Better control, easier management, enhanced security analytics, and context-aware threat mitigation

What’s new in Cisco Stealthwatch Release 7.0

Have you been compromised? How would you know? With today’s evolving threats, it’s a matter of time when an organization will be breached. You need eyes within your environment to be able to detect any suspicious behavior. This is where a visibility and security analytics solution like Cisco Stealthwatch® can help. Stealthwatch collects telemetry from your existing network infrastructure, and applies a funnel of analytical techniques to detect anomalies in real-time and also ties it to specific threats with a high level of confidence.

However, every organization is different with its own workflows. What might be considered suspicious activity within one, might not necessarily apply to another. And with security teams already strapped for time and resources, you don’t want to spend time chasing down irrelevant alerts, or worse, miss critical threats. Stealthwatch gives you an unmatched level of control to fine-tune security and customize it to the business logic.

Stealthwatch release 7.0 introduces further enhancements to the tuning capabilities of Stealthwatch, giving you even more control and easier management of the security policies, users, host groups, and appliances, all of which are now accessible from the web interface. In addition to that, we are announcing tons of other exciting updates for faster, more advanced threat detection and response.

New features

- Policy, user, and host group manager enhancements
- Centralized appliance and update management
- Cisco® Identity Services Engine (ISE) integration enhancements
- Stealthwatch Apps
- Enhanced security analytics
- USGv6 certification with basic IPv6 management port addressability

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**Policy Management updates**

All three types of Stealthwatch security policies: core events, custom events, and relationship events, can be managed centrally by the admin using the web interface. Now you can create, edit, or delete events easily. And with just one click, you can view the “effective policies” that are currently applied to a specific host, or drill down into an alarm to tune the event.

**Figure 1:** Stealthwatch Core Events control how Stealthwatch monitors and responds to host behavior that it observes. Core events can reduce unwanted alarms on your system as well as ensure that alarms are triggered in certain instances. Stealthwatch has three types of Core events - Host, Role and Default, in order of precedence.

1. View detailed alarm description, and modify policies based on behavioral and threshold values
2. Easily search for policies set for a host or host group
3. View, create and modify default policies, or define them by role or specific hosts
4. Filter Core Events by multiple parameters

<table>
<thead>
<tr>
<th>Event</th>
<th>Event Type</th>
<th>Policy Name</th>
<th>Policy Type</th>
<th>Hosts</th>
<th>When Host is Source</th>
<th>When Host is Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talks to Phantom</td>
<td>Security</td>
<td>10.201.3.79</td>
<td>Default</td>
<td>Inside Hosts</td>
<td>Off</td>
<td>On + Alarm</td>
</tr>
<tr>
<td>Talks to Phantom</td>
<td>Security</td>
<td>10.201.3.22</td>
<td>Default</td>
<td>Outside Hosts</td>
<td>Off</td>
<td>On + Alarm</td>
</tr>
<tr>
<td>Target Data Handling</td>
<td>Security</td>
<td>10.201.3.22</td>
<td>Default</td>
<td>Inside Hosts</td>
<td>Off</td>
<td>On + Alarm</td>
</tr>
<tr>
<td>Target Data Handling</td>
<td>Security</td>
<td>10.201.0.66</td>
<td>Default</td>
<td>Inside Hosts</td>
<td>Off</td>
<td>On + Alarm</td>
</tr>
<tr>
<td>Target Data Handling</td>
<td>Security</td>
<td>Firewall, Process &amp; NAT Devices</td>
<td>Default</td>
<td>Outside Hosts</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>Target Data Handling</td>
<td>Security</td>
<td>Inside Hosts</td>
<td>Default</td>
<td>Inside Hosts</td>
<td>Off</td>
<td>On</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Behavioral and Threshold</th>
<th>Tolerance</th>
<th>Threshold Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more hosts have downloaded an unusual amount of data from the target host.</td>
<td>Never trigger alarm when less than</td>
<td>676.04 MB</td>
<td>downloaded payload bytes in 24 hrs</td>
</tr>
<tr>
<td></td>
<td>Always trigger alarm when greater than</td>
<td>503.32 GB</td>
<td>downloaded payload bytes in 24 hrs</td>
</tr>
</tbody>
</table>
Figure 2: Stealthwatch Custom Security Event (CSE) is a unique policy created for your environment that is configured based on rule types and rule values. CSEs begin as a blank slate and allow you to designate the who, what, and how for the flow that will cause an event or alarm to trigger.

