

Illumio and adaptive security

Equity Research

An elegant segmentation solution for distributed networks

Illumio secures workloads independently of network infrastructure

We hosted a lunch with CEO and co-founder of Illumio, Andrew Rubin, as the first event in our Security Spotlight series. In a security landscape that has traditionally been dominated by the perimeter with firewalls and switches, Illumio uses an “adaptive” approach that applies security policy directly to individual workloads (via a lightweight operating system agent), rather than to infrastructure. This approach allows enterprises to 1) segment their internal networks more granularly via a whitelisting policy engine, which reduces the attack surface and simplifies the process of writing otherwise-static rules in a dynamic environment; 2) ringfence high value assets; 3) apply security policy independent of fixed infrastructure in a scalable model that spans on-premise, cloud and hybrid environments. Illumio exited stealth mode in 2014 and has raised \$142.5 mn in funding over 3 years; customers include Morgan Stanley, NTT and Plantronics.

The changing security landscape: focus on segmentation and cloud

Mr. Rubin highlighted trends in the security landscape such as more segmentation, protecting high-value assets, and meeting stricter compliance rules (e.g. data residency laws in Europe). Together with the move to cloud, these evolving use cases have driven a proliferation in firewall policy with enterprises often maintaining over 8mn disparate rules that are difficult to manage manually. Ultimately, given a much larger surface area *within* a datacenter than around it, the TAM for internal segmentation tools could be much larger than the TAM for perimeter firewalls, which may drive a significant shift in the way enterprises are allocating budgets. Mr. Rubin highlighted that there is increasing momentum toward distributed computing environments; however, “all-cloud” roadmaps are rare and most enterprises are likely to take a hybrid approach. We believe over the medium term, the increasing complexity of maintaining security in hybrid environments is likely to be incremental (rather than cannibalistic) to the existing security TAM.

Infrastructure likely to remain the cornerstone of security

Mr. Rubin identified three key buckets of security spending: analytics (e.g. SIEM tools), detection and remediation (e.g. advanced threats, FireEye), and infrastructure, with infrastructure the largest and most defensible. Illumio does not compete with firewalls at the perimeter, but may compete going forward if firewall vendors become more aggressive with internal segmentation. Illumio’s primary competitor today is VMWare’s NSX.

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