

# STRATUS SHIELD

*HYE TECH NETWORK & SECURITY SOLUTIONS LLC*

## MODERN SECURITY WITHOUT THE COMPLEXITY

As organizations accelerate digital transformation, traditional perimeter firewalls can't keep up with distributed users, hybrid environments, and evolving threats. HyeTech's Stratus Shield (Firewall-as-a-Service) delivers enterprise-grade protection from the cloud—eliminating hardware limitations while strengthening security everywhere your people work. Stratus Shield centralizes policy enforcement, simplifies operations, and provides consistent protection across all workloads.

### Stratus Shield vs traditional firewalls at a glance

FWaaS	Legacy FW
Cloud-based, no physical hardware	On-premises hardware; support & maintenance
Elastic, scales with customer demand	Limited by hardware capacity
Hosted & managed platform	Maintain platform in addition to policy
Predictable cost	High upfront costs + ongoing maintenance
Optional Disaster Recovery	Requires separate DR planning & infrastructure
Maintenance & updates part of service	Manual updates, patching, and monitoring

### Why Stratus Shield Is the Better Choice

#### 1. Cloud-Native Scalability

Instantly scale security capacity without hardware refresh cycles. Support short term burst & growth. Elastic performance that adapts to traffic demands.

#### 2. Advanced Threat Protection

Next-gen firewall capabilities & continuous threat intelligence powered by global cloud networks

### 3. *Unified Security Management*

Centralized policy control and simplified operations with automated updates & zero-touch deployment.

### 4. *Reduced Cost & Complexity*

No hardware to purchase, maintain, or replace. Predictable pricing & lower operational overhead for IT and security teams.

# STRATUS SHIELD

## *HYE TECH NETWORK & SECURITY SOLUTIONS LLC - WHITEPAPER*

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SIMPLIFYING COMPLEXITY | MODERNIZING SERVICE DELIVERY | ACCELERATING PERFORMANCE

### Executive Summary

Organizations face rising cybersecurity threats while managing tight budgets, distributed networks, and complex compliance mandates. Traditional firewalls are costly, hard to scale, and poorly suited for today's hybrid environments.

Hye Tech Network & Security Solutions, LLC (HyeTech) delivers a modern, cloud-native Firewall-as-a-Service (FWaaS) platform built **within the customer's local geographic region**, consistent policy enforcement, and deep visibility into both perimeter and internal east-west traffic—without the operational burden of managing hardware appliances. HyeTech's Stratus Shield platform enables Zero Trust architectures for customers in a simplified manner.

### 1. Introduction

The security perimeter has dissolved. Users connect from anywhere, applications live in SaaS platforms, and workloads run across multiple clouds. Traditional hardware firewalls—designed for centralized networks—introduce:

- Latency from backhauling traffic
- Operational complexity
- Inconsistent policy enforcement
- Limited visibility into internal east-west movement

Stratus Shield offers a cloud-delivered firewall solution hosted within the customer's geographic region. This ensures that security inspection happens near the customer, not hundreds of miles away. It provides scalable, policy-driven security for all users and devices, while meeting our customer's requirements for performance, compliance, and cost control.

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## 2. What Is HyeTech's Stratus Shield?

Stratus Shield is a cloud-delivered, regionally hosted firewall platform that provides:

- Layer 3–7 firewalling
- Zero Trust architectures
- Intrusion detection and prevention (IDS/IPS)
- Application-aware controls
- DNS security\*
- SSL/TLS inspection\*
- Identity-based policy enforcement\*
- East-West segmentation
- Centralized logging and analytics

Traffic is routed to the nearest HyeTech security node, where policies are applied consistently across all users, devices, campuses, offices, and cloud workloads.

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## 3. Why Local Geolocation Matters

Most FWaaS providers operate from large, centralized data centers. This introduces latency and unpredictable routing paths.

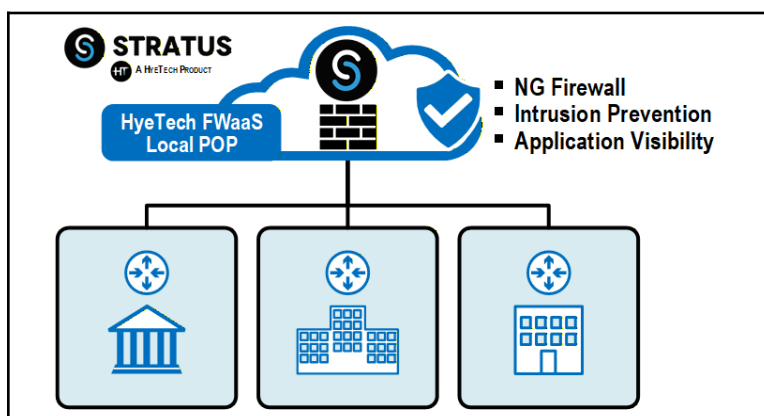
Stratus Shield is deployed within the customer's local region, ensuring:

- Faster inspection
- Lower latency and jitter
- Improved performance for cloud apps and remote learning platforms
- Reduced dependency on long-haul circuits
- Better user experience for remote users, branch users, students, staff, and field workers

This is especially critical for networks where bandwidth limited.

## 4. Architecture Overview

### 4.1. Stratus Shield Security Fabric



*Graphic: FWaaS Fabric*

This architecture ensures consistent policy enforcement regardless of where traffic originates.

## 5. Key Benefits of Stratus Shield

### 5.