



OmniSOC



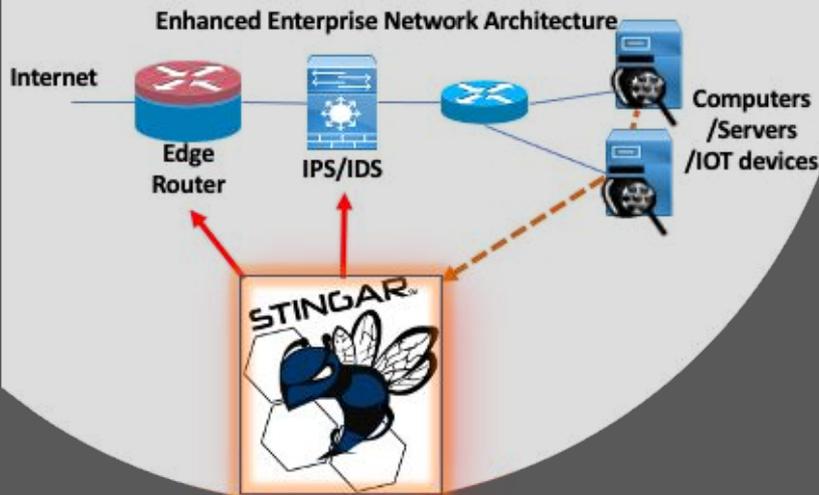


STINGAR

Shared Threat Intelligence for
Network Gatekeeping and
Automated Response

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Introducing STINGAR Security Automation Platform

Shared Threat Intelligence

- Provides real time visibility of cyber attacks
- Shared threat data improves defenses of all partners
- The network effect: Shared data value grows with more users

Network Gatekeeping

- Real time threat blocking at network edge
- Sophisticated “block list” processing avoids false positives

Automated Response

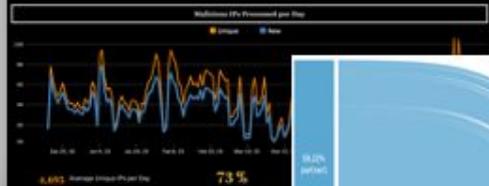
- Provides Automatic Threat detection & Response in real time
- Sub-second response time from intrusion detection to blocking
- Improves quality & utilization of existing network defenses
- Reduces workload of Security/Incident Response Teams
- Saves operating cost\$

The results

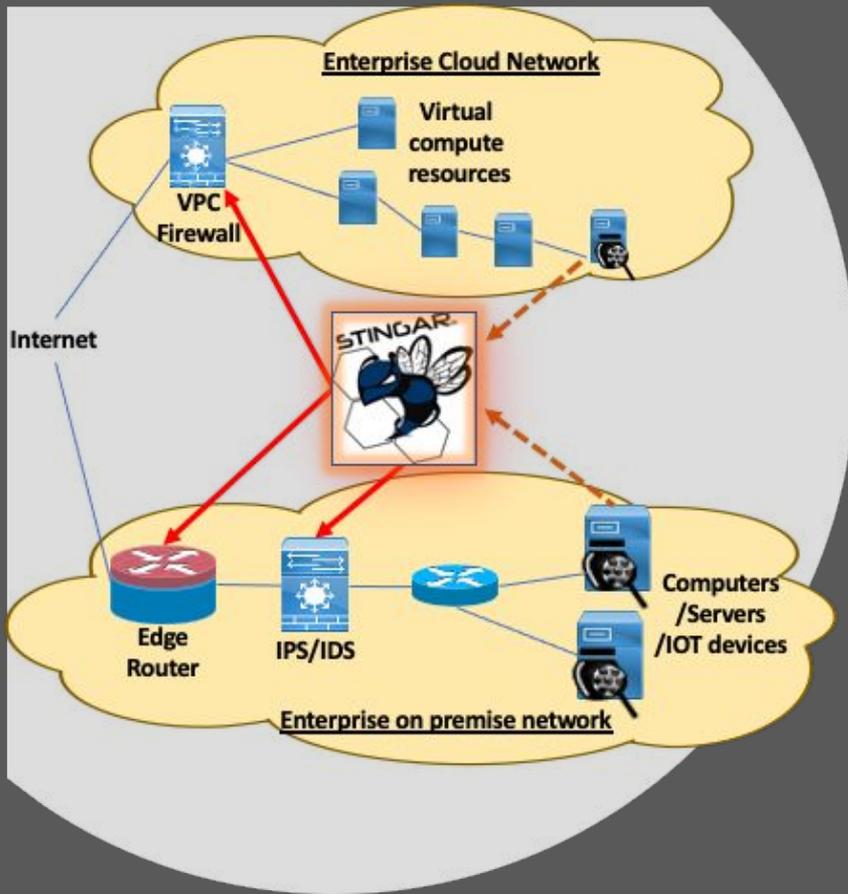
Relevant, timely Threat Intelligence improves network security & reduces operating costs

