



Active Defense: TrapX[®] DeceptionGrid[®] and ForeScout CounterACT[®]

TrapX Security and ForeScout[®] Technologies have joined forces to provide real-time visibility and threat detection, improved incident response, and rapid threat containment, leveraging the capabilities of ForeScout solutions. The TrapX DeceptionGrid and ForeScout CounterACT[®] joint solution enables early detection of targeted attacks and sophisticated threat actors operating inside networks, along with the agility needed to isolate compromised assets and stop attackers in near real-time.

The Challenge

Advanced threat actors employ sophisticated techniques to penetrate even the most robust network defenses. The question isn't whether attackers will penetrate your networks, but when and how often. Attackers can operate within your network undetected for many months, which can ultimately spell disaster for the targeted network.

In large enterprises, building a motivated security operations center team is essential. Yet security operations team morale is worn down by constant alert fatigue due to the thousands and, in some cases, even millions of alerts daily. All of this raises triage costs, reduces team effectiveness and makes it difficult to retain and build a motivated team. The sheer volume of alerts also makes it

extremely difficult to find attackers. Which alert is the important one? Which alert did we miss? Unfortunately, just one successful penetration can compromise an entire network unless the attacker is rapidly identified, quarantined, and stopped.

Joint Solution

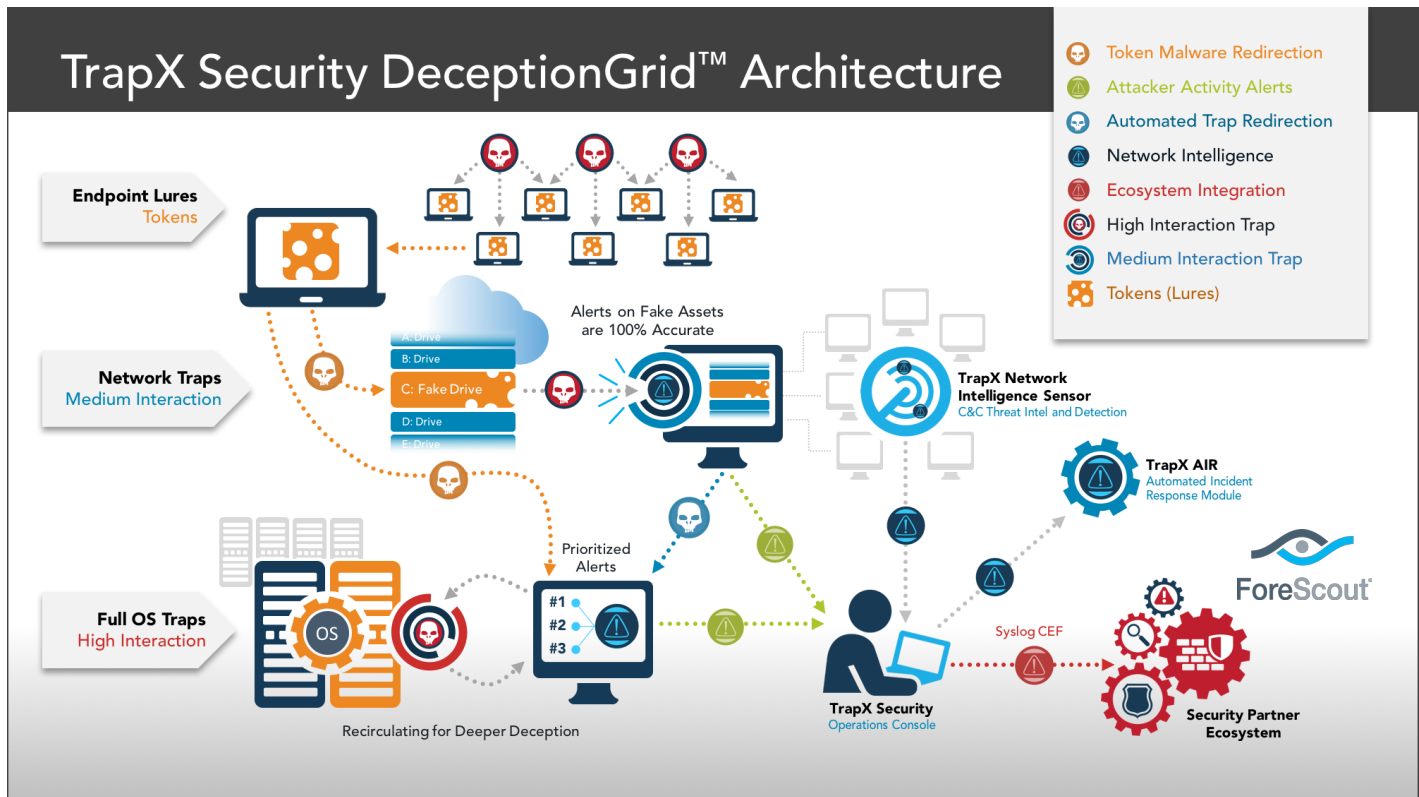
TrapX Security and ForeScout have integrated TrapX's powerful DeceptionGrid technology into ForeScout CounterACT, an agentless visibility and control appliance, that dynamically identifies and evaluates network endpoints and applications the instant they connect to your network. Unlike conventional security methods which generate alerts

How will you know if an attacker has penetrated your network?

How quickly will you know that your current security protections have failed?

