TRIPWIRE® ENTERPRISE

FILE INTEGRITY MANAGER

◆ File integrity monitoring was invented by Tripwire. But that's only one reason why so many consider "Tripwire" synonymous with this critical security control. Tripwire Enterprise has taken FIM far beyond basic change auditing. It not only collects highly detailed change data in real-time, it also adds change intelligence and automated remediation and then integrates this data with the other critical security controls provided by Tripwire solutions. ◆

TRIPWIRE ENTERPRISE
SECURITY CONFIGURATION MANAGEMENT
- POLICY MANAGER
- FILE INTEGRITY MANAGER
- REMEDIATION MANAGER

Changes to configurations, files, and file attributes across the IT infrastructure are just part of everyday life in today's enterprise organization. But hidden within the large volume of daily changes are the few that can impact file or configuration integrity. These include unexpected changes to a file's credentials, privileges, or hash value, or changes that cause a configuration's values, ranges and properties to fall out of alignment with security policy. To protect critical systems and data, you need to detect all change, capture details about each one, and use those details to determine if it introduces security risk or non-compliance. You also have to do that in real time to stop an attack from succeeding—or minimize the impact of a successful one.

But with constant changes to files and configurations occurring, how do you tell the difference between "good" and "bad" ones? Or in a more pragmatic sense, between business-as-usual changes and the ones that spell trouble? That's what file integrity monitoring (FIM), a critical security control, is supposed to do. Unfortunately, most FIM solutions determine that a change occurred and stop right there. Only a few capture change in real time and with enough detail to show you who made it. Fewer still provide the option to automatically remediate an undesirable configuration change. Organizations need "true" FIM—file integrity monitoring that detects each change as it occurs and uses change intelligence to determine if a change introduces risk or non-compliance. File Integrity Manager, a core component of Tripwire® Enterprise, offers exactly this by combining Tripwire's industry-leading change detection with ChangeIQ™ change intelligence and automated remediation.

CHANGE DATA IN REAL TIME WITH AGENT-BASED FIM

One of the big differentiators between File Integrity Manager and other FIM solutions is Tripwire's use of agents to continuously capture detailed who, what and when change details in real time, with little impact on systems. Tripwire's lightweight, easy-to-manage agents mean you don't miss the changes that occur between scans that can leave systems and data exposed. While some

solutions claim to be agentless, they actually install and uninstall an agent each and every time they collect change data, which increases overhead and risk. And the truly agentless solutions only collect a subset of the change data that File Integrity Manager collects, which reduces your knowledge of system states as well as your overall security posture. Other solutions rely on periodic megascans to collect detailed change data, but due to the impact these scans impose on systems, they're usually only scheduled to occur weekly, monthly or even quarterly.

CHANGE INTELLIGENCE WITH ChangeIQ

In addition to capturing highly-detailed change data in real time, File Integrity Manager uses ChangeIQ™ change intelligence to differentiate between "good" change and "bad" change, or at least between expected changes versus undesired and potentially harmful ones.

ChangeIQ:

- Determines if changes takes configurations out of policy
- Reconciles changes against change tickets or a list of approved changes in a text file or spreadsheet
- Automates responses to specific types of changes—for example, flag the appearance of a DLL file

What Makes FIM "True" FIM?

True FIM detects change by first establishing a highly detailed baseline version of each monitored file or configuration in a known and trusted state. Using real-time monitoring, it detects change to any aspect of the file or configuration and captures these in subsequent versions. Versions provide critical before-and-after views that show exactly who made the change, what changed, and more. True FIM also applies change intelligence to each change to determine if it impacts integrity (for example, rules that determine if the change takes a configuration out of policy or is one that is typically associated with an attack.) File Integrity Manager is true FIM.

