

Cisco Hypershield is a security architecture that makes hyperscaler technology accessible to enterprises and delivers AI-native security for modern data centers and cloud. Hypershield places control points (e.g. switch ports, DPU enabled servers etc.), to enforce different capabilities and policies not possible to configure manually.

Benefits:

Deep Visibility and surgical control at the workload level

Machine Learning and Analysis of the relationships between the application process, file, and network operations against Common Weakness Enumeration (CWE) database, which is a classification system for hardware and software security weaknesses

Analysis of the Application process graph and known application behaviors to classify suspicious or malicious activity

Block Application Exploits in Minutes. Employs compensating controls that are evaluated and tested against live production traffic for optimal effectiveness

Protects Everywhere. Implement a hyper-distributed security approach that reaches all areas of your network, tapping into a broad range of previously unreachable workload and network enforcement points

Achieve Effective Segmentation that continuously adapts and learns. Applied to highly specific controls, even down to regex filtering, ensuring tailored security

Unified Management across the network and workloads. Deploy software and policy updates with confidence using a dual data-plane approach, enabling safe testing on live traffic without risking your operations

FAQs:

Q: What platforms will Hypershield support at GA?

A: The Tesseract Security Agent (TSA) will be supported on Linux-based systems running above kernel version XX (TBD by GA). This includes Kubernetes systems as they are Linux-based. In the case of Kubernetes, the TSA can be installed on the Kubernetes Nodes, and its capabilities made available to resident Kubernetes Pods on these Nodes. These Nodes could be VMs or bare metal-based.

Q: What does eBPF stand for?

A: [extended Berkeley Packet Filter](#) and goes beyond just “packets” or “filtering”

Q: How will Hypershield help manage security in a unified way?

A: Hypershield will leverage [Cisco Defense Orchestrator](#) (CDO).

Q: How does Hypershield impact existing solutions like Cisco Secure Workload?

A: See [Secure Workload and Hypershield co-positioning](#)

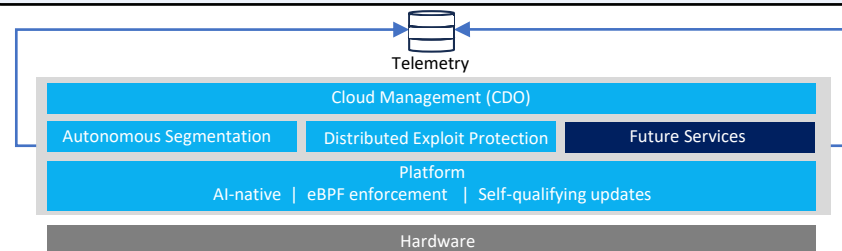
Key Components:

Tesseract Security Agent (TSA): High-performance agent operates on the workload, interfacing with processes and the operating system kernel through the extended Berkeley Packet Filter (eBPF1). Easy deployment in Kubernetes and fully functional in non-Kubernetes settings. It offers complete visibility into workload actions, monitoring network connections, file and system calls, and kernel functions, and it alerts on anomalous activities.

Virtual machines/Containers: Hypershield includes network enforcement points that operate within a virtual machine or container. These are strategically placed close to the workload to protect specific assets more effectively.

Unified cloud management: All policies are centrally organized and managed via Hypershield’s management console (CDO). New or updated policies are "compiled" and distributed to the appropriate enforcement points. This system ensures that security administrators maintain a comprehensive overview of all deployed policies, which can dynamically adapt to workloads moving from on-premises environments to public clouds or between servers.

AI-native: Hypershield delivers high efficacy, rapid response, and continuous protection. The system can autonomously write, test, deploy, and manage its own rules, taking advantage of the dual data-plane and extensive visibility across the network and workloads. An AI assistant is also available to explain the analysis, observed behaviors, recommendations, and more, thus earning trust through appropriate levels of autonomy and control.



Resources:

User Guide	Ordering Guide	Solution Overview	FAQ's
SalesConnect	Data Sheet	Cisco Defense Orchestrator	Public Page
At-a-Glance			