Aspect Capital

Overview

Industry

o Financial Services

Challenge

o Industry faced with sophisticated and advanced cyber-threats
o Maintain its professional reputation
o Defend its confidential client data

Benefits

o Total network visibility
o Real-time detection of in progress attacks
o Ability to mitigate risk posed by cyber attackers

Business Background

Aspect Capital ('Aspect') is a UK-based investment manager with offices in London, Stamford and Hong Kong, applying a systematic and quantitative approach to investment management. Founded in 1997, Aspect employs a team of over 110 professionals and currently manages USD 6.6bn, in a range of systematic investment programs. It invests heavily in the research driven evolution of its quantitative alpha-generating systems.

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> Darktrace's comprehensive Enterprise Immune System has provided us with greatly increased threat detection capability.
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> **Tom Clarke, Head of Information Security, Aspect Capital**

Challenge

The financial services industry faces a range of threats from advanced and sophisticated attackers, who aim to cause disruption and reputational damage. As a leading systematic investment manager, the integrity of Aspect's systems is of vital importance.

In an age of heightened cyber-threat levels, perimeter defenses are no longer sufficient in guaranteeing the integrity of global networks. Aspect felt their existing tools were insufficient in providing total network visibility, preventing them from identifying potential vulnerabilities. Aspect recognized that it need a new approach to detect advanced threats, achieve total network visibility, and to understand where the potential weaknesses in its cyber security could be found.

Solution

Following an assessment of its existing security tools, Aspect chose to trial Darktrace's machine learning technology. The Enterprise Immune System produced immediate results, demonstrating its fundamentally innovative approach and effectiveness.

Darktrace's self-learning technology independently learns a pattern of normal behavior for each user and device within the organization, powered by probabilistic mathematics and machine learning developed at the University of Cambridge. This evolving understanding of 'normality' within the network enables the Enterprise Immune System to detect new and emerging threats that escape the attention of traditional security methods. Applying the principles of the human immune system, Darktrace's technology uses unsupervised machine learning in real time to identify early indicators of potential cyber risks and in progress attacks.

Using advanced Bayesian mathematics, the Enterprise Immune System is also capable of classifying anomalies based on their statistical likelihood of being genuine threats, which helps to focus the security team's efforts on the most serious issues. The wealth of intelligence uncovered by Darktrace's technology is accessed through the Threat Visualizer, an intuitive visualization interface that is easily understood by both security specialists and board-level executives. The Threat Visualizer highlights the most significant threats, at the same time offering a dynamic 3D overview of the entire network in real time.

Benefits

The Enterprise Immune System was installed quickly and integrated with Aspect's existing systems without hindering functionality. The unsupervised machine learning of the Enterprise Immune System enables Aspect to monitor its global network in real time, alerting the company to anomalous and suspicious behaviors. By understanding the 'pattern of life' of every device and user, the Enterprise Immune System allows Aspect to protect its network in the context of constantly evolving threats, and mitigate any potential problems before they arise.

Darktrace's technology gives Aspect's security team total network visibility in a way that is both comprehensive and accessible. It also gives Aspect much improved visibility from the user perspective. External expertise provided by Darktrace's security analysts was of significant benefit too, with regular Threat Intelligence Reports highlighting the potential dangers detected and ranking them in order of importance.

Darktrace's self-learning technology has given Aspect enhanced confidence in its cyber defense capabilities. The Enterprise Immune System enables Aspect to undertake all of its common business practices without hindrance, and in the knowledge that emerging threats or abnormalities will be proactively detected.

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> The machine learning enables us to detect emerging threats, in real time, and is mapped in a way that provides total network visibility. This has improved our ability to quickly diagnose potential issues and act accordingly.
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> **Tom Clarke, Head of Information Security, Aspect Capital**