Ease Cybersecurity Compliance Audit for Network Infrastructure

Maintain assured inventory and reliable evidentiary trail to simplify compliance verification and reporting

Business challenge

Network infrastructure in today’s economy is synonymous with critical infrastructure. Each nation defines their own regulations to protect critical infrastructure—such systems so vital that their incapacity could cripple security, the economy, and day-to-day life. Operators of network infrastructures require tools to maintain integrity, availability, and authenticity. In a large network, the challenge is to track if any devices have been altered and prove if the devices have maintained the intended operational state for the purpose of audits.

Why is it a challenge?

• Lack of reliable visibility to understand what is running in the network, hardware and software assets, version details, and specific updates.
• Lack of ability to track and analyze system changes to ensure sustained compliance.
• Manual audits are cumbersome and error prone. They are based on low-fidelity data and make it difficult to verify compliance without the system knowledge provided by the manufacturer.

Executive summary

Business challenge
• How do you track the integrity of the hardware and software components that make up your network?

Network solution
• Cisco CrossWorks™ Trust Insights

Business results
• Improved trustworthiness of critical infrastructure
• Minimized cybersecurity risks
• Reduced compliance overhead with verifiable visibility of inventory and related changes
• Lower operational complexity and costs
• High service reliability using scalable cloud-based Software-as-a-Service (SaaS) offering
Solution
Cisco Crosswork Trust Insights implements a secured mechanism backed by cryptographic proof for collecting inventory and trust data from your routers. This application is used to gather verifiable evidence related to both hardware and software (for example, deployed hardware components, software updates and upgrades, run-time data, and much more). Such evidence can be utilized for a variety of use cases such as compliance audits, forensic analysis, and operational reporting. Accurate tracking of inventory changes and the ability to prove, retrospectively, what happened, when, and how it happened are critical to maintain compliance and assured inventory. For example, when a change in router OS version is observed, the evidence is crucial to verify sustained compliance, or if the version changed unexpectedly, it may be an indication of a suspicious activity.

Cisco Crosswork Trust Insights provides a cloud-based service that reports on the integrity of devices and provides forensics for assured inventory. It empowers the network and security operations with visibility to track trustworthiness and changes related to hardware and software integrity of the device.

Why Cisco Crosswork Trust Insights? The solution:
• Leverages the trust technologies built into Cisco® platforms, including the capability to collect signed evidence to track system integrity.
• Utilizes Cisco-provided fingerprints to accurately interpret hardware and software evidence.
• Cryptographically verifies evidence and traces its history to ensure sustained compliance.
• Maintains independent and immutable storage of evidence, safeguarding against internal threats.

Cisco Crosswork Trust Insights provides the following business outcomes:
• Improves trustworthiness of critical infrastructure using evidence with a cryptographically verifiable evidence trail.
• Minimizes risks related to cybersecurity noncompliance with on-going monitoring and verifications—stop fretting about yearly audits.
• Reduces effort in maintaining compliance with verifiable visibility of inventory and related changes.
• Lowers operational complexity and costs while maintaining high service reliability using a scalable, cloud-based SaaS offering.

Operators of network infrastructures require tools to maintain integrity, availability, and authenticity. Cisco Crosswork Trust Insights is the answer.