- Removal of bad traffic from enterprise networks
 - Increase in blocks
 - @Duke from ~10M to over 1B blocks per day
 - Reduction of intrusions
 - @Duke >100x increase in blocked intrusion attempts
- Automation with STINGAR reduced SOC workload & lowered operating costs
 - Dramatic reduction in daily IDS alerts (>90%)
 - Realtime shared threat data blocks >75% attacks before they are detected
 - Enhanced protection against DDoS style attacks
- Installed @ 50+ leading institutions nationwide protecting 1,000,000's users

122,859,804 Total Connections Monitored	221 Critical Incidents
811,436 Threats Blocked	15,310 Alerts



Improved resilience of Enterprise network and greater return on your overall security investment



STINGAR benefits extend to hybrid/cloud networks

Hybrid network assets increase threat exposure for enterprises

STINGAR's unique software approach protects all network assets

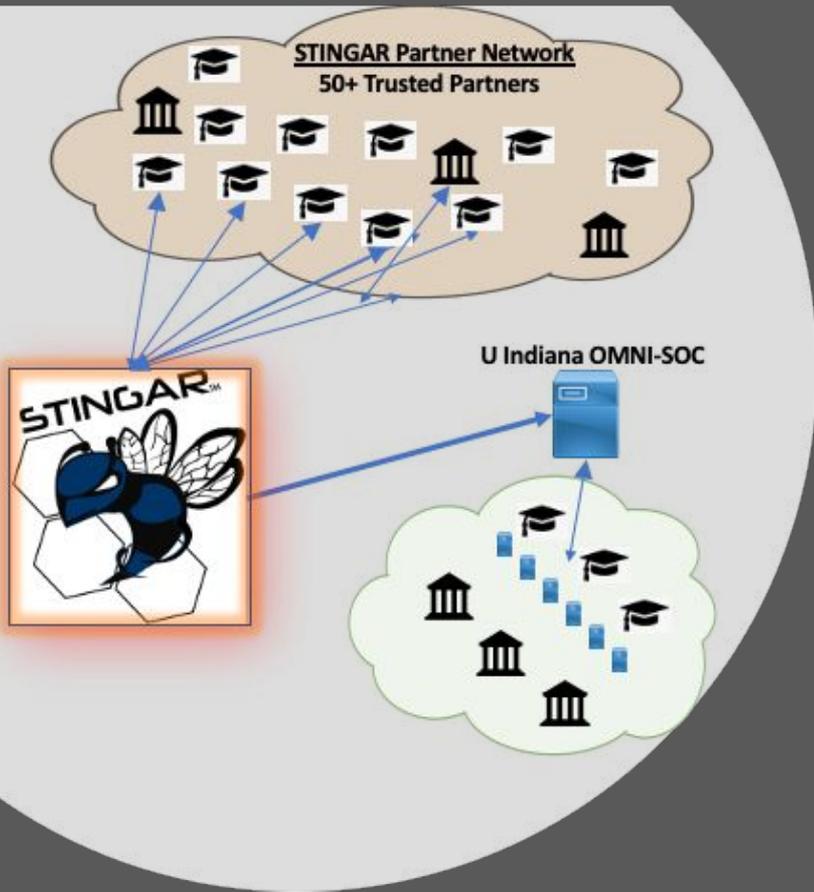
- Improved & consistent Threat Intelligence protection across entire enterprise network infrastructure
- Improved network protection and reduced SOC workload
- **Broader sensor footprint**
 - Additional benefit by adding more sensors to virtual resources
 - Greater threat visibility and coverage



Trusted Partner Community

- **50+ STINGAR licenses in Higher Education**
 - Mature software platform in production since 2016
 - Protecting millions of devices and users daily
 - In use at top Research Universities in USA
- **Valuable shared threat intelligence for STINGAR trusted community**
 - Large collection of raw Threat Intelligence Data available for research
 - Multiple sponsored research projects underway
 - More members improve overall network intelligence
- **Active community of users with support forums, slack channels, regular updates.**





