



NetBrain® Integrated Edition R12.1

GAL Library Installation Guide

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GAL Library Installation

Pre-requisites for Installing the GAL Library from Knowledge Cloud (KC)

Before a customer can install the Golden Assessment Library (GAL) from the Knowledge Cloud (KC), the following pre-requisites must be met:

1. The NetBrain Integrated Edition (IE) version must be 12.1.0.3 or higher.
2. If GAL v1.0 is already installed, it must be uninstalled before proceeding with the installation of GAL v2.0.

About NetBrain



NetBrain R12.1 Next-Gen

Git Version: 8a54549dcc24

Patch Version: **12.1.0.4** (Git Version: fa46e7d23701)

Released on: 2025-06-05

License ID: **[REDACTED]**

Knowledge Cloud:

Common Repo: **[REDACTED]** | **v0.0.6**

Customized Built-in Repo: **[REDACTED]** | v0.0.21

Customized Repo: N/A

[Open Source Software Notice](#)

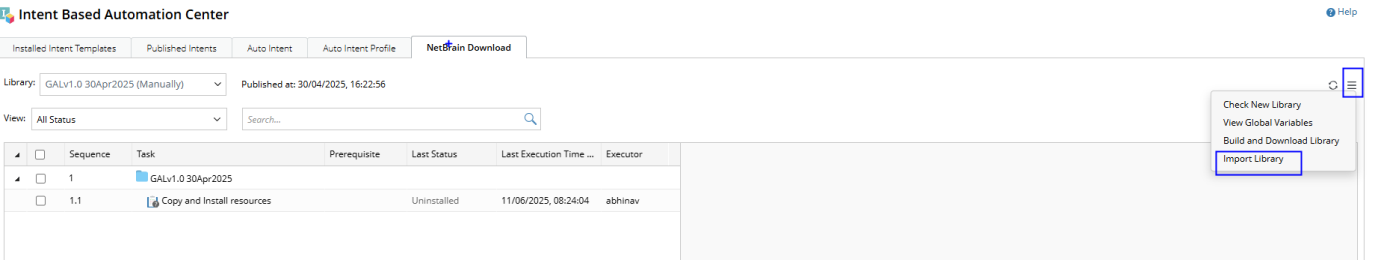
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(Optional) Import the Offline Library through the Intent-Based Automation Center

Import the Offline Library package from IBA Center in case the customer does not have internet access.



Once the above prerequisites are met and the offline library is imported, the library should be visible in the Intent-Based Automation Center Center → NetBrain Download Section, Under “Library:” Dropdown with “(Manually)” Suffix.

Install the library from the Intent Based Automation Center

Once above pre-requisites are met, we should be able to see the library in the Intent Based Automation Center → NetBrain Download Section, Under “Library:” Dropdown

Intent Based Automation Center

Installed Intent Templates Published Intents Auto Intent Auto Intent Profile NetBrain Download

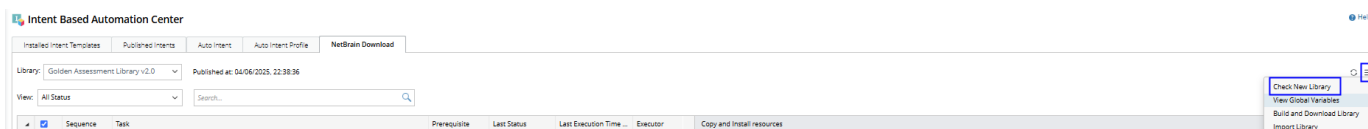
Library: Golden Assessment Library v2.0 Published at: 04/06/2025, 22:38:36

View: All Status

	Sequence	Task	Prerequisite	Last Status
☒	1	Golden Assessment Library v2.0		
☒	1.1	Copy and Install resources		Installed

Install Selected Items Uninstall Selected Items

If you are not able to see the GAL library named “Golden Assessment Library v2.0” in the dropdown, click on the hamburger icon to right and click on “Check New Library” – this will take a while and fetch the GAL Library from KC.



Once the library is available in the NetBrain Download section, proceed to "Copy and Install" the resources that may be relevant to the customer's interests.

To help you select the appropriate Assessment Rules based on customer requirements, refer to the description panel on the right side of each installable resource. This section provides a list of the Assessment Rules that will be installed with the selected package.

Description:

Golden Assessment Library v2 - Overview

Golden Assessment Library v2 (GAL v2) delivers **comprehensive assessment coverage** by evaluating both **configuration design consistency** and **critical operational health indicators** across your network.

Building on the foundation of GAL v1, this release enhances support for **hybrid and multi-vendor environments**, offering broader insight and deeper visibility into modern enterprise networks.

