NOVA

Nova Network Security

Intrusion Detection

Network Snooping Prevention

Suspicious Activity Notification

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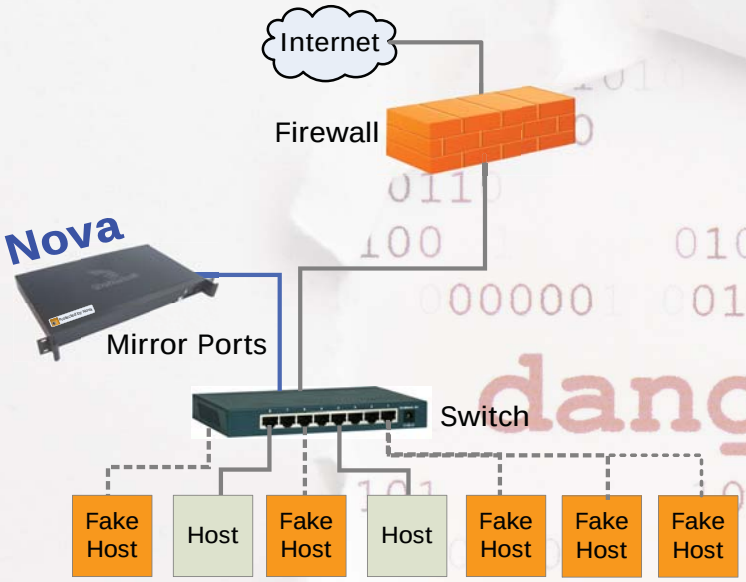
Nova Overview

Nova is a cyber-defense product for network security that thwarts attempts by attackers to gain information about a private network.

Nova detects and prevents this snooping by setting up a large net of realistic virtualized decoys. When attackers search for real machines, it's as if they're trying to find a needle in a haystack. Meanwhile, Nova identifies the attackers by their inevitable suspicious activity in communicating with the decoys. It notifies the network administrators of the suspicious activity and provides them with a situation awareness view of their network.



Benefits

- Limits the effects of internal and external cyber attacks by detecting suspicious activity, providing false data to attackers, and alerting network administrators of critical issues
- Prevents hostile attackers from performing reconnaissance on private networks
- Improves situation awareness across networks
- Useful for training cyber teams in detecting and containing network intrusions

Capabilities

- Defeats hostile reconnaissance with deception
- Uses machine learning to automatically classify suspects without exploitable signature databases
- Complements and works well with existing intrusion detection systems
- Provides an easy-to-use web interface for viewing status and configuration
- Generates automated email alerts and rsyslog messages to a dashboard system when a hostile entity is discovered

Feature	Description	Mechanism
Obfuscate	Provides false data to attacker	Haystack, Doppelgangers
Detect	Finds network-based reconnaissance	Haystack, Classification Engine
Minimize False Positives	Legitimate requests receive real data	Haystack
Deny	Protects real network data	Doppelgangers
Deceive	Protections look real to attacker	Honeyd
Notify	Real-time alerts to security administrator	Web/Syslog/Email Notifications

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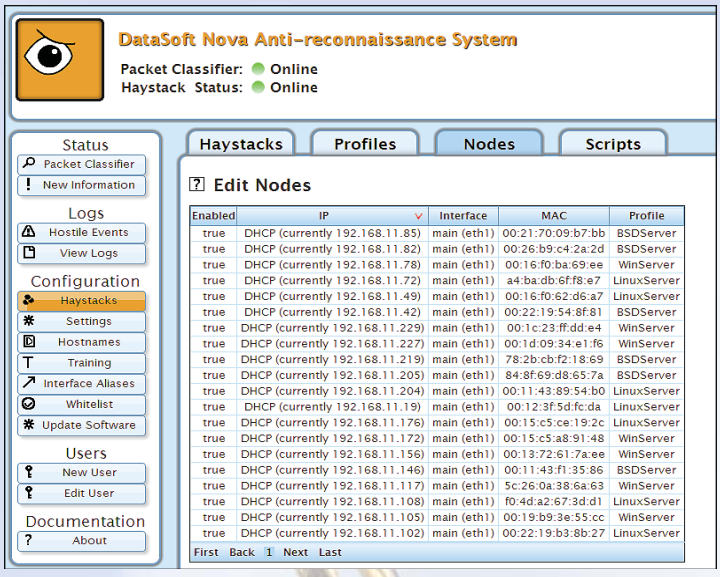


