gluware®

Gluware 4.0
Network Automation Your Way

White Paper

Contents

How unique is your network?

No two networks are alike.

No two network automation journeys are alike either.

No matter how complex your enterprise network is, Gluware® Intelligent Network Automation 4.0 is designed to help.

The Gluware Intelligent Network Automation software suite delivers the features, simplicity and reliability organizations seek today to discover, automate and orchestrate their complex, multi-vendor, multi-domain and multi-cloud networks. To prevent network outages, manual errors and security issues, many global enterprises use the Gluware platform for an intent-based and declarative approach to automating their mission-critical networks.

Gluware 4.0 opens the door to automating any mission-critical network—no matter what the size or degree of complexity. Gluware 4.0 delivers a new multi-engine architecture and enterprise-ready features for:

- **Flexible Automation:** On-premises or cloud-delivered; One automation application or more
- **Expanded Environments:** More platforms including multi-cloud
- **Enhanced Experience:** Enterprise-class features and dashboards

Gluware's declarative, intent-based network automation applications include:

- **Gluware Control:** Centralized control panel for Gluware applications
- **Device Manager:** Auto-discover your network devices and details—at scale
- **Config Drift and Audit:** High resolution drift detection and no-code audits
- **OS Manager:** Reliable and scalable process to ensure network devices are updated with the approved versions and security updates
- **Config Modeling:** Automatically change your configurations into network policy change your configurations into network policy
- **Workflows:** Streamlines your day-to-day operational network automation tasks and processes
- **GluAPI:** Enables core API endpoint services with support to access Gluware app functionality including Device Manager, Config Drift and Audit and more

This white paper is designed to help you explore why there has never been a better time to begin your network automation journey with Gluware intent-based network automation.

Gluware 4.0 Overview

Rapid Deployment

Cloud-delivered Gluware Pro SaaS tiers are optimized to quickly and easily bring the agility and ease needed in today's complex enterprise network environments.

On-premises or cloud-delivered?

Both Gluware Pro and Enterprise 4.0 offerings let organizations implement the Gluware Intelligent Network Automation software they need so they can address their current challenges and add additional solutions as they need them. Organizations need to be able to access and consume their network automation solution in a way that best suits their existing network environments. New in Gluware 4.0, the Gluware Multi-Engine Architecture (GMA) brings the power of intent-based Intelligent Network Automation to any-sized enterprise and with any network design. Whether you select cloud-delivered Gluware Pro SaaS software options or large-scale Gluware Enterprise software, you will be able to begin or advance your network automation journey your way.

Gluware Pro

Gluware Pro allows you to apply for and download Gluware with a simple request form. Install the new Gluware Secure Gateway (GSG) virtual appliance on the network. The GSG provides a secure SSH connection to the AWS-hosted Gluware instance. The GSG is part of the Multi-Engine Architecture leveraging an integrated Gluware Engine Server component to execute the provisioning jobs (inventory, drift, audit, config management) via SSH to the network devices keeping all the device connectivity on the enterprise network. A single GSG offers dual provisioning engines and Gluware Pro supports the deployment of two GSGs on each customer network for redundancy. Gluware's multi-tenant deployment is designed for networks of up to 2000 devices, multi-tiered and cloud-delivered to bring the power of intent-based network automation to work for you in no time. Four Pro tiers are offered for modern flexibility:

Pro Free Tier that lets you discover up to 100 network devices with the Gluware Device Manager application for 365 days. Achieve detailed discovery and inventory—including filter, sort and query capabilities. The free tier also currently includes a 45-day free trial of the Gluware Config Drift and Audit application for deep visibility into exactly what is changing in your network and what devices are in or out of policy.
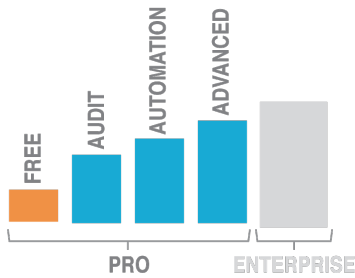
Pro Audit automates common network management tasks, keeping your network in policy and continually monitoring it for proper configuration, security and compliance. Gluware Control gives you full Gluware administrative access including a user-defined dashboard to see and manage the exact details of your Gluware system. Device Manager enables comprehensive network discovery and inventory. Config Drift & Audit lets you monitor all network devices for change, identify configuration lines that have changed and audit configurations for company and security policies. Solve your biggest network automation pain-points with a Pro tier tailored to meet your unique enterprise requirements—code-free and at scale.

Pro Automation In addition to all the features of Pro Audit, Pro Automation adds the OS Manager application so you can seamlessly automate your operating system upgrades/downgrades and patches to address vendor vulnerabilities and to enable new features.