What's New in GAL v2

End users will now see an **expanded set of Assessment Rules** automatically installed in their **Golden Engineering Studio**, enabling them to evaluate network design adherence and operational health across a wide range of supported devices.

GAL v2 introduces two key capabilities:

1. Assessment Rules

Evaluate the **operational health** of various device types and network features, ensuring consistent performance and early detection of issues.

2. Config Rule Discovery

Analyze **configuration design consistency**, detect deviations from standards, and promote **best practices** across your infrastructure.

Supported Device Types and Capabilities

Device Type	Config Rule Discovery	Golden Assessment
Cisco IOS Switch	✓	✓
Cisco Router	✓	✓
Cisco IOS XR	✓	✓
Cisco NX-OS	✓	✓
Juniper JunOS	✓	✓
Arista	✓	✓
Palo Alto Firewall	✓	✓
Checkpoint Firewall	✓	✓
Cisco ACI		✓
Cisco Viptela SD-WAN		✓
VMware VeloCloud		✓
Microsoft Azure		✓
Amazon AWS		✓

Key Benefits

- 1. Broader multi-vendor coverage** for real-world hybrid network environments
- 2. Design-driven assessments** to enforce configuration standards
- 3. Operational visibility** through automated rule checks and alerts
- 4. Scalability and extensibility** to support diverse device types and cloud platforms

Install Settings

Conflict Option:

overwrite

ADT Folder:

Shared Tables/Golden Assessment Library

ADT Folder 1:

Shared Tables/CVE Security Advisory

ADT Folder 2:

Shared Tables/Device Lifecycle Observability Library

Device Group Folder:

Shared Device Groups/Cisco ACI Devices

Device Group Folder 1:

Shared Device Groups/Cloud Automation Library

Device Group Folder 2:

Shared Device Groups/CVE Library

Device Group Folder 3:

Shared Device Groups

Device Group Folder 4:

Shared Device Groups/VMware

Device Group Folder 5:

Shared Device Groups/EoX Library

Device Group Folder 6:

Shared Device Groups/EOL report

Golden Feature Folder:

All Features/Golden Assessment Library

Golden Feature Folder 1:

All Features/Performance

Golden Intent Folder:

Shared Golden Intent/Golden Generator

Network Intent Folder:

Shared Intents/Golden Assessment Library

Network Intent Folder 1:

Shared Intents/CVE Security Advisory

Network Intent Folder 2:

Shared Intents/Device Lifecycle Observability

Cancel

Install Selected Items

Conflict Option helps you decide to “overwrite” or “skip” the intents that are already present in the ADT Folder, Device Group Folder, Golden Feature Folder, Golden Intent Folder, Network Intents folder, Reference Cluster Folder.

Once you click on “Install Selected Items” and after the installation is complete – all the assessment rules will now be available in Golden Engineering Studio →Golden Assessment→ Assessment Library.

Golden Engineering Studio

Golden Config

Feature

Golden Intent

Schedule

Golden Assessment

Assessment Rule

Reference Cluster

Rule Discovery

Assessment Library

Items: 59

Installed Rules; To Be Updated Rules

Generate Golden Assets from Golden Engineering Studio

1. Golden Assessment Library

The Golden Assessment Library enables you to install Assessment Rules for various features on relevant network devices. Follow the steps below to ensure accurate deployment:

1. Select the required features and Assessment Rules to be installed. You may also choose to select all features and rules if applicable.
2. Click *Analyze Relevance* to evaluate the applicability of each selected rule across all managed devices.
3. After the analysis is complete, select only those rules/features that have relevant devices.
4. Click *Generate Golden Assets* to create and deploy the corresponding Assessment Rules on the matched devices.

Golden Engineering Studio

Assessment Rule | Reference Cluster | Rule Discovery | Assessment Library

Items: 276 | Installed Rules: To Be Updated Rules

Assessment Rules	Description	Local Version	Library Version	Relevant Devices	Status
Amazon Web Service					
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
BGP					
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
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	To Be Installed
Cisco ACI					
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	To Be Installed
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	To Be Installed
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	To Be Installed
Cisco Viptela SD-WAN					
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	To Be Installed
BGP Assessment	Check the BGP session state, configuration consistency, and route availability to ensure stable peer communication.	v2.0	v2.0	0 Device	To Be Installed
Device Health Assessment	Verify device reachability and raise an alert if CPU or memory usage exceeds normal thresholds.	v2.0	v2.0	0 Device	To Be Installed
Interface Assessment	Check interface configuration, operational status, and overall interface health.	v2.0	v2.0	0 Device	To Be Installed
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	To Be Installed
OMP Assessment	Verify OMP-related configurations follow best practices after it is enabled on Viptela vEdge devices.	v2.0	v2.0	0 Device	To Be Installed
OSPF Assessment	Verify the OSPF configuration, neighbor relationships to ensure proper intra-domain routing and protocol stability.	v2.0	v2.0	0 Device	To Be Installed
Redundancy Assessment	Verify the configuration and status of redundancy mechanisms to ensure high availability and failover capabilities within the network.	v2.0	v2.0	0 Device	To Be Installed
Route Assessment	Verify the route table and protocol configurations to ensure correct path selection and reachability across the network.	v2.0	v2.0	0 Device	To Be Installed
Tunnel Encapsulations Assessment	Verify tunnel interface configurations follow best practices for secure and reliable connectivity.	v2.0	v2.0	0 Device	To Be Installed
Configuration					
Configuration Assessment	This rule will compare the running-config with the startup-config on all devices to identify any configuration discrepancies	v2.0	v2.0	71 Devices	To Be Installed

