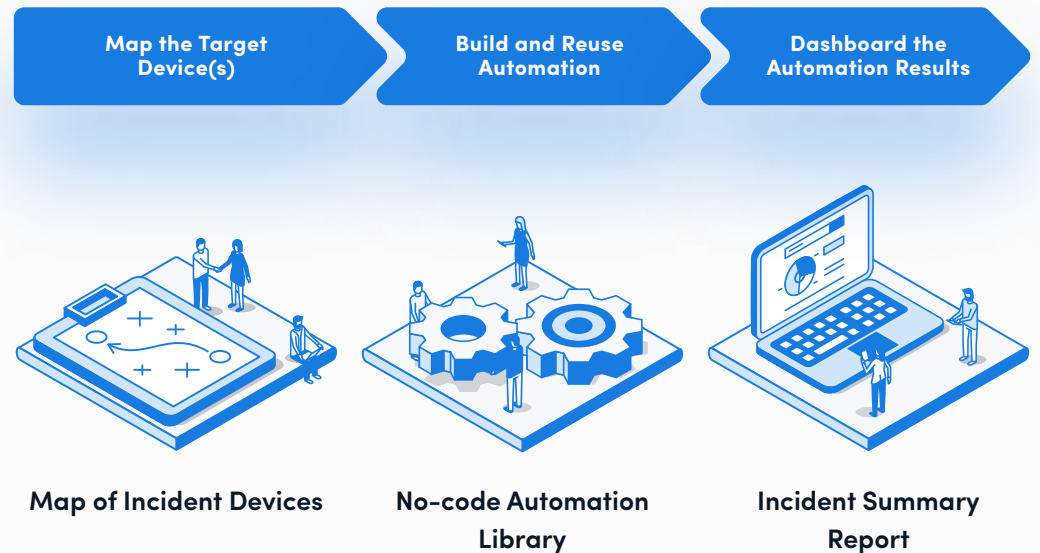
NetBrain next-gen

A SINGLE TROUBLESHOOTING WORKFLOW

NetBrain Next-Gen is a no-code network automation platform that captures and enforces network design intents, simplifying problem diagnosis and maintenance. A single workflow creates dynamic maps, uses automation from the expert knowledge library, and offers collaborative incident dashboards.

This workflow generates network automation in minutes that anyone can use to solve problems of any size or complexity.

FOR EVERY PROBLEM



Automate every aspect of the incident workflow, from ticket creation to diagnosis to notification. It automatically identifies the problem area, generates topology maps, and empowers network operators to collaborate effectively. With event-triggered automation, NetBrain diagnoses and resolves network issues in real-time, reducing MTTR and improving service availability.

Get automated notifications as email alerts informing the right teams immediately about network issues, even transient ones so engineers can monitor.

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

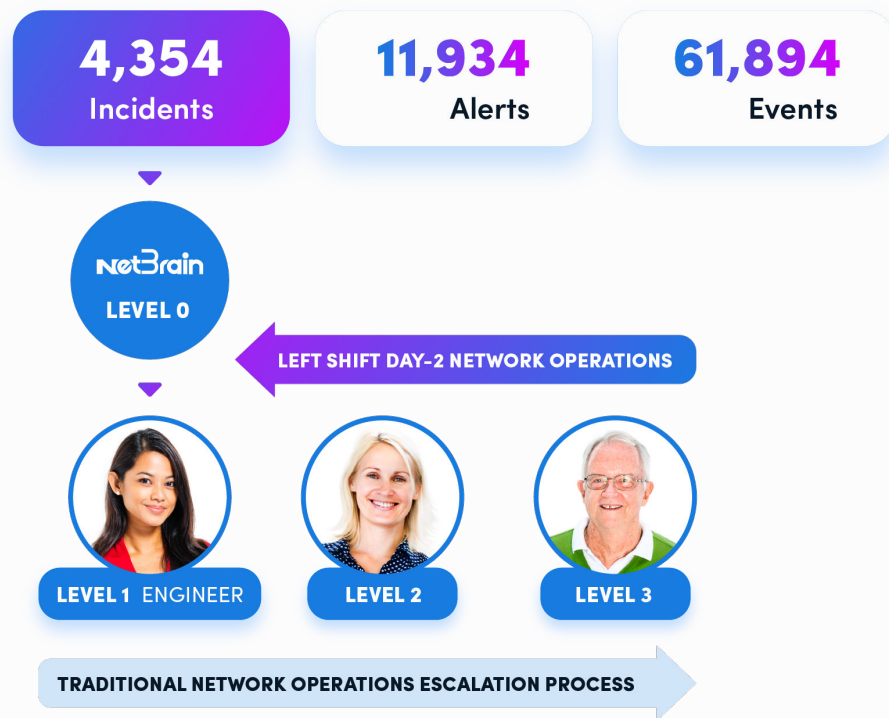
Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