Pro Advanced Automation takes you to the next level adding the Gluware Config Modeling application for a powerful way to automate brownfield or greenfield deployments and ensure that your network is in the desired state.
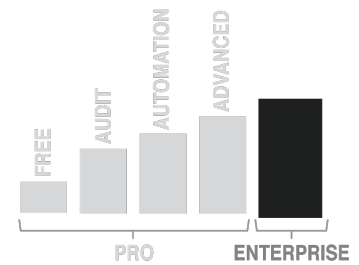
Learn more about Gluware Pro.

Gluware Secure Gateway
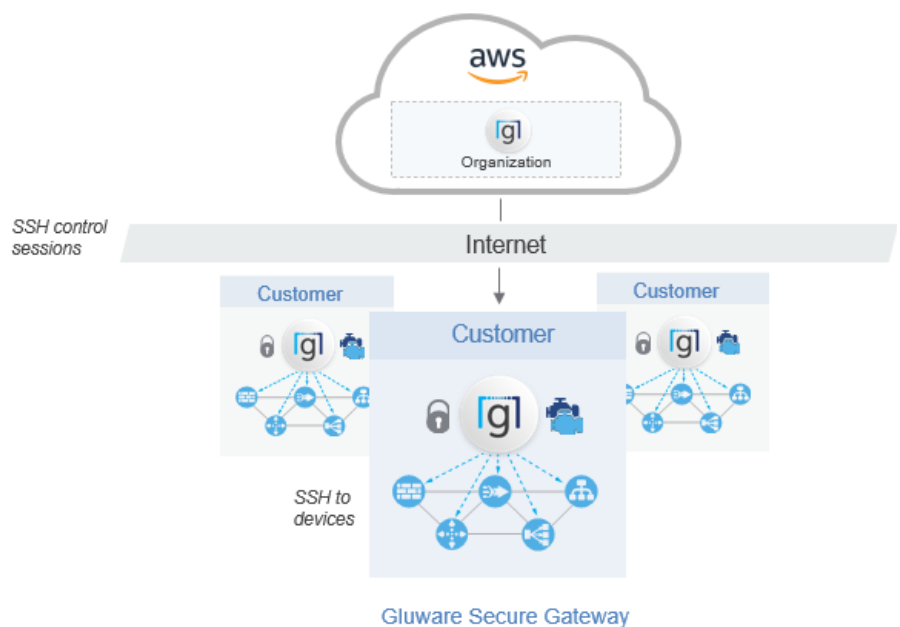
For the ultimate degree of flexibility and scalability to automate networks of any size or complexity

Gluware Enterprise

Gluware Enterprise is the flagship Gluware offering delivering a high degree of flexibility and scalability to address the needs of larger enterprises or those who require special sizing. Gluware Enterprise is available on-premises, deployment in any customer cloud (including customer AWS instances or MS Azure), or it can be hosted by Gluware as a single-tenant in AWS. Gluware Enterprise has been enhanced in 4.0 with the addition of the Gluware Zone Engine Servers, a component of the Multi-Engine Architecture, which enables the ability to distribute the provisioning power of Gluware to geographical regions or any area with a cluster of network devices, like a campus or a data center. Gluware Enterprise can scale to any size network and customers can select which components of the Gluware Application Suite they want to deploy.
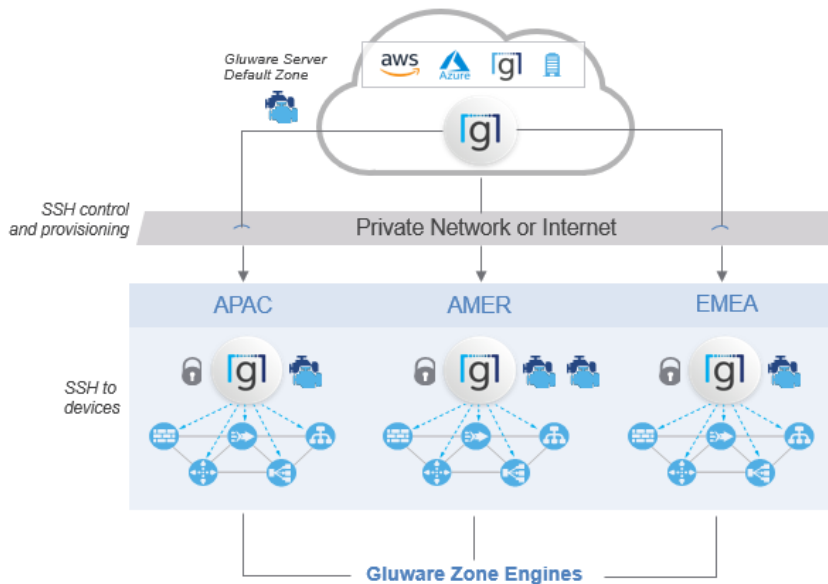
- **Scales to tens of thousands of devices per global enterprise**
- **Data encryption in transit and at rest**
- **Full suite of inventory, automation and orchestration applications in any combination**
- **Automation delivered your way:**
  - Gluware hosted SaaS
  - Customer AWS
  - Azure Marketplace
  - On-premises

Learn more about Gluware Enterprise.

