

# **SOTERIA**

# Proactive cyber defence

Soteria is an innovative, proven proactive technology that prevents known and as yet unknown malware infection. It is the only solution implemented in the kernel of the operating system, intercepting and mediating file writing access to the computer's permanent storage.

### **DEFENCE WHERE IT MATTERS**

Whether you are small or large, military or commercial, the threat of malware infection could ultimately lead to putting a commercial entity out of business or result in the loss of life to the military.

### UNIQUE PROTECTION

With robust access control over the writing of executable files and user-defined files (protected files) to a computer, Soteria protects against unauthorised modification and denies unauthorised write operations. Soteria can tailor files for integrity protection according to the computer's roles, minimizing user disruption. It's unique operation and extensive audit log allows pre-existing malware to be identified and can also reveal rootkit infections.

#### **CONFIGURABLE UPDATES**

The Soteria service provides simple, effective malware protection whilst still allowing for the updating of existing applications with patches, new versions and completely new applications under the control of the authorised administrator or automatically from trusted sources if so configured.







# SIMPLE, EFFECTIVE END POINT DEVICE PROTECTION

Proactive defence against:

- > Viruses
- > Worms
- > Ransomware
- > Trojans
- Key-loggers
- > Kernel rootkits
- > Zero-Day Malware
- Targeted attacks like Spear-Phishing
- Hacker attack and insider threats
- Malware injection through Alternate Data Streams (ADS)

### PROTECTION IN THE MOST CRITICAL ENVIRONMENTS

Soteria is safe to use in:

- > SCADA
- > Real-Time
- > IOT
- > Safety critical environments

All of which proven by a European Systems Integrator for safety-critical nuclear environments.

# INCREASING CYBER THREATS

# THE CHALLENGE TODAY

Chief Information Security Officers today face a formidable challenge of increasing cyber threats. Cyber criminals are extremely aware of mainstream technology and the loopholes which exist. Financial gain, espionage, hacktivism, or, even worse, terrorism is but some of the motive that drive those who wish to access the technology of others.

Typical security approaches which are managed within the operating space are susceptible to human error, or malicious intent. They are controlled in an environment which itself is vulnerable to attack and manipulation.

In practice, the options open are limited to security at the network level or at the end point. This decision is made difficult because the network boundary is difficult to define, due to modern cloud computing and bring your own device trends. Furthermore, existing technology to defend the network is not robust enough to thwart all attacks and solutions need to cover all operating systems which require constant updates and patching. End point security software solutions can be problematic for the user and expensive to support.

Best security practice requires "defence in depth". A robust layered approach to cyber security is the only true approach in an attempt to mitigate the threat of cyber-attack and malware infection. Reducing user interaction and minimising the complexity of solutions will deliver greater, continuous security within an ever increasing threat landscape.

Soteria takes a proactive approach to end point security that is highly effective, simple and reduces operational costs to a minimum.



**DISCREET AND EFFECTIVE** Soteria integrates into the kernel of the operating system rendering it invisible to would-be hackers.

# FAST AND EFFICIENT

# WITH A TINY FOOTPRINT

Soteria is in operation internationally delivering a highly resilient proactive cyber defence capability to many organisations. Not only does it offer protection against malware, rootkits, key-loggers, Trojan-horses, APTs viruses, worms and all manner of other malware and cyber threats it also enforces corporate security policy whilst protecting against attacks. It does all of this with a footprint of less than 100KB.



### LOW COST OF OWNERSHIP

Protecting both legacy and new operating systems, Soteria prolongs the life of un-supported operating system removing the need for risky and expensive upgrades. Once deployed, it requires no regular updates making it a virtually fit-and-forget solution.

Simple to deploy, Soteria is easy to manage whilst enforcing system and file integrity. Soteria doesn't use signature file updates, whitelisting, heuristic analysis or sandboxing, offering protection against zero-day and targeted attacks with no false positive or false negative results.



### PROACTIVE. NOT REACTIVE

Key features include but are not limited to:

- Legacy operating system protection
- Significant reduction in the cost of cleaning up infected systems
- Improved mitigation against the risk of loss of productivity or commercially sensitive information
- Improved mitigation against the risk of reputational damage from cyber-attack
- > No Signature File or Whitelist Updates are required
- Proactive not Reactive it does not require someone to become infected first in order to generate a signature file
- Defeats Zero Day Malware that attempts to write to permanent storage – proven by various test labs
- > Tiny footprint < 100KB
- Deterministic in operation which means it is suitable for safety critical real-time systems
- Extremely Fast in Operation

   no perceptible performance degradation noticed by several evaluations



#### PARTNER OF CHOICE

We are dedicated to helping our customers to make mission critical decisions with confidence.

For almost 35 years, we've established a strong software engineering pedigree in the development and through-life management of complex information systems, data fusion solutions and mission configurable communications.

We have the expertise and agility to meet time-critical operational requirements and with a proven record of assured delivery, we collaborate with customers to help them to generate actionable intelligence from the most demanding challenges of the information age.

#### A SIMPLE TO DEPLOY SOLUTION

Soteria offers:

- > Legacy device support
- > Discreet integration
- > Low total cost of ownership
- > Proactive cyber defence where it matters



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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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