

According to Gartner, organizations need to embrace systematic automation of IT processes to improve accountability, efficiency and predictability while reducing cost and risk. Similarly, IT teams need to communicate and collaborate more effectively in order to share domain knowledge and subject matter expertise, particularly during troubleshooting and escalation.

### Challenges of traditional process automation and documentation

Unfortunately, most network teams automate only a small fraction of their day-to-day operational tasks, even time sensitive ones. Similarly, teams struggle to share expertise effectively, so very few people are equipped with the skills and know-how required to solve tough problems. This lack of automation and documentation can be attributed to a few key challenges:

- ◆ **Documenting subject matter expertise is a manual process:** Documenting network know-how with playbooks and wikis is often inefficient and ineffective, leading to a knowledge gap across enterprise IT operations.
- ◆ **Troubleshooting and escalation workflows are inefficient:** When tickets are handed upwards, engineers often duplicate troubleshooting efforts while solving the same problem, due to a lack of collaboration and communication.
- ◆ **Scripting and process automation don't scale well:** Engineers often shy away from the time commitment of learning a programming language. In addition, in-house scripts don't scale well across complex multi-vendor environments. As a result, engineers often end up consumed by manually performed network operations.

### Introducing - Executable Runbooks

NetBrain's Executable Runbooks are interactive workflows containing executable actions which can perform complex network tasks. Executable Runbooks provide your organization with a simple, scalable method of achieving automation and empower your network team to do more with less.

#### Build It

Build runbooks for network processes in seconds, or let NetBrain automatically create one while you perform tasks on the network.

#### Run It

Quickly automate operations such as CLI commands, path analysis, and data visualization anywhere on your network.

#### Share It

Have your network heroes codify advanced knowledge into runbooks and empower junior operators to work independently.

The screenshot displays the NetBrain Runbook interface. On the left, a workflow diagram for 'Check Status1' is shown, starting with a 'Start' node, followed by a 'Path' node, and then four sequential action nodes: 'Annotate QoS Config', 'Highlight Queue Strategy', 'Monitor QoS Drop Rate', and 'Retrieve QoS CLI Data'. On the right, the 'Runbook Info' panel is visible, containing fields for 'Author: QoS Expert', 'Last Modified: 2018-11-20 4:25 PM', 'Device Type: Cisco IOS Switch, Cisco Router', and 'Tags: QoS'. Below these fields is a 'Runbook Description' section with a rich text editor, followed by a 'Technology Overview' section and a 'Purpose of Runbook' section listing the actions: 'Highlight QoS Configuration', 'Highlighting Interface Queuing Strategy', and 'Retrieve QoS CLI Commands'.

*Transform complex network processes into executable workflows.*

# NetBrain Executable Runbooks

## Accelerate Troubleshooting

Executable Runbooks are powerful troubleshooting and escalation tools which can reduce Mean Time to Repair by 50% or more and help meet your organizational SLA targets.

## Document Workflows Automatically

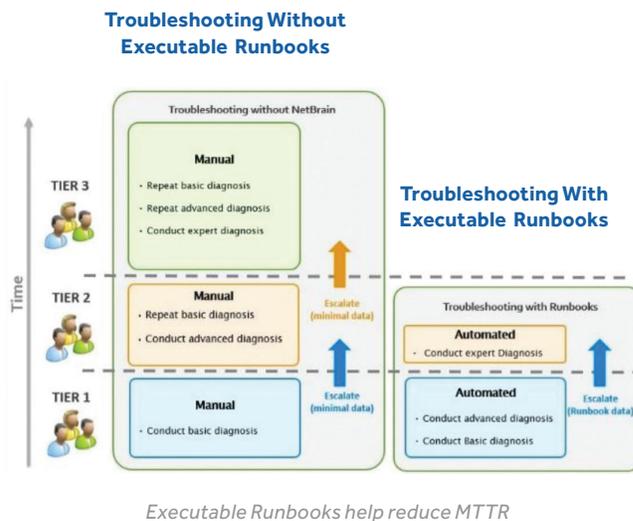
With NetBrain, documenting network processes is made easier. As you troubleshoot an issue on a Dynamic Map, all your steps are automatically recorded in a runbook. When your team needs to escalate issues, tier-2 engineers can see which steps have already been performed on the network and the associated data.

## Make Knowledge Executable

Recurring problems (e.g. slow applications, route flapping, ACL denials) may not be rare, but still take time to discover and resolve. Using runbooks, the organizational experts can codify their advanced knowledge and share it with the rest of their team, empowering the more junior operators to resolve issues independently.

## Trigger “Just-In-Time” Automation

NetBrain’s robust RESTful API enables you to integrate runbooks with your existing event-management solutions. When NetBrain receives an alert from your monitoring solution, security tool or incident management system it can trigger a first-response diagnostic Runbook. This Runbook will run over the affected area and collect information for your engineers before they sit down and start working on it.



## Program Visually

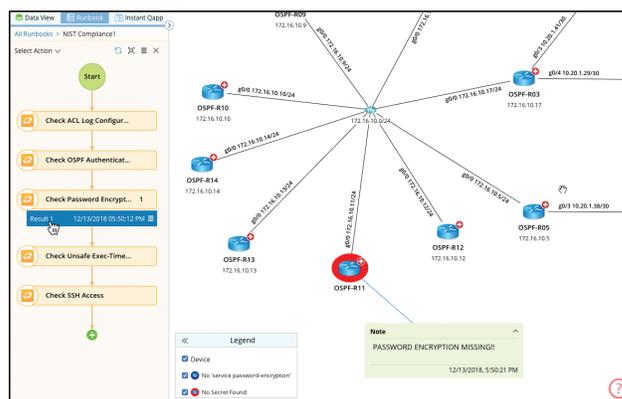
NetBrain’s visual programming environment leverages built-in CLI Parsers, SNMP, and APIs to automate data collection and analysis. Engineers won’t need to write a single line of code to automate network operations.

## Write Once, Execute Anywhere

Once a Runbook is created for one area, you can execute the same runbook anywhere else in your environment.

## Apply Automation Using a Dynamic Map:

Executable Runbooks use devices and interfaces on a Dynamic Network Map as the input for automation. The same Dynamic Map is also used for the output of automation, providing a canvas for visualizing the automation results.



Execute network processes over Dynamic Maps, which serve as NetBrain’s main User Interface