1. Multiple rule parameters to choose from
2. Rules also include Encrypted Traffic Analytics (ETA) parameters to easily monitor for weak encryption
3. View an automatically generated easy-to-read event summary
Stealthwatch 7.0 at a glance
Cisco public

Figure 3: Stealthwatch Relationship Events provide a way to monitor the current state of traffic between host groups with the ability to filter the traffic by applications and services.

1. Use relationship events to monitor policy violations by host groups
2. View detailed alarm description, and modify policies based on behavioral and threshold values
3. Easily search for policies set for a host or host group
4. Filter Relationship Events by multiple parameters
User Management and Host Group Management updates

Add Stealthwatch users and configure access to data based on their roles. Create Host Groups to effectively monitor for anomalies and threats based on the business workflows.

**Figure 4: User Management**

**Figure 5: Host Group Management**
Centralized appliance and update management

Don’t let the upgrade process get in the way of security. We have simplified management and update of all the Stealthwatch appliances like the Stealthwatch Management Console (SMC) and the Flow Collector, and it can be all be done from one place.

**Figure 6:** Appliance Manager

**Figure 7:** Update Manager
Cisco Identity Services Engine (ISE) integration enhancements

Stealthwatch is integrated with ISE to provide additional user and identity context around a threat detection. This integration also allows the security professional to take action to mitigate the threat right from within Stealthwatch. With release 7.0, we are making further updates to the integration with ISE. Now you can choose from multiple ISE ANC (Adaptive Network Control) policies based on the severity of the threat, and ISE will apply the selected policy to the compromised host. Stealthwatch allows you to implement a smarter network segmentation strategy with the visibility that it provides within the environment, and now, it is further enhanced by the availability of Cisco TrustSec® Security Group Tags (SGTs). SGT fields can be used to create Custom Security Events (CSEs) or to search through the telemetry while investigating threats. The Stealthwatch and ISE integration also supports multiple ISE clusters and other performance improvements to allow larger customers to scale user sessions.

Figure 8: Stealthwatch and ISE integration

1. Rapid threat containment using ISE ANC policy
   - selective mitigation based on threat severity

2. TrustSec Security Group Tags (SGTs) are pulled from ISE and mapped to IP addresses
   - provides ability to implement more efficient network segmentation by using SGTs to create Custom Security Events
Stealthwatch 7.0 at a glance
Cisco public

Benefits:
• Get unmatched level of control to fine-tune security and customize it to the business logic
• Save time on managing and updating the tool to focus on better security
• Stay ahead of evolving threats with updates to the machine learning analytics
• Choose the appropriate mitigation action based on threat severity and context
• Easily detect and investigate incidents using the intuitive interface

Next steps
For further details about this release, please refer to the release notes.
To learn more about Stealthwatch, visit https://www.cisco.com/go/stealthwatch or contact your local Cisco account representative.

Introducing Stealthwatch Apps!
Get exciting new Stealthwatch functionalities on-the-fly without upgrading the entire system. You can find the App Manager under Global Settings -> Central Management. Stay tuned for apps that will deliver additional features!

Enhanced security analytics
And we continue to update and improve Stealthwatch analytics to stay ahead of evolving threats, for faster and high-fidelity threat detection. The cloud-based machine learning engine (Cognitive Intelligence) includes enhancements for more efficient botnet detection, ability to analyze and correlate proxy logs to network telemetry for increased efficacy, option to apply analytics to specific internal servers, auto-update for cryptomining classifier to detect unusual and new cryptomining pools, and more!

Figure 9: Example botnet detection characterized by communication to many IP addresses hosted in multiple autonomous systems.