Expanded Environments

30+ Vendors

Gluware has significantly enhanced its extensive vendor support for Aruba, a Hewlett Packard Enterprise company, expanding on support for ArubaOS (Wireless) and adding:

- **ArubaOS-CX**
- **ArubaOS-Switch**
- **ProCurve (ProVision)**

Gluware has also upgraded its support for Juniper Networks' Junos OS for the EX, MX, QFX, and SRX platforms. Gluware has shared recent customer success stories automating Juniper Networks at Acuity Insurance and First Bank.

New Multi-Cloud Infrastructure Automation Support

Gluware integrates with Terraform to extend network automation to the domains of multiple public cloud providers, starting with AWS, Google Cloud, and Microsoft Azure. Leveraging Terraform as a vendor adapter, Gluware adds the ability to automate cloud endpoints and automate all the capabilities enabled by the native Terraform Providers.

Gluware has integrated Terraform File (TF) creation and management through the Config Modeling application. Using Config Modeling, users can create and manage the TF files for the initial creation and day two changes of the various resources (VPCs, internet gateways, subnets, security groups…etc.) Config Modeling supports static text, variables, and abstracting with form fill data – same as traditional CLI users are already familiar with. Gluware also maintains the TF state file to support the native declarative provisioning. You can use Gluware to preview, provision and even un-provision your multi-cloud resources. Users will appreciate the centralized control Gluware brings along with the transparency and detail of all the logs provided when leveraging the underlying Terraform engine to see exactly what happened.

Enhanced Experience

Enterprise-class features and dashboards

Gluware 4.0 introduces the new, highly intuitive, and interactive Dashboards, representing a significant advancement in the Gluware look, feel, and application functionality. To enhance usability and the administration of Gluware, several example dashboards are seeded in the product and users are able to create their own using an initial set of widgets. Dashboards provide extended insights and summaries of network devices, user activity on the system, and all discovery, automation, and orchestration activities being run. Users will enjoy customizing their dashboards for private or public (shared) use and Gluware will be providing a growing library of widgets and other tools. Watch the demo video.

Config Drift and Audit Adds Config Audit Operators

Config Audit adds several options to expand and simplify the audit policies including:

- **Evaluate results independently:** Enables the audit to check the required or forbidden statement on each item – like an interface or protocol parameter. This is used when the audit rule applies to multiple logical constructs within a configuration
- **All:** Tells the audit engine that all the statements are required as one block vs treating them as independent lines and counting each one individually
- **Ordered:** Added when the order of multiple configuration statement matters.

Learn more about the Config Drift and Audit application.

Syslog Integration

Gluware 4.0 integrates a syslog server, when enabled, to capture and correlate change notification information with a device managed by Gluware. When enabled in a Gluware Organization, a containerized syslog-ng server is enabled and listens for syslog messages (currently filtering for syslog-5 which are generated when a user goes into config mode on a device). This enables visibility in the Gluware system when a user is making a manual change. With that information, users can execute a config drift, config audit, or re-provision the device in Config Modeling to be sure it is in policy. Watch the demo video.

Cisco License Inventory

Users of Cisco networking devices often have to understand what licenses are enabled on their various devices which affects their annual support maintenance costs. Gluware has extended the capabilities of Device Manager and the device detect capabilities to automate the capture of each device license, status and EULA for IOS, IOS XE and NXOS. Gluware provides an exportable comprehensive report using the Data Export application. Tremendous time savings are realized avoiding manual effort to perform inventory along with the ability to reconcile with what has been purchased can save organizations significant costs. Watch the demo video.

Additional Features

Other features included with the Gluware 4.0 release include:

- **Unified and Enhanced Device Logging:** Unified look and behavior for all device interactions with color-coded logs for simplified understanding with search
- **Banner Acknowledgement:** User-defined Gluware login banner and acknowledgment
- **Open Domain LDAP & RADIUS:** Option to remove domain requirement for authentication
- **File Server Proxy Support:** Ability for the Master File Server and its remotes to be behind a single proxy
- **OS Manager Anonymous FTP Support:** FTP mode support
- **Enhanced Global Settings:** New and updated settings, including SMTP, are available in the updated System Settings

Watch the **Gluware Webinar** for more details and demonstrations of the 4.0 Release.

Starting the Journey

When your team is ready to begin their enterprise network automation journey toward code-free, error-free security and agility, Gluware Intelligent Network Automation delivers the capability many of our customers require:

- **Flexible Automation:** On-prem or cloud-delivered; One app or more
- **Expanded Vendor Support:** Growing list of platforms
- **Inclusive Environments:** Multi-vendor | Multi-domain | Multi-cloud
- **Quality User Experience:** Enterprise-class features and dashboards
- **Multiple Payment Offerings:** Get started your way

Free Gluware Pro Inventory App	Apply Now

Our team of automation experts are here to help at **sales@gluware.com**.

gluware®

2020 L Street, Suite 130
Sacramento, CA 95811

www.gluware.com