STINGAR's Network Effect

STINGAR's Community generated Threat Intelligence protects all participants

- STINGAR HigherEd partners providing real time protection for all participants
- Threat intel provided via OMNI-SOC for support of HigherEd & Government Research Organizations
- >75% attacks blocked on partner institutions before they are detected
- Threat Intelligence used for Research & Education



STINGAR protects your network from the inside

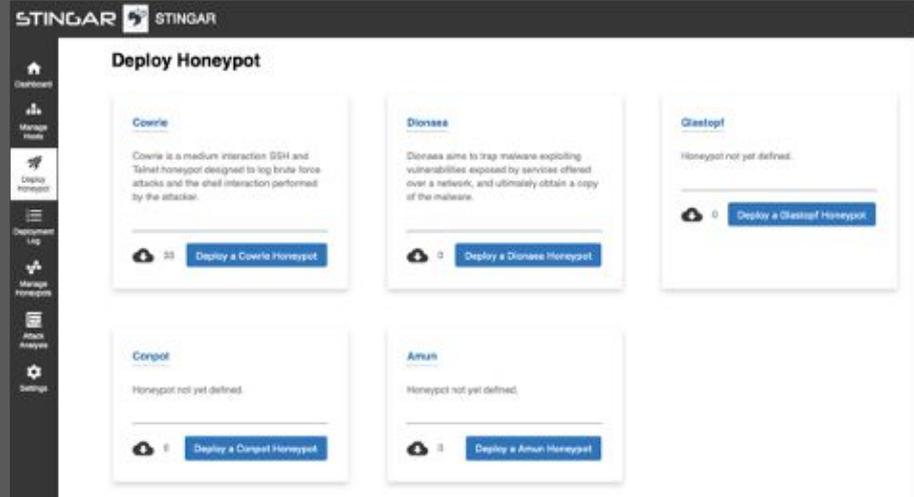
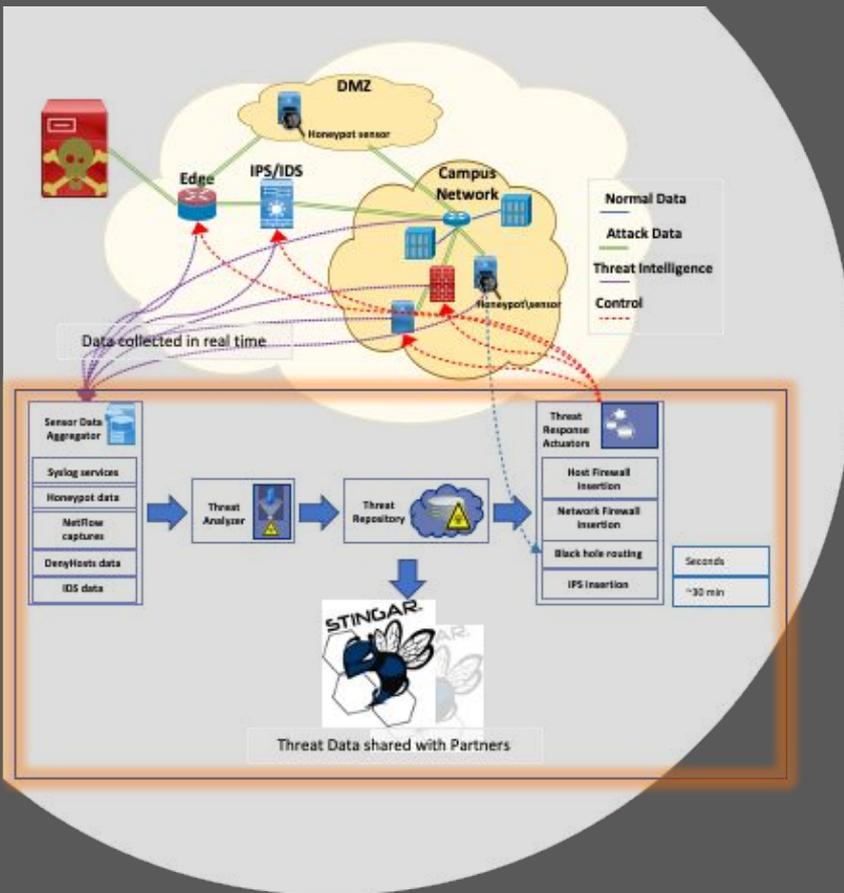
STINGAR provides real time protection for critical infrastructure