How quickly can you isolate and shut down the attack and return to normal operations?





based on probabilities and known threats, DeceptionGrid alerts are binary—attackers either attempt to engage a Trap or they don't. If they do, we know with nearly 100 percent confidence that it's an attack. Once an attacker is identified by DeceptionGrid, CounterACT processes this enhanced threat intelligence and instantly applies this security insight to trigger an automated response and enforce its broad range of policy-based controls, such as isolating the device and remediating the endpoint to eliminate threats. This response action can be initiated by a security operations center analyst directly, or can be implemented by policy-based automation triggered by high-fidelity DeceptionGrid alerts.

TrapX DeceptionGrid

DeceptionGrid is based on our TrapX Deception-in-Depth architecture, which combines wide-ranging deception capabilities to bait, engage, and trap attackers. DeceptionGrid's multi-tier architecture presents deception attack surfaces that match attacker activity adaptively, creating a tempting environment for attackers within the network.

DeceptionGrid baits attackers by deploying automated, camouflaged deception Tokens (lures) and medium- and high-interaction Traps (decoys) among authentic IT resources. The Traps appear identical in every way to authentic IT assets and connected Internet of Things (IoT) devices. The attacker may see an array of camouflaged Traps which appear as tempting medical devices, servers, automated teller machines, retail point of sale workstations, switches, industrial control system components and many other devices. DeceptionGrid even maintains a facade of convincing network traffic among the Traps, thereby enhancing the illusion of authenticity and further engaging sophisticated attackers.

Once an attacker has penetrated a network in which DeceptionGrid has been deployed, they're faced with immediate identification at every turn. Just one touch of the

DeceptionGrid Architecture

DeceptionGrid Architecture

DeceptionGrid by the attacker sets off a high-confidence alert. Then DeceptionGrid integrates with key elements of the network and CounterACT to contain the attack and enable a rapid return to normal operations.

Benefits

- » **Reduced time-to-breach detection** – DeceptionGrid detects malware and human threat actor movements inside the perimeter immediately.
- » **Powerful situational awareness** – DeceptionGrid detects lateral movements that are often missed by other types of cyber tools and defenses.
- » **Highest-fidelity alerts** – DeceptionGrid generates a very low volume of highly accurate alerts.
- » **Deception-in-Depth integrated product platform** – Deception in Depth brings the industry's most comprehensive and powerful suite of deception techniques together in one multi-tier architecture to bait, engage, and trap attackers.
- » **Ease-of-deployment** – DeceptionGrid deployment is simple and fast, using our proprietary emulations and powerful automation.
- » **Actionable intelligence** – Information flows across our integrated network to leverage discovery and uncover hidden threats that target critical assets in both IT and OT infrastructures.
- » **Deep visibility into internal networks** – The DeceptionGrid/CounterACT joint solution provides augmented and actionable real-time visibility into lateral movements from attackers, targeting special turnkey systems such as IoT, SCADA, ICS, POS, and medical devices.
- » **ForeScout integration** – DeceptionGrid integrates seamlessly into CounterACT for fast deployment, trouble-free administration, and automated rapid threat containment. TrapX provides MSSP partners that bring the expertise and skills needed to supplement constrained in-house teams.

Use Case #1

Quarantine Suspected Endpoints

Once DeceptionGrid identifies a suspicious endpoint (IP), it instructs CounterACT to isolate that endpoint from the network. This halts the attack immediately and gives your security team time to investigate the incident without risking further infection/compromise to the network.

This quarantine can be initiated by a security operations center analyst directly, or can be implemented by policy-based automation triggered by high-fidelity DeceptionGrid alerts.



Use Case #2 Diversion

Once a suspicious endpoint (IP) is identified by DeceptionGrid or any other integrated third-party solution, the information is communicated to CounterACT, which moves the endpoint to a special pre-defined segment (e.g., DeceptionGrid VLAN) of the network,

which includes decoys. At this point, any attempt by malware or a human attacker to move laterally from that suspicious endpoint to the decoys immediately reveals their tactics, techniques, and procedures to DeceptionGrid, which enables the security operations team to better understand and contain the threat. This enables more rapid conviction of suspect entities moving with the network before they can cause further damage and theft.



Use Case #3 Proactive Mitigation

TrapX identifies indicators of compromise (IOC) based upon interaction with our emulated decoys (including IoT, SCADA, medical, ATM, and POS devices and systems). DeceptionGrid shares these IOCs (e.g., detect malware binary file hash) with CounterACT. CounterACT isolates the infected endpoint based on your policy. It leverages its IOC repository to scan other endpoints that are attempting to connect or are already connected on the network for new IOCs and initiates remediation actions.

About TrapX Security

TrapX Security is a leader in deception based cyber security defense. Our solutions rapidly detect, deceive and defeat advanced cyberattacks and human attackers in real time. DeceptionGrid provides automated, highly accurate insight into malicious activity unseen by other types of cyber defenses. By deploying DeceptionGrid, you can create a proactive security posture, fundamentally halting the progression of an attack while changing the economics of cyberattacks by shifting the cost to the attacker. The TrapX Security customer base includes Forbes Global 2000 commercial and government customers worldwide in sectors that include defense, healthcare, finance, energy, consumer products and other key industries. Learn more at www.trapx.com.

About ForeScout

ForeScout Technologies is transforming security through visibility, providing Global 2000 enterprises and government agencies with agentless visibility and control of traditional and IoT devices the instant they connect to the network. Our technology continuously assesses, remediates and monitors devices and works with disparate security tools to help accelerate incident response, break down silos, automate workflows and optimize existing investments. As of December 31, 2016, more than 2,300 customers in over 60 countries improve their network security and compliance posture with ForeScout solutions. See devices. Control them. Orchestrate multivendor response. Learn more at www.forescout.com.

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