Select All | Analyze Relevance (0) on 82 devices | Generate Golden Assets (0) with Live Data

2. Config Rule Discovery Using Network Feature Explorer

The Config Rule Discovery process uses the built-in plugin Network Feature Explorer to identify applicable configuration rule templates. Follow the steps below to discover and install the rules:

1. Click the *Rule Discovery* tab.
2. Click *Discover Rules* to initiate the discovery of configuration rule templates.
3. Once the discovery process completes, click *Select All* to choose all the discovered templates.

- Click *Add* to move the selected rules to the *Assessment Rules* list.
- Select the relevant rules based on customer requirements — or choose *Select All* to include all available config rules.
- Click *Build Assessment Rules* to finalize and install the selected rules.

Golden Engineering Studio

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

Assessment Rule | Reference Cluster **1** | **Rule Discovery** | Assessment Library

Discover Config Rules

Select Template: All Templates | Device Scope: All Devices

Discover Rules **2** | Last Discover at: June 7, 2025

Config Rule Template	Config Rule Instance
☐ ACL	
☐ BGP Distribute-list ACL	BGP Distribute-list ACL ALLOW_TRAFFIC
☐ BGP Distribute-list ACL	BGP Distribute-list ACL SG_WAN_IN
☐ BGP Distribute-list ACL	BGP Distribute-list ACL SG_WAN_OUT
☐ BGP Neighbor AS Path ACL	BGP Neighbor AS Path ACL 1
☐ BGP Neighbor Distribute-list ACL	BGP Neighbor Distribute-list ACL SG_WAN_IN
☐ BGP Neighbor Distribute-list ACL	BGP Neighbor Distribute-list ACL SG_WAN_OUT
☐ BGP Neighbor Route-Map ACL	BGP Neighbor Route-map ACL JP_WAN_IN
☐ BGP Neighbor Route-Map ACL	BGP Neighbor Route-map ACL JP_WAN_OUT
☐ BGP Redistributes Connected Route-Map ACL	BGP Redistributes Connected RM BGP_TRAFFIC ACL ALLOW_TRAFFIC
☐ BGP Redistributes EIGRP Route-Map ACL	BGP Redistributes EIGRP RM BGP_TRAFFIC ACL ALLOW_TRAFFIC

3 **Select All** **4** **Add**

Total: 13 Rules Installed

Config Rule Template	Config Rule Instance	Parser
☐ ACL		
☐ BGP Distribute-list ACL	BGP Distribute-list ACL 1	
☐ BGP Distribute-list ACL	BGP Distribute-list ACL S0	
☐ BGP Distribute-list ACL	BGP Distribute-list ACL S2	
☐ BGP Distribute-list ACL	BGP Distribute-list ACL ALLOW_TRAFFIC	
☐ BGP Neighbor AS Path ACL	BGP Neighbor AS Path ACL 1	
☐ BGP Neighbor Distribute-list ACL	BGP Neighbor Distribute-list ACL 1	
☐ BGP Redistributes Connected Route-Map ACL	BGP Redistributes Connected RM BGP_TRAFFIC ACL 1	
☐ BGP Redistributes EIGRP Route-Map ACL	BGP Redistributes EIGRP RM BGP_TRAFFIC ACL 1	
☐ BGP Redistributes ISIS Route-Map ACL	BGP Redistributes ISIS RM BGP_TRAFFIC ACL 1	
☐ BGP Redistributes OSPF Route-Map ACL	BGP Redistributes OSPF RM BGP_TRAFFIC ACL 1	
☐ BGP Redistributes Static Route-Map ACL	BGP Redistributes Static RM BGP_TRAFFIC ACL 1	
☐ Console Line ACL	Console Line ACL 1	

5 **Select All** **6** **Build Assessment Rules** | with Live Data ☒ Auto verify Golden Configs after generation ☒ Auto run Golden Intents after generation