OFFLOAD DIAGNOSIS WORK FROM HUMAN TO MACHINE

NetBrain facilitates a left-shift approach to troubleshooting, enabling network operations teams to detect and address issues before they escalate into major incidents. By inserting automation in between the incident generator tools and the operators and engineers that diagnose and resolve them, you can reduce wasted troubleshooting time on repetitive incidents you already know how to solve and reduce escalations to critical engineers working on service delivery innovation.



Automate every aspect of the incident workflow, from ticket creation to diagnosis to notification. It automatically identifies the problem area, generates topology maps, and empowers network operators to collaborate effectively. With event-triggered automation, NetBrain diagnoses and resolves network issues in real-time, reducing MTTR and improving service availability.

Get automated notifications as email alerts informing the right teams immediately about network issues, even transient ones so engineers can monitor.

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

DECREASING THE NUMBER OF SERVICE TICKETS WITH AUTO-CLOSE

Reduce the amount of monitoring events that are non-issues by checking to see if they are persistent and, if not, auto-closing tickets for transient, non-actionable problems. For example, if there is BGP flapping, NetBrain runs auto-diagnosis 3 times at 15-minute intervals, and, if all clear, it auto-closes the ticket.

REDUCING ESCALATIONS

NetBrain identifies potential issues in real time and provides actionable diagnostic insights. This proactive approach minimizes downtime, improves network reliability, and enhances user experience.



Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

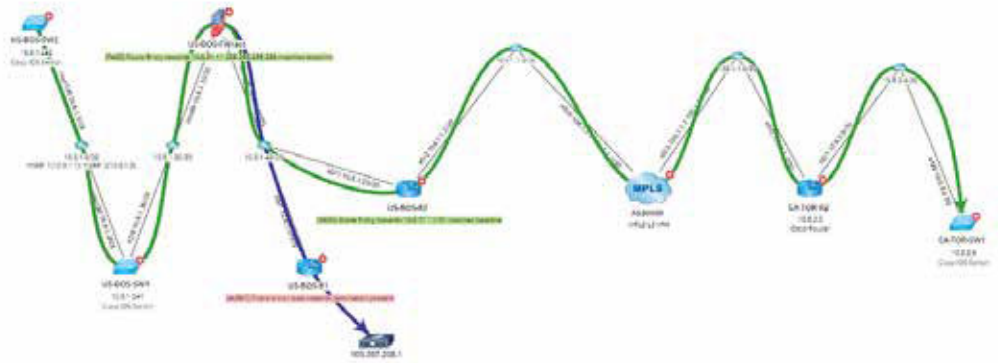
Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

MAP-DRIVEN DIAGNOSTICS

NetBrain's map-based diagnostics allow engineers to troubleshoot network problems visually, leveraging pre-built automation assets like Intents/Maps/Paths. With real-time collaboration features, engineers can share findings and execute multi-step automations effortlessly, speeding up troubleshooting and change management tasks.



Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

ON-DEMAND AUTOMATION LIBRARY

Automated network troubleshooting leverages your own automation library to react instantly to external incidents, reduce escalations and dramatically shorten mean time to repair. Start with hundreds of pre-built automation intents and add no-code automation as you go.

