

# Hybrid Mesh Firewall - AI-Driven Zero Trust

## Unified Security. Everywhere. Seamlessly Managed.

Hybrid Mesh Firewall is a next-generation cybersecurity solution designed to unify and extend protection across modern IT environments—on-premises, virtual, and in the cloud. With centralized management and AI-driven zero-trust enforcement, it provides complete visibility, advanced threat detection, and granular control across data centers, branches, cloud platforms, and remote workforces.

## Executive Summary

In today's distributed, cloud-first world, traditional firewalls can't keep up with the complexity of modern environments. Cisco's Hybrid Mesh Firewall solution leveraging AI solves this challenge by unifying on-premises, cloud, and virtual firewall capabilities into a single, centrally managed solution. Designed to support zero trust principles, it delivers comprehensive visibility, granular access control, and advanced threat protection across all your environments—from data centers and branch offices to public clouds and remote users.

By integrating leading-edge technologies like Cisco Secure Firewall, Hypershield, and AI Defense, Magentai empowers organizations to simplify operations, strengthen security posture, and scale protection as their infrastructure evolves.

## Core Capabilities

**Unified Platform:** Combine hardware, virtual, and cloud-native firewalls into a single, centrally managed system—removing silos and complexity from your security stack.

**Flexible Deployment:** Adapt to your environment with on-prem, virtualized, and cloud firewall options—protecting traditional networks and dynamic cloud workloads alike.

**Centralized Management:** Control, configure, and monitor all firewall instances from a single dashboard. Simplify policy enforcement and reduce operational overhead.

**Enhanced Visibility:** Gain deep telemetry and real-time traffic insights across the entire hybrid environment to proactively detect threats and enforce policies.

**Zero Trust Enforcement:** Enable identity-based access, validate every connection, and restrict lateral movement with segmentation down to the workload level.

**Advanced Threat Defense:** Protect against encrypted threats, zero-day exploits, and AI-targeted attacks with built-in threat intelligence and behavior-based detection.

**Scalable & Cost-Efficient:** Scale security operations as your business grows—without stacking up point solutions or manual configurations.

## Technology Integrations

### Cisco Hypershield (When available)

Autonomous segmentation and updates to defend modern AI-scale data centers.

### Cisco Secure Firewall

Decryption and detection of malicious flows using Snort ML and Talos threat intel.

### Cisco Secure Workload

Agentless policy enforcement for hybrid and multi-cloud applications.

### Cisco AI Defense

Purpose-built protections for securing AI application pipelines and infrastructure.

### Cisco Multicloud Defense

Extend Layer-7 firewalling across cloud environments with auto-healing orchestration.

### Cisco Identity Services Engine (ISE)

Identity-based segmentation and access control across users, devices, and applications.

## Key Benefits

### Unified Protection Across

**Environments:** Secure data centers, branches, cloud platforms, and remote users under one strategy.

### Centralized Policy Management:

Manage and enforce firewall policies from a single, unified console.

### Cloud-Native Scalability:

Seamlessly scale security as infrastructure and workloads grow.

### Zero Trust Security Model:

Enforce identity-based access and microsegmentation across all assets.

### Advanced Threat Defense:

Block zero-day attacks, encrypted threats, and lateral movement with built-in intelligence.

### Visibility and Control:

Gain full insight into traffic, usage, and threats for faster response.

### Reduced Complexity and Cost:

Consolidate tools to simplify operations and cut unnecessary expenses.



Magentai is a world-class Cybersecurity services provider, dedicated to implement, integrate and operate the most resilient Cybersecurity platforms using proven state-of-the-art technologies. With a team of seasoned experts and cutting-edge technology, we deliver comprehensive solutions tailored to our clients' unique needs, ensuring their digital assets remain secure in an increasingly complex cyber landscape.

For more information or to engage our services, please contact us at [info@magentai.com](mailto:info@magentai.com) or visit <https://magentai.com>