- STINGAR's custom sensors silently monitor networks from the inside capturing threats 24/7/365
- Live threat intel detected from internal sub nets and protected assets
- x86 & ARM based sensors on small, low cost (<\$50) low power hardware emulating embedded devices, network appliances, etc.
- Custom sensors for real time Threat Intelligence for Research, Education, Healthcare, First responders & Defense systems

">60% of Data Breaches Are Caused By Insider Threats" - Equifax

STINGAR - Cyber Threat Platform

- An Enterprise Software Platform for cyber-threat monitoring & management
 - Simple web based network sensor management
 - Simple to install & virtually zero maintenance
 - Automatic blocking & Network protection
 - Use standalone or integrate with existing SIEM tools

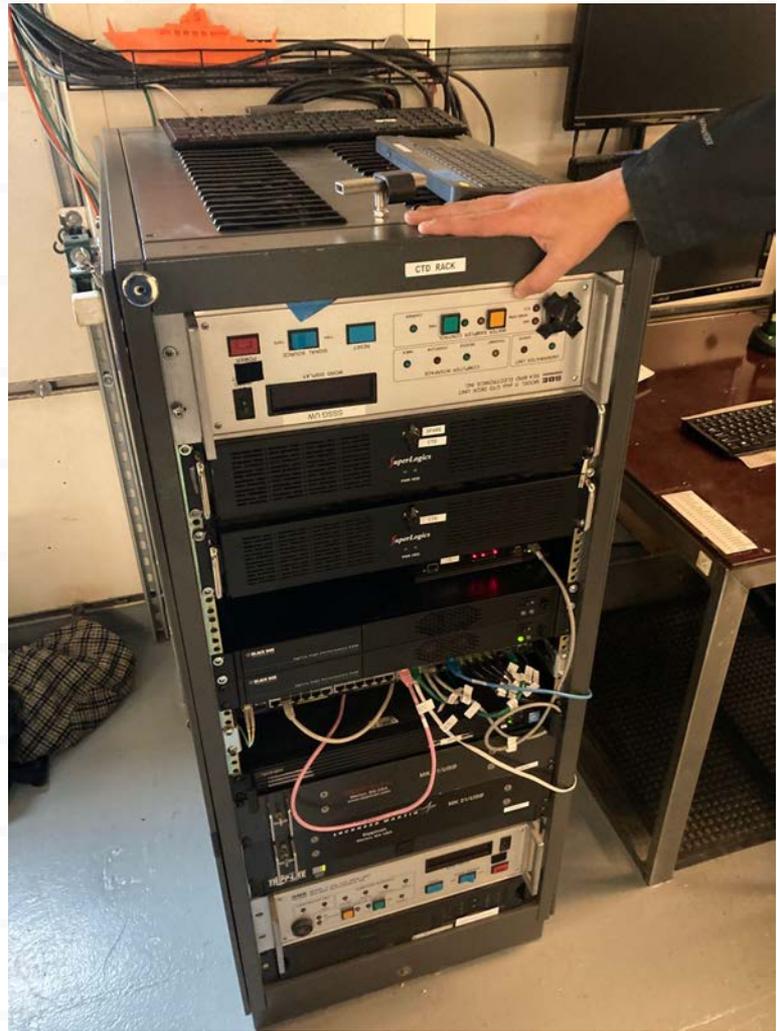


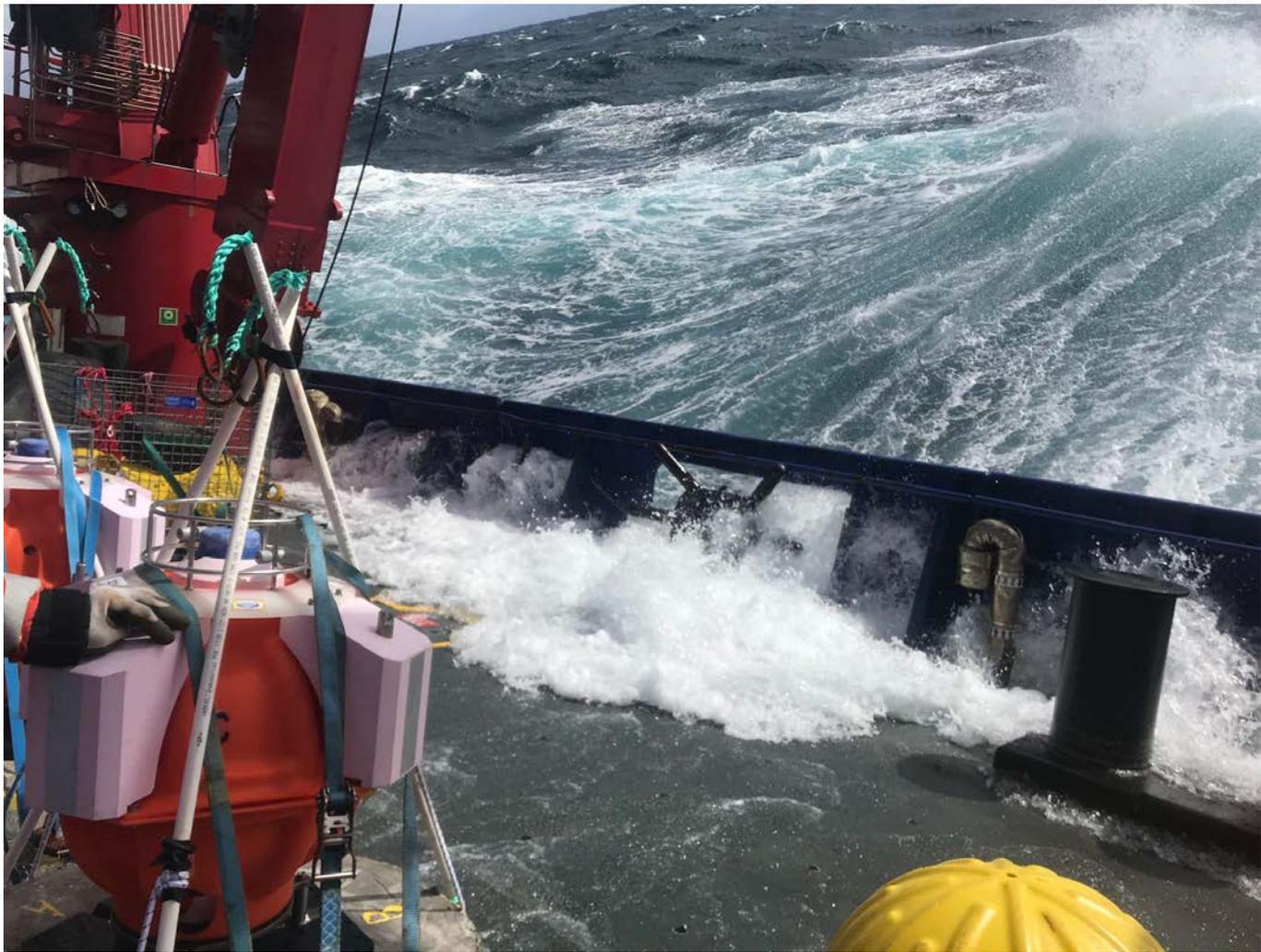












US Academic Research Fleet

14 institutions, 17 vessels, 2 funding agencies.

- No central IT
- New security program
- Lots of infrastructure variety
- Limited tech staff availability

There's something weird about a distributed organization

14 institutions, 17 vessels, 2 funding agencies. Lots of variety.

- Tech staff capacity
- Little standardization
- Lots of networks
- Tiny internet pipes

Tech Staff

Not all vessels have shore-side IT supporting them.

