Bio-inspired™ cyber defence
INTRODUCING
PERCEPTION
ULTIMATE NETWORK PROTECTION

Unknown (zero-day) threat detection

Network protection from external and internal sources

Effective identification of data exfiltration

Threats detected from trusted devices
Perception™ is a cyber security solution which is fast, accurate and reliable. Its Bio-inspired™ technology detects malicious behaviours that other products cannot, helping safeguard the network against unknown (zero-day) threats from both external and internal sources, resulting in long-term network security.

BEYOND NETWORK PROTECTION

- **Unknown zero-day threat identification**
  Perception™ is free of the conventional need for an ever expanding list of rules or signatures. Its unique Bio-inspired™ behavioural analysis architecture is fast, accurate and reliable in identifying new cyber attacks as they emerge.

- **Network protection from external and internal sources**
  Perception™ identifies malicious behaviours across the network, identifying threats that originate both from within the network and external locations.

- **Effective identification of data exfiltration**
  Perception™ is able to accurately identify the slow-stealthy data exfiltration techniques used by the most sophisticated attackers.

- **Threats detected from trusted devices**
  Perception™ provides an early warning mechanism to limit malicious behaviour, data loss and exposure from compromised devices connected to the network.

93% of large organisations had a security breach last year, with the affected companies experiencing around 50% more breaches on average than a year ago.

*UK Government Information Security Breaches Survey 2013*
Our Bio-inspired™ technology mimics the fight-or-flight fear response that mammals use to protect themselves. Taking inspiration from our own evolution, Perception™ provides a fast, accurate and reliable response to threats in the network.

Just like our own sensor processing, the neural network architecture within Perception™ monitors data within the network and will alert any unusual behaviours as a potential threat. These unusual behaviours are then subjected to further processing where a more complex threat assessment is made.

This Bio-inspired™ approach enables all network traffic to be monitored in real-time and allows highly complex algorithms to be applied to the specific anomalous data.

ACCURATE AND RELIABLE
The ability to transparently monitor all network traffic and to focus complex threat assessment algorithms on just the data of interest delivers a more efficient, effective and assured defence.

INTELLIGENT
The self-learning threat detection system enables Perception™ to become tailored to your network.

FAST
Perception™ uses data volume reduction techniques which, combined with its unique anomaly detection technology, provides alerts in near real-time to enable fast and efficient protection.

EFFICIENT
The autonomous threat detection and characterisation techniques used by Perception™ reduces the workload of system operators.
WHAT PERCEPTION™ BRINGS TO YOUR ORGANISATION

- Network situation awareness
- Reconnaissance detection
- Application intelligence
- Regulatory compliance
- Exfiltration detection
- Loss limitation and containment
- Managed security services
- Incident response
DETECTION WITHOUT DELAY

The Bio-inspired™ technology of Perception™ offers enduring and resilient network defence against a continually changing threat landscape.

Systems that depend upon an ever growing list of simple signature rules struggle to keep pace with new threats. When a new threat emerges, signature-based systems immediately have a gap in their defences while a new rule must be written and deployed. Increasingly, they become less effective, and today’s more sophisticated threats are designed to actively avoid detection. Perception™ is not bound by such a list.

Without the need for in-line processing of rules the network does not suffer the same reduction in network speeds experienced when a conventional signature-based system checks the traffic. Perception™ delivers enduring surveillance and maintains network speed.

DEFENCE FROM INSIDE

Network threats can originate from internal, as well as external sources. The slow exfiltration of business information can go unnoticed by traditional network monitoring tools, or an attack on an external third party can originate from within your organisation. Perception™ goes beyond other security devices in offering effective identification of data flowing out of your network to external locations, even when the corporate gateway is by-passed (e.g. via a smartphone connected to the network).

COMPLETE NETWORK SURVEILLANCE

The acceptance of Bring Your Own Device (BYOD) presents increasing network policy management issues. Compromised BYODs circumvent perimeter defences, potentially injecting an attack at the core of your network. Perception™ can mitigate this risk. With its advanced threat detection ability it identifies threats from ‘trusted’ devices that have been compromised externally and then connected to the network.

NETWORK PROTECTION TAILORED FOR YOU

Perception™ will easily integrate into your network, and quickly start protecting you from threats. Supplied pre-installed and configured on an industry-standard network appliance, it adapts to the specific requirements of your organisation and quickly learns what ‘normal’ is on the network. Unusual network behaviours are then identified and classified, and an alert sent so you can quickly and effectively lock-down potential threats.

COMPLETE CONTROL AND FLEXIBILITY

Available as a self-managed solution or a fully managed service, Perception™ is suitable for organisations with varying degrees of existing network security infrastructure.

As a self-managed solution, your existing network security teams will find it a simple and effective tool, saving costs, increasing security and giving you complete control. Should your requirements change, you always retain the option to switch to a managed service and make use of our dedicated security specialists.

With the managed service you can deploy-and-forget. Perception™ will work silently in your network, reporting back to our Security Operations Centre, where our team will monitor and alert you to potential threats.

If you choose to operate Perception™ as a self-managed solution, we will provide a training service to help you learn how to monitor and maintain your own system.
Perception™ has been designed and developed by market-leading technology and security specialists within the Chemring Group, which has been delivering secure communication solutions for more than 40 years and is trusted by defence and security agencies worldwide.

Founded in 1905, Chemring Group is headquartered in London, UK and Washington DC, USA. Employing more than 4,000 people worldwide, Chemring has extensive operations in the Americas, Europe, Middle East and Asia.

Chemring is a global business providing a range of advanced technology products and services to demanding Customer requirements in aerospace, defence and security markets in more than 60 countries.

DISCUSS YOUR CYBER SECURITY REQUIREMENTS TODAY
If you would like to know more about how Perception™ can better protect your organisation’s network contact us today. A member of our specialist security team will be happy to describe the system in detail and discuss your specific requirements.

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