

NetBrain Golden Assessment Library

THE “APP STORE” EXPERIENCE FOR NETWORK AUTOMATION

Imagine a world where ensuring network reliability and security is as simple as downloading an app. The **Golden Assessment Library (GAL)** makes this a reality—delivering **pre-built, plug-and-play automation** to replace manual processes, custom scripting, and reactive firefighting.

Built on industry-wide knowledge from Cisco (Business Critical Service), NetBrain, and trusted partners, and is integrated into the centralized Golden Assessment Library is the industry's first curated marketplace for network automation, offering ready-to-run assessments that proactively validate intent, enforce compliance, and eliminate misconfigurations across hybrid and multi-vendor environments. By applying lessons from past outages and automating best practices, the Library acts as a “herd immunity” shield for your network—stopping problems before they start.

With the Golden Assessment Library, network and security teams can:



Automate 100+ critical checks (BGP, OSPF, ACLs, Zero Trust, and more) in minutes.



Enforce golden configurations at scale without manual audits and assessments.



Prevent outages and breaches with proactive, intent-driven validation.

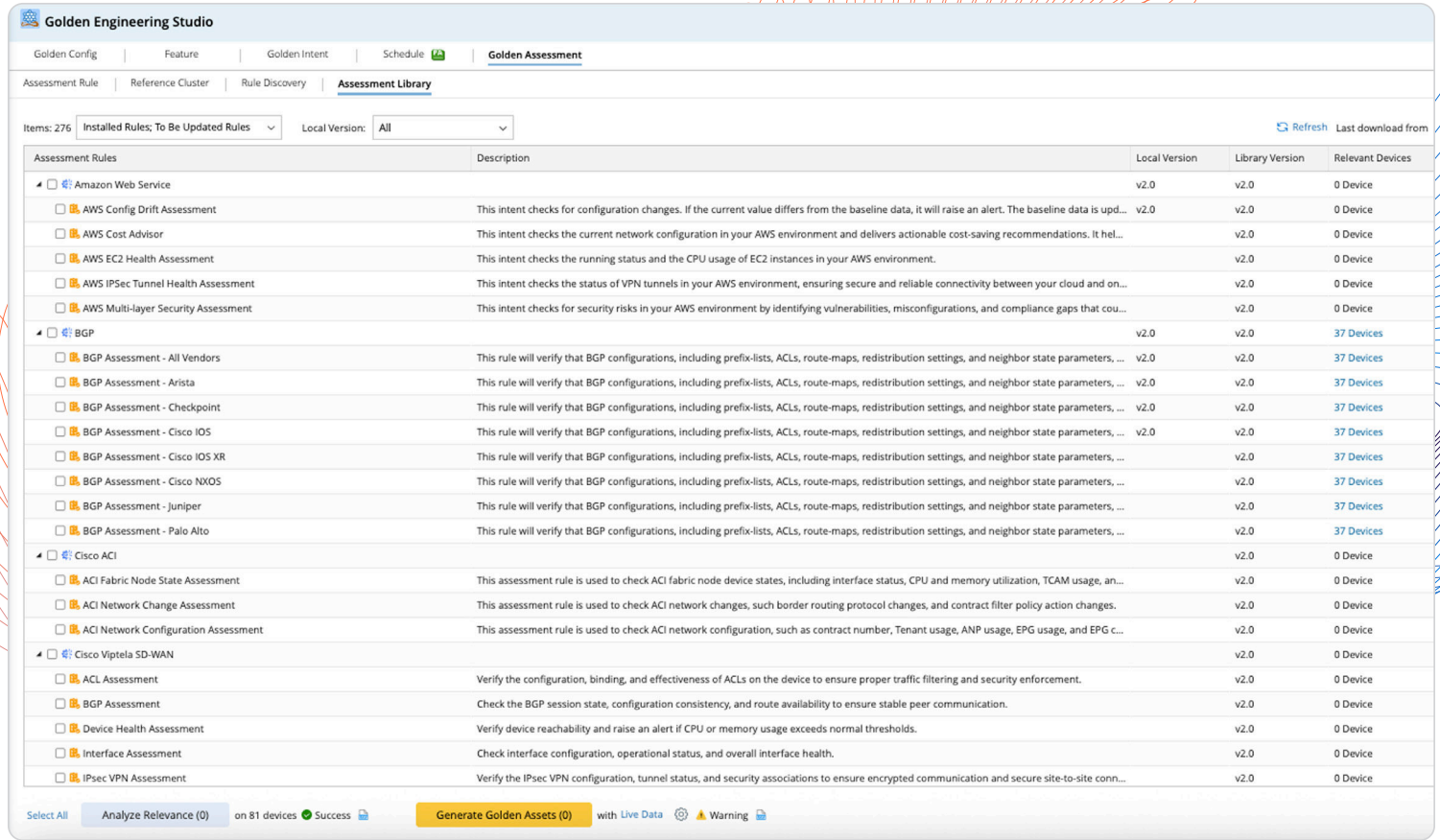
Welcome to the future of network operations—where automation is effortless, and reliability is guaranteed.