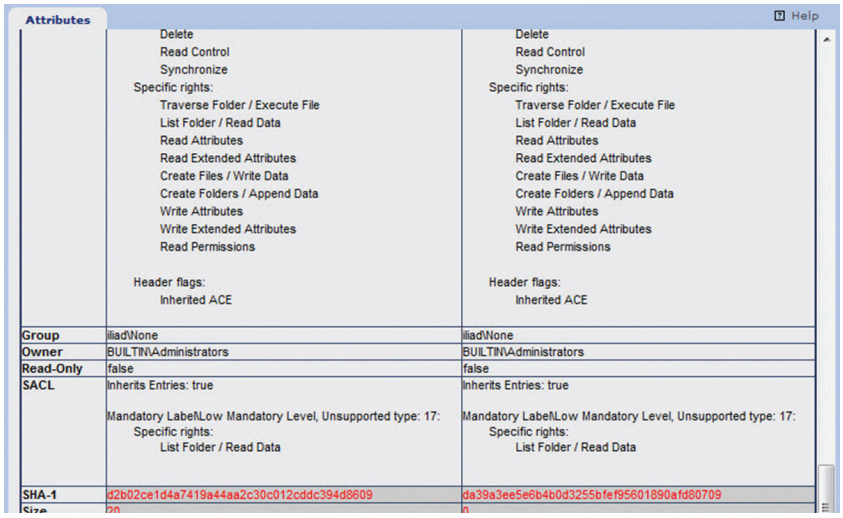


FIG. 1 *Tripwire Enterprise allows you to see before and after differences in precise detail through continuous versioning and baselining.*

LOOKING FOR ADDITIONAL INFORMATION?

Click below or visit **www.tripwire.com** for the following datasheets

- Policy Manager
- Remediation Manager
- Report Catalog
- Tripwire Integrations
- Tripwire Asset View
- Tripwire Data Mart

(high-risk) but auto-promote a simple modification to a DLL file (low-risk)

- Triggers a user-tailored response when one or more specific changes reaches a severity level threshold that one change alone wouldn't trigger—for example, a minor content change accompanied by a permission change that was done outside change window hours.

In short, ChangeIQ turns raw change "noise" into actionable information.

AUTOMATION HELPS ORGANIZATIONS KEEP UP WITH THE WORKLOAD

Most IT organizations have too much to do and not enough time or staff to do it. Automation is essential to keep up with the workload. File Integrity Manager uses automation to detect all changes and to remediate those that take a configuration out of policy. At the same time, ChangeIQ auto-promotes countless business-as-usual changes, so IT has more time to investigate changes that may truly impact security and introduce risk.

Automation is especially important when it comes to reconciling large batches of changes, like the ones that occur when operating system or application patches are pushed. It's tempting to "auto-promote" these types of bulk changes, but hackers often rely on this behavior and lie I wait for a chance to insert listeners or malware. To help with this, the latest version of Tripwire Enterprise works with a new Tripwire Dynamic Software Reconciliation app that can automate the reconciliation of changes stemming from these updates – without losing integrity or records of the change. The app is available from the Tripwire Customer Center.

Another example of Tripwire Enterprise's automation capability is the way it can integrate with existing change ticketing systems like BMC Remedy, HP ServiceCenter or Service Now. This type of ticketing integration insures traceability and closes the loop between continuous integrity and uninterrupted availability. Don't have a service management system? Check with Tripwire services consultants about implementing Reconcile Express, a simple way to automate change reconciliation against with basic change sources like Excel spreadsheets or even delimited text files.

BENEFITS OF TRIPWIRE ENTERPRISE FILE INTEGRITY MANAGER

- Captures change data with greater granularity and specificity than other FIM solutions, including who, what, when and even how details
- Continuous, real-time change detection across the enterprise infrastructure—virtual, physical and hosted—to detect and respond to malware
- Provides a reliable host-based intrusion detection system that safeguards against exploits and breaches
- Offers broad support for almost any IT asset—servers, platforms, devices, applications, and more
- ChangeIQ capabilities that help determine if a change is business-as-usual or introduces risk or non-compliance
- Provides automated remediation of changes that cause non-compliance with any Tripwire security policy or a custom, internal policy.
- Captures highly-detailed change data in real time without notable impact on systems.