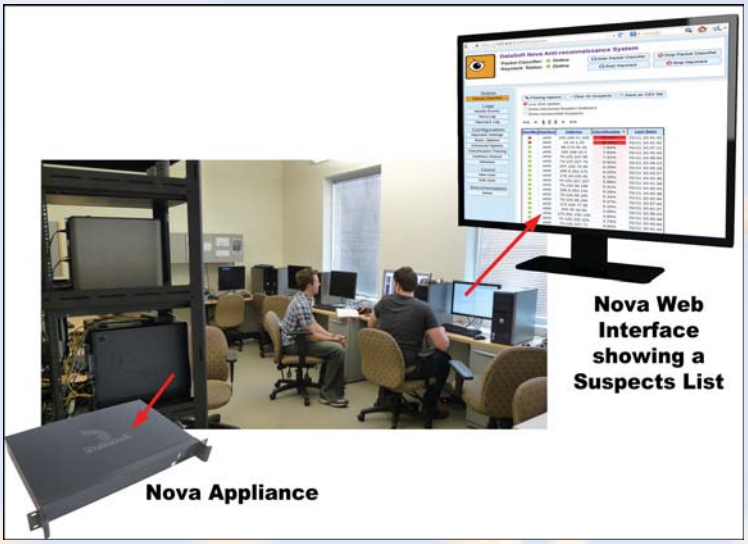
Web Interface

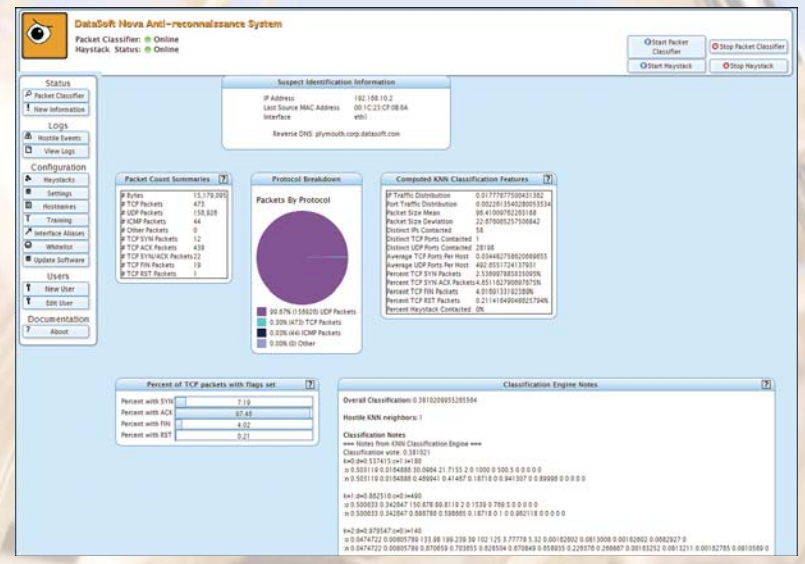
Use the web interface to automatically or manually configure the haystack, to securely view your network's status, or to make configuration changes.

The haystack includes parameters for the decoys (honeypots) such as OS, open ports, and MAC addresses. All values are initially set by default with an automatic haystack creation utility. Many default configuration options simplify operation and maximize the effectiveness of the haystack decoys.

Hostile Activity

Once the haystack is active, Nova alerts network administrators of potentially hostile activity by email, rsyslog, and by the web interface. Nova uses machine learning algorithms and user input to match patterns of hostile traffic. An alert is triggered if one of the statistical features passes a certain threshold. The honeypots have the ability to monitor for login attempts and trigger alerts. Any traffic to a honeypot is assumed hostile.





Suspect Details

When suspicious activity is detected, Nova provides information gathered on the honeypots in a number of charts, graphs, and tables. This gives security analysts and system administrators the needed data to dive into alerts and quickly discover threats.

The Nova appliance is a rack-mounted server with pre-configured Nova software. Since it is delivered ready to use, all you need to do is plug it into your network, follow a short start-up wizard, and Nova will instantly begin to detect issues and protect your vital information. Combined with enterprise-level support, the Nova cyber security system couldn't be easier to use.

Nova Appliance Options:

	Basic Appliance 1 Ethernet Port SWN1UA	***Industrial Appliance 2 Ethernet Ports SWN1U2***	***Industrial Appliance 8 Ethernet ports SWN1U8***
Ideal for:	For small networks (20-30 nodes) with light traffic	Most Class C business networks	Up to 8 separate LANs in one location
Operating System	Linux 64-bit	Linux 64-bit	Linux 64-bit
Processor	Intel Dual Core 2.6 GHz, Celeron	Intel Dual Core 3 GHz	Intel Dual Core 3 GHz
Hard Drive	250 GB, SATA 6 Gb/s	Dual 250 GB, SATA 6 Gb/s	Dual 250 GB, SATA 6 Gb/s
Memory	1 GB SDRAM	4 GB SDRAM	4 GB SDRAM
Ethernet Ports	1 Gigabit LAN Port	2 x Gigabit LAN Ports	8 x Gigabit LAN Ports
Dimensions	19" x 14" x 1.7" (1U / half-depth)	19" x 14" x 1.7" (1U / half-depth)	19" x 14" x 1.7" (1U / half-depth)
Power Supply	200W	200W	200W High-Efficiency

The Nova cyber security appliance is a turn-key anti-reconnaissance tool with both web-based and Android-based monitoring systems.

Contact DataSoft to improve the security of your network

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