The Golden Assessment Library revolutionizes network and security operations by offering a curated marketplace of pre-built, automated assessments. Inspired by the simplicity of an app store, it delivers ready-to-use solutions to tackle common network challenges, eliminating the need for custom scripting and manual interventions. Organizations can achieve proactive, intent-driven network management, ensuring reliability and security in dynamic, hybrid environments.

Key Challenges Addressed

- **Cost of Manual Assessments:** Traditional methods struggle to keep pace with dynamic network changes, leading to misconfigurations, policy drift, and security vulnerabilities, often resulting in human error and outages.
- **Cost and Resources for Post-Mortems:** Engineers spend excessive time evaluating and diagnosing network outages across multi-vendor infrastructures yet fail to prevent future occurrences.
- **Lack of Audit Preparedness:** Manually prepared audits and network assessments fail to provide holistic, accurate and up-to-date network information for compliance.

The Solution



Assessment Rules	Description	Local Version	Library Version	Relevant Devices
Amazon Web Service		v2.0	v2.0	0 Device
<input type="checkbox"/> AWS Config Drift Assessment	This intent checks for configuration changes. If the current value differs from the baseline data, it will raise an alert. The baseline data is upd...	v2.0	v2.0	0 Device
<input type="checkbox"/> AWS Cost Advisor	This intent checks the current network configuration in your AWS environment and delivers actionable cost-saving recommendations. It hel...	v2.0	v2.0	0 Device
<input type="checkbox"/> AWS EC2 Health Assessment	This intent checks the running status and the CPU usage of EC2 instances in your AWS environment.	v2.0	v2.0	0 Device
<input type="checkbox"/> AWS IPsec Tunnel Health Assessment	This intent checks the status of VPN tunnels in your AWS environment, ensuring secure and reliable connectivity between your cloud and on...	v2.0	v2.0	0 Device
<input type="checkbox"/> AWS Multi-layer Security Assessment	This intent checks for security risks in your AWS environment by identifying vulnerabilities, misconfigurations, and compliance gaps that cou...	v2.0	v2.0	0 Device
BGP		v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - All Vendors	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Arista	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Checkpoint	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Cisco IOS	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Cisco IOS XR	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Cisco NXOS	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Juniper	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
<input type="checkbox"/> BGP Assessment - Palo Alto	This rule will verify that BGP configurations, including prefix-lists, ACLs, route-maps, redistribution settings, and neighbor state parameters, ...	v2.0	v2.0	37 Devices
Cisco ACI		v2.0	v2.0	0 Device
<input type="checkbox"/> ACI Fabric Node State Assessment	This assessment rule is used to check ACI fabric node device states, including interface status, CPU and memory utilization, TCAM usage, an...	v2.0	v2.0	0 Device
<input type="checkbox"/> ACI Network Change Assessment	This assessment rule is used to check ACI network changes, such as border routing protocol changes, and contract filter policy action changes.	v2.0	v2.0	0 Device
<input type="checkbox"/> ACI Network Configuration Assessment	This assessment rule is used to check ACI network configuration, such as contract number, Tenant usage, ANP usage, EPG usage, and EPG c...	v2.0	v2.0	0 Device
Cisco Viptela SD-WAN		v2.0	v2.0	0 Device
<input type="checkbox"/> ACL Assessment	Verify the configuration, binding, and effectiveness of ACLs on the device to ensure proper traffic filtering and security enforcement.	v2.0	v2.0	0 Device
<input type="checkbox"/> BGP Assessment	Check the BGP session state, configuration consistency, and route availability to ensure stable peer communication.	v2.0	v2.0	0 Device
<input type="checkbox"/> Device Health Assessment	Verify device reachability and raise an alert if CPU or memory usage exceeds normal thresholds.	v2.0	v2.0	0 Device
<input type="checkbox"/> Interface Assessment	Check interface configuration, operational status, and overall interface health.	v2.0	v2.0	0 Device
<input type="checkbox"/> IPsec VPN Assessment	Verify the IPsec VPN configuration, tunnel status, and security associations to ensure encrypted communication and secure site-to-site conn...	v2.0	v2.0	0 Device

A **dual-component library** designed to automate network assessments and enforce best practices:

Golden Intent Library

- **Purpose:** Proactively assess network health and detect risks.
- **Key Features:**
 - Validates BGP stability, OSPF routing, device performance, and security gaps.
 - Supports multi-vendor and hybrid environments (AWS, Azure, GCP, Cisco ACI, SD-WAN).
 - Enables intent-based network management with automated checks against industry standards.