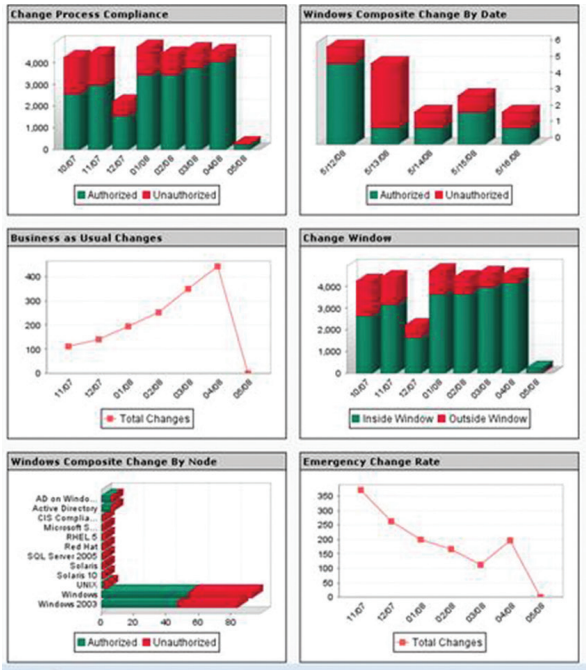
NEED A BASIC, STANDALONE FIM SOLUTION? TRIPWIRE CAN HELP.

What if you're not ready for an end-to-end enterprise SCM solution, but you still need FIM?

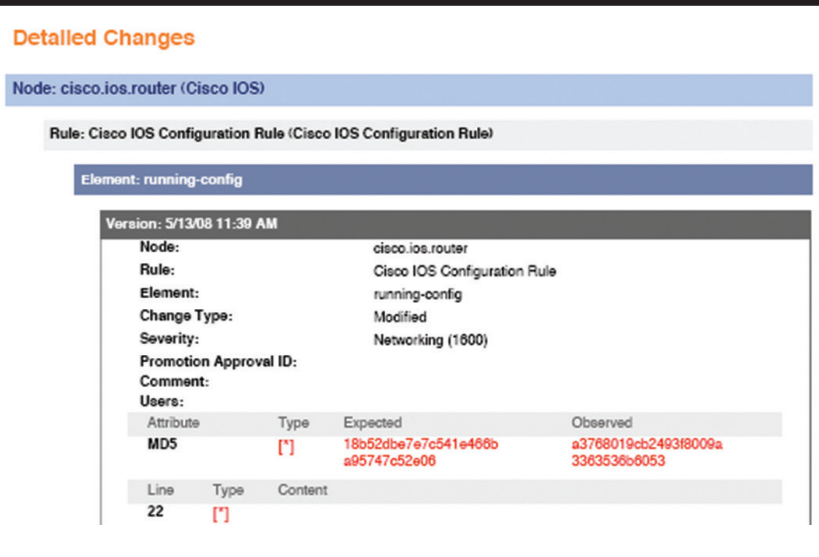
Maybe for an audit, or maybe you need integrity checking as you implement other controls or decide what policy your organization will use. If that's the case, there's Tripwire File Integrity Manager, our FIM-only solution. Later, when you're ready for policy capabilities or need automated remediation, you can easily upgrade to Tripwire Enterprise. Contact Tripwire Sales to learn more.

FILE INTEGRITY MANAGER AND TRIPWIRE SECURITY CONTROLS

Tripwire provides the ability to integrate File Integrity Manager with all your Tripwire security controls—security configuration management (SCM), log management and SIEM. It also adds components that combine and manage the data from these controls more intuitively and in ways that protect data and infrastructure better than before. For example, the Event Integration Framework (EIF) adds valuable change data from File Integrity Manager to Tripwire Log Center or almost any other SIEM. With EIF and other foundational Tripwire security controls, you can easily and effectively manage the security of your modern IT enterprise.



◆ **FIG. 2** *With Tripwire Enterprise's library of pre-made, built-in reports, changes and anomalies become immediately visible.*



◆ **FIG. 3** *Security is in the details—Tripwire Enterprise provides exhaustive detail about the* Who, What, Where *and* When *of changes.*

◆ Tripwire is a leading provider of security, compliance and IT operation solutions for enterprises, service providers and government agencies. Tripwire solutions are based on high-fidelity asset visibility and deep endpoint intelligence combined with business context; together these solutions integrate and automate security and IT operations. Tripwire's portfolio of enterprise-class solutions includes configuration and policy management, file integrity monitoring, vulnerability management, log management, and reporting and analytics. Learn more at tripwire.com. ◆

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