- Device Fail Over (4)
 - ASA Failover Pair Both Active Check
 - ASA Failover Pair Both Active Check_follow up
 - HA Configuration Synchronization Check
 - HA Status Check
- First-Hop Failover (14)
 - GLBP (4)
 - GLBP Base Group
 - GLBP Pair Device and State Check
 - GLBP Stability Check
 - GLBP Track and Preemption Configuration Check
 - HSRP (6)
 - HSRP Base Group
 - HSRP Pair Device and State Check
 - HSRP Pair Device Consistency Check
 - HSRP Pair Device Consistency Check- Follow up
 - HSRP Stability Check
 - HSRP Track and Preemption Configuration Check
 - VRRP (2)
 - VRRP Stability Check
 - VRRP Ttrack and Preemption Configuration Check
- Trunk_Port(L2 Failover) (6)
 - Design Error (5)
 - Mode of Port Channel Pair Check
 - Mode of Port Channel Pair Follow Up Check
 - Port Channel without Member Port Check
 - VPC Peer Link Port Status Check
 - VPC Port Status Check
 - Operational Status Assessment (1)
 - Check Port Channel Member Status

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

INCIDENT SUMMARY DASHBOARD FOR COLLABORATION

Incident Summary Dashboards leverage custom reports to organize automation activity by role and location, allowing for interactive collaboration and live analysis.

FOR EACH PROBLEM INCIDENT... An Incident Summary Dashboard

The diagram illustrates the flow from automation roles to a detailed incident summary dashboard. On the left, three roles are listed in white boxes with blue arrows pointing right:

- ITSM Auto-Diagnosis (Using Triggered Auto Intent)**: Represented by a monitor icon.
- L1 Engineer (Manually Executed Auto Intent)**: Represented by a person icon.
- L2 Engineer (Enhanced with new Intent)**: Represented by a person and gear icon.

On the right, a screenshot of the 'Incident Summary Dashboard' is shown. It features three main sections, each with a table of results:

- Services/line Triggered**: A table with columns for 'Dashboard and Intent Group', 'Query Results', 'Device Results', 'Total Device Results', 'CA-TDR #1', and 'CA-TDR #2'. It shows two rows of data with green status indicators.
- L1 Diagnosis**: A table with similar columns, showing two rows of data with green status indicators.
- L2 Diagnosis**: A table with similar columns, showing two rows of data with mixed green and red status indicators.

Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

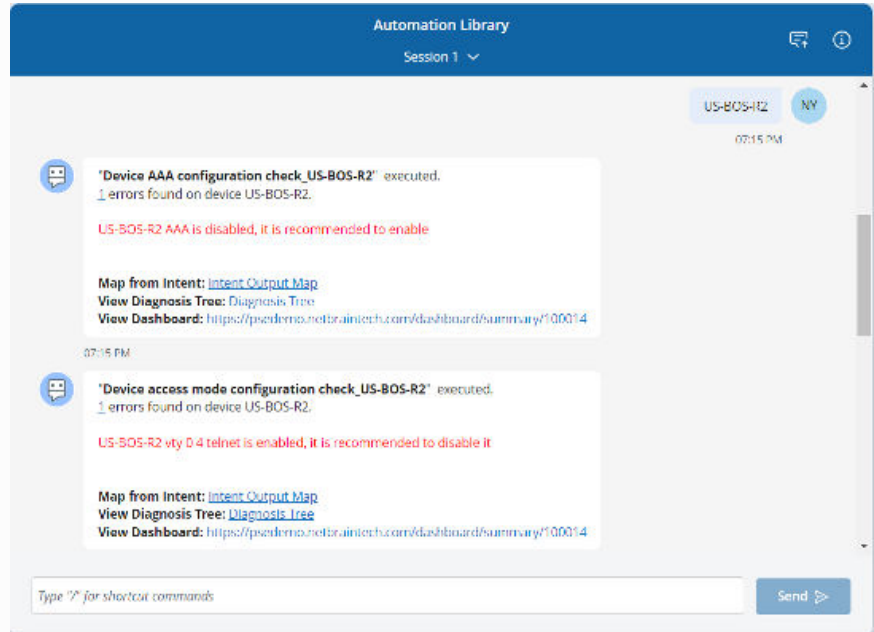
Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

COLLABORATION PORTAL AND CHATBOT

NetBrain's self-service chatbot allows non-automation engineers to handle troubleshooting tasks such as diagnosis of known problems using the automation library, generating incident-specific maps and dashboards for collaboration, and open an interactive portal, without a NetBrain license.