Golden Config Library

- **Purpose:** Identify and enforce golden configurations across devices.
- **Key Features:**
 - Groups devices with similar configurations and sets the most frequent as the "golden" standard.
 - Detects deviations (e.g., mismatched NTP servers) and manual configuration errors.
 - Audits ACLs, prefix lists, and compliance across Cisco, Arista, and other vendors.

How it Works

Golden Engineering Studio

Golden Config | Feature | Golden Intent | Schedule PA | **Golden Assessment**

Assessment Rule | Reference Cluster | Rule Discovery | **Assessment Library**

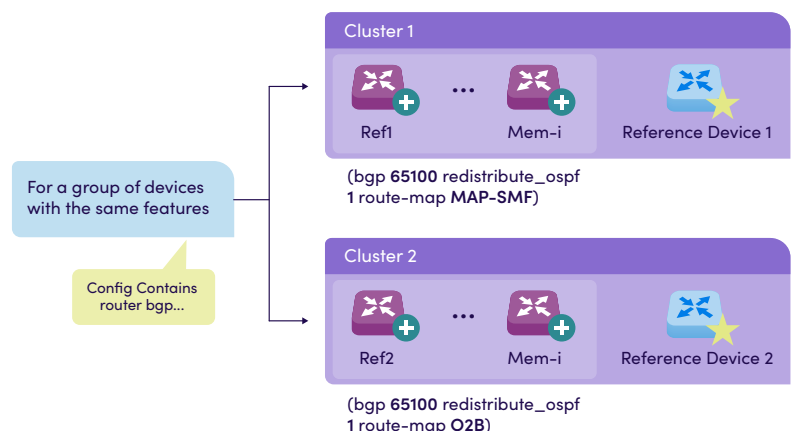
Items: 42 Installed Rules; To Be Updated Rules Refresh Last download from [NetBrain Download](#) 4 days ago.

Assessment Rules	Description	Local Version	Library Version	Relevant Devices	Status
GA Demo		v1.0	v1.0	0 Device	Installed
BGP Config		v1.0	v1.0	65 Devices	Installed
BGP Golden Config		v1.0	v1.0	65 Devices	Installed
NTP_Dynamic		v1.0	v1.0	50 Devices	Installed
NTP_dynamic_250311			v1.0	50 Devices	To Be Installed
NTP_dynamic_250325			v1.0	50 Devices	To Be Installed
NTP_Static			v1.0	50 Devices	To Be Installed
NTP_Static_250311			v1.0	50 Devices	To Be Installed
NTP_Static_250325			v1.0	50 Devices	To Be Installed
GA Do Along			v1.0	0 Device	To Be Installed
ATM VLAN Check - Abhishek			v1.0	0 Device	To Be Installed
ATM VLAN Check - APR			v1.0	0 Device	To Be Installed

Select All Analyze Relevance (35) on 82 devices Error Generate Golden Assets (35) with [Live Data](#) Error

Analyze Relevance ensures assessments target the right devices to eliminate guesswork by applying checks only to relevant devices and ensure accuracy and actionable insights by validating:

- **Assessment Feature:** Broad criteria (e.g., BGP health, security posture).
- **Assessment Rule:** Specific checks within the feature.
- **Device Scope:** Groups devices using Reference Clusters for targeted validation.
 - A Reference Cluster is a set of device groups with a reference device for each group. The criteria to create reference cluster, which helps to identify reference devices, is included in the GAL and installed and calculated at the same time. Reference Cluster is selected from a pool of devices (using either a Dynamic or Static method), and a criteria condition is applied to ensure the selected devices meet specific requirements. Devices that meet the criteria are classified as Classified, while those that don't match are listed as Unclassified. Group devices by type/device type, location, model, version, keyword, config etc.



Realizing Value

- **Proactive Observability:** Shift from reactive troubleshooting to automated, outcome-driven operations.
- **Automated Security:** Enforce Zero Trust, detect policy drift, and remediate misconfigurations.
- **Rapid Investigation:** Reduce troubleshooting time from hours to minutes.
- **Outage Prevention:** Gain 24/7 network visibility to mitigate risks before they impact operations.

Why Golden Assessment Library?

- **Herd Immunity for Outage Prevention:** Learn from past outages and industry knowledge to prevent widespread network issues and build collective resilience.
- **Curated Expertise:** Built on industry-wide outage knowledge to prevent recurring issues.
- **Effortless Automation:** Pre-built assessments eliminate the need for custom scripting.
- **Scalable Compliance:** Enforce best practices across hybrid and multi-vendor networks.

Get Started Today

Experience the power of the Golden Assessment Library in the [NetBrain Playground](#).