

# **OS** Manager

## Take network-wide upgrades from months to days

Gluware® OS Manager is the enterprise upgrade solution designed for today's critical multi-vendor, multi-platform networks. Unlike manual, error-prone methods, Gluware OS Manager changes the game for IT staff, allowing them to reliably upgrade the firmware/ software (FW/SW) across an entire network in days, not weeks or months. Through Gluware® Intelligent Network Automation, OS Manager transforms the arduous and potentially perilous task of upgrading a network's FW/SW to an easy-to-implement, automated process. OS Manager provides a reliable and scalable process to ensure network devices are updated with the approved versions.

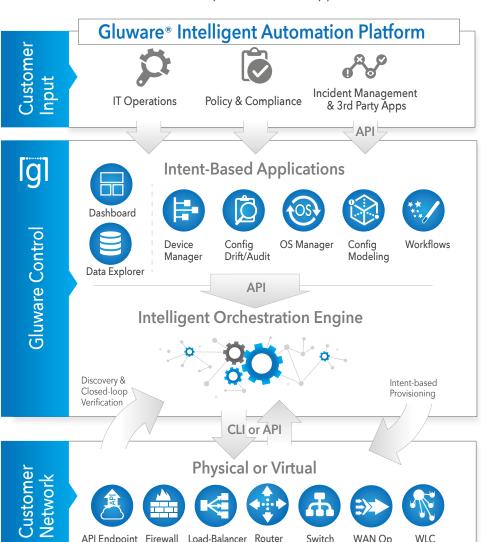
### Gluware® Intelligent **Network Automation**

**Gluware Intent-Based Applications** transform your enterprise, letting you simply and seamlessly automate and orchestrate multi-vendor, multi-platform networks at scale, taking the guesswork out of maintaining today's mission-critical networks.

What I found was a pre-packaged automation solution that allows our engineers to use the same CLI they are used to. Gluware allows them to use the same syntax, the same commands, and it will abstract that and build the automation that they need.



James Radford VP of Operations, Mastercard



Switch

WAN Op

WLC

API Endpoint Firewall Load-Balancer Router

Agile and secure network upgrading delivers the highly-coordinated effort that today's network engineering and operations groups need to reduce risk and minimize network downtime. Today, security vulnerabilities are on the top of the priority list for most CIOs and CTOs, yet their staff may avoid upgrading network device FW/SW, given that it introduces change-and therefore risk. In the past, most IT organizations try to limit FW/SW upgrades on their network equipment to once a year at most. With Gluware OS Manager, IT teams can update changes without previous risks that limited them to once a year upgrades. Gluware OS Manager is designed to handle the variability and complexity of pre-existing, brownfield networks.



#### Command and Control

- Global FW/SW updates to address security vulnerabilities or feature gaps
- Centralized organization, management and control
- Keeps key network elements on the latest approved software levels
- Integrated file server to provide the best end-to-end performance with the option for distributed servers

#### **Brownfield Support**

- Handles FW/SW in your pre-existing brownfield network image control
- Defines a software catalog to provide operations only with approved images and versions
- Options to transfer the image only, transfer and reboot, or perform a manual or scheduled reboot at a later time
- Auto optimizes TFTP window size to speed image transfer

#### Gluware Ecosystem

 Works seamlessly with other Gluware Intent-Based applications including Config Modeling to perform backup and restore configurations containing complex features even when changing CLI syntax

#### Intent-Based Automation

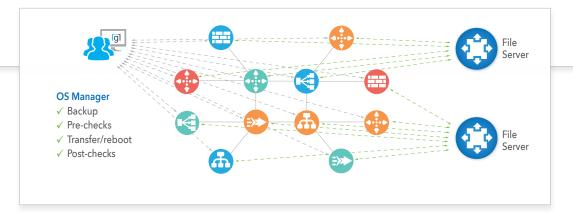
- Eliminate the manual and error-prone legacy process
- Automated device upgrades and downgrades with a new operating system, firmware or ROMMON
- Automated compatibility validation leveraging integrated Cisco® Support APIs which also pull the checksum to validate the image after transfer
- Pre-checks of the node state, pre-reboot health check, post-reboot assessment
- Automate any required changes post update, driven by feature or semantic changes

#### Secure

- Configurations are backed up, restored and verified as necessary
- Enables a network device to act as a local server

#### Easy and Reliable

 No programming or scripting required allowing network engineers to implement



### Smarter Centralized Control

- Reduce errors and risk
- Eliminate manual and error-prone legacy processes with automation
- Reduce risk to business continuity from remaining on older versions that expose known vulnerabilities

## Faster

Time to Value

- Perform OS changes across hundreds or thousands of devices with speed and reliability to complete within maintenance windows
- Enable IT operations teams to handle critical update requests with an automated process
- Dramatically reduce the time required to roll out FW/SW updates

# Simpler

No Manual Effort

- Automated process of pre- and post-checks without requiring manual effort
- Specify approved code in the software catalog to eliminate code selection errors
- Consolidate tools and reduce manual effort performing operating system changes across multi-vendor, multi-platform networks