Marine Techs sailing in the fleet are very busy people.

IT isn't their primary role.

Bunk space is limited.

Shipboard deployments must be

1. Light-touch for techs
2. Reliable with unreliable internet connectivity
3. Durable, replaceable, or **both**

Light-touch

Once deployed OmniSOC VCS team performs all OS and software maintenance.

- AutoSSH maintains an SSH tunnel to OmniSOC Maintenance Server
- VCS Team then can SSH into Honeypot
- Hardened SSH servers on both ends.
- Authentication is all done locally.

OmniSOC
Maintenance Server



Light-touch

Honeypot data is sent to OmniSOC's STINGARv2 Server using Fluentd protocol.

- Data is secure in transit.
- Honeypot data is cached on the honeypot if not able to report to STINGARv2 server.
- OmniSOC monitors honeypot data.
- Alerts if action is required.



OmniSOC Maintenance & STINGAR Server

Reliable

Designed to be reliable:

- AutoSSH maintains an SSH tunnel to OmniSOC Maintenance Server
- Fluentd will automatically reconnect to STINGARv2 server if the connection is lost.
- Honeypot data is stored on the honeypot until transmitted to STINGARv2 server.





QUESTIONS ?

For more information please visit :

www.forewarned.io

Or email

info@forewarned.io

Please join our slack channel

<https://join.slack.com/t/stingar>

Thank you for your interest in STINGAR

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