By providing instant assistance and guiding users through the resolution process, the chatbot reduces escalations and false positives while improving MTTR.



Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

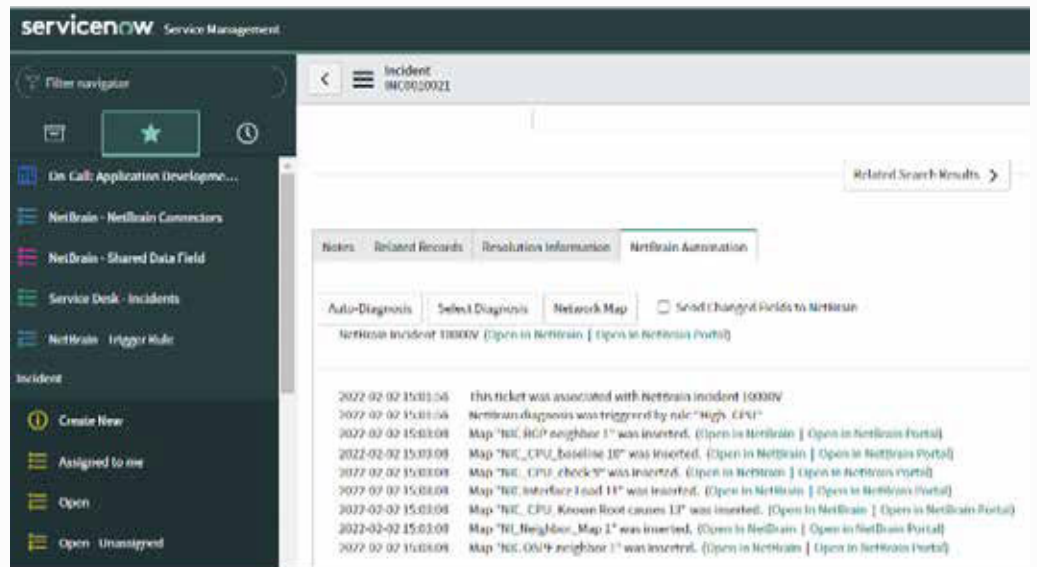
Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain next-gen

WORKFLOW INTEGRATION WITH ITSM SYSTEMS AUTOMATE TICKET HANDLING

By integrating with major ITSM systems like ServiceNow, NetBrain enhances event processing stages (Problem, Incident, Change). After mapping the problem area in the ticket, users define applicable automations (health, performance checks). Any user can continue diagnostics by selecting from a menu of intents within ServiceNow. Without NetBrain, engineers can still run diagnosis using Select Diagnosis and view results in the NetBrain Portal. Results are also added to the ticket and ServiceNow Incident Pane. NetBrain documentation and diagnostic results are available in the ServiceNow ticket, showing triggered events with timestamps.



Achieve NOC efficiency through network automation

The advent of no-code network automation for service excellence

A single troubleshooting workflow

Offload diagnosis work from human to machine

Decreasing the number of service tickets with Auto-close

Reducing escalations

Map-driven diagnostics

On-demand automation library

Incident summary dashboard for collaboration

Collaboration portal and chatbot

Workflow integration with ITSM systems automate ticket handling

NetBrain Next-gen

NETBRAIN NEXT-GEN

NetBrain Next-Gen redefines network automation by focusing on network intents, making it more intelligent, available, and responsive to business needs. By automating problem diagnosis and preventive maintenance, NetBrain helps organizations achieve NOC efficiency, reduce operational costs, and strengthen network security.

ABOUT NETBRAIN TECHNOLOGIES

Founded in 2004, NetBrain is the market leader for NetOps automation, providing network operators and engineers with dynamic visibility across their hybrid networks and low-code/no-code automation for key tasks across IT workflows. Today, more than 2,500 of the world's largest enterprises and managed service providers use NetBrain to automate network problem diagnosis, generate real-time documentation, accelerate troubleshooting, and enforce enterprise architectural rules.



Copyright © 2024 NetBrain Technologies, Inc.
All trademarks referenced herein belong to
NetBrain Technologies, Inc

+1 (800) 605-7964
info@netbraintech.com
www.netbraintech.com