

HCLSoftware

HCL iAutomate NetBot

AI-driven automation for network agility
and operations efficiency



HCL iAutomate

Value of HCL iAutomate NetBot

As the scale and complexity of enterprise networks increase, the challenges of effectively managing the network infrastructure also grow exponentially. Enterprises have to handle increasing operational complexities, demand for omnichannel customer experience 24x7, and an unprecedented amount of threats from security breaches and service downtimes. The need of the hour is a comprehensive network automation strategy resulting in self-driven networks capable of using data and AI-based cognition.

Adopting intelligent automation solutions is key to building this resilience.

HCL iAutomate NetBot (NetBot), a workflow driven network automation product, offers seamless network management and reduces your network recovery time. It automates the entire network lifecycle starting from device provisioning, to change management, security, and compliance. NetBot ensures your network reaches autonomous capabilities, such as network self-healing, auto remediation, automated change and event management, automated configuration changes, and plug-and-play provisioning.



Challenges Addressed by NetBot



Infrastructure Outages

- **39% of IT managers blame human errors for infrastructure outages.**
- With a large and distributed network in enterprises hosted on multiple platforms – public, private and cloud infrastructures, manual changes become impossible.
- Manual command line interface-based network management has proven to be unscalable, monopolizing of time, and prone to human error.



Configuration and Change Management Failures

- **4 out of 5 network managers believe that improved configuration management and processes could have prevented their most recent major outage.**
- Configuration & firmware errors and corrupted routing tables play a big role in network outages and increase provisioning times.
- Complex network designs and lack of standard procedures make it difficult to verify configuration changes and determine failure modes.



Time Spent on Firefighting and Reactive Troubleshooting

- **31% of the day of an average NetOps team is spent on troubleshooting issues. With a greater number of troubleshooting tools, this number reaches 44%.**
- Troubleshooting network issues have largely been reactive, leaving the NetOps teams less time to deliver strategic value to the business.
- Expectations from application & user experience are high with near zero fault tolerance.



Key Features

• NetOps Automation

Automated network operations

An automation platform based on automated scripts, tools and nested workflows. Supports complete runbook automation and self-healing with zero manual intervention.

- **Repair:** Triage, network self-heal.
- **Recommend:** Runbook recommendation.
- **Customization:** Custom runbook creation.

• Interactive UI

AI-driven analytics & user interface

The user interface provides all network and troubleshooting insights being reported through multiple data sources, helping network managers keep an eye on overall network performance.

- **Dashboards:** Personalized, real time.
- **Multitenancy:** Multiple data sources.
- **Unified View:** Detailed reports, RBAC.

• Experience Automation with Generative AI

Injected with Generative AI capability, it redefines user experience with enhanced capabilities around proactive issue resolution and driving greater productivity.

- Generation of knowledge articles with chat window feature.
- Ansible playbook generation.
- Recommendation of related tickets to, enhancing user's ability to understand and resolve issues.
- Document summarization for ease of understanding.
- Enhanced knowledge articles recommendation with GenAI capabilities.

• DAG-Based Troubleshooting

Causal reasoning based issue remediation

Powered with a Direct Acyclic Graph (DAG) enabled troubleshooting platform that remediates even the most complex problems in the networks through causality-based inference engines.

- **Cause-Effective Mapping:** Inference engine, knowledge authoring.
- **Knowledge Base:** Unified knowledge repository.
- **Visualization:** Context aware visual workflow.

• Knowledge assistance

- Aggregates knowledge from multiple enterprise sources, internal and external to build a unified knowledge base.
- Proactive knowledge assistance to human agents for faster resolutions.

• Enterprise-grade security

Ensure security of your closed-loop automations through various mechanisms, like:

- Data encryption.
- Token-based authentications for integrations.
- SAML-based authentications.
- Key rotation mechanism to avoid eavesdropping.

• Real-time updates

- Track the actions performed by automations on target end points on a real-time basis.
- Leverage the data for auditing and governance for future knowledge recommendation.
- Proactive mail notifications to detect stopped / paused jobs for better visibility and troubleshooting.

Business Benefits



Rapid time-to-value

- Quick implementation in 6 to 8 weeks.
- Leverage **600+ reusable and configurable runbooks** out of the box.
- Achieve **zero-touch automation state in 4 to 5 months**.



Self-healing network aligned to business strategy

- Enterprise network to proactively self-remediate issues eliminating human intervention.
- Critical configuration patches and updates deployed at one go across the network.



Improved operational efficiency and reduce costs

- Transforms network operations from a perceived cost center into a modern NetDevOps entity fully aligned with the business needs.
- Achieve up to **30% reduction in service desk related costs**.
- Use of nested automated workflows completely bringing considerable OpEx savings and improved ROI.



Intelligent orchestration

- Intuitive, context-aware, and visual workflows help orchestrate real time problem detection, remediation and optimization, making networks more self-aware.

Success Stories

01

Leading American Drugstore chain improved IT operations and reduces its manual efforts.

Challenges:

- Manual effort for iOS upgrades due to lack of automation.
- Time-consuming resolution of network slowness.
- Lengthy manual analysis of port interoperability issues.
- Hours spent diagnosing and resolving application slowness.

Benefits:

- Single platform of automation.
- Quicker resolution to network troubles.
- Reduced MTTR.
- Reduction in manual efforts in NetOps.

Value Delivered:

98% Success rate

12K+ Tickets handled

2.5K Hours saved

57% Reduction in MTTR

02

HCL iAutomate NetBot enabled end-to-end automation for US-based multinational healthcare service company.

Challenges:

- Redundant and shallow tickets from Spectrum alerts burdened the NetOps team.
- Prolonged resolution times due to manual operations.
- Inconsistent ticket information increased processing times.
- Duplicate tickets created by Spectrum and Moogsoft for each network issue.

Benefits:

- Single platform for network automation.
- Reduced shallow tickets saved significant man-hours.
- Proactive alerts minimized network downtime.
- Consistent ticket information improved NetOps efficiency.

Value Delivered:

92% Success rate

56K+ Tickets handled

3K Hours saved

About HCL Intelligent Operations

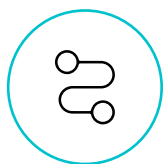
HCL Intelligent Operations is focused on transforming and simplifying enterprise IT and business operations. Our exclusive products and platforms enable enterprise to operate in a leaner, faster, and cost-efficient manner while ensuring superior business outcomes.



Our vision focuses on



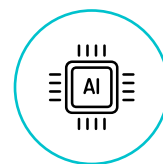
**Drive
enterprise-wide
Digital agility**



**Facilitate
business flow
intelligence**



**Enabling a
service-Oriented
enterprise**



**Provide AI-led
service
assurance**

Want to know more? Contact us at aiops-pmg-team@hcl-software.com.

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About HCLSoftware

HCL Software is a global leader in software innovation, dedicated to powering the Digital+ Economy. We develop, market, sell, and support transformative solutions across business and industry, intelligent operations, total experience, data and analytics, and cybersecurity. Built on a rich heritage of pioneering spirit and unwavering commitment to customer success, we deliver best-in-class software products that empower organizations to achieve their goals. Our core values of integrity, inclusion, value creation, people centricity, and social responsibility guide everything we do. HCL Software serves more than 20,000 organizations, including a majority of the Fortune 100 and almost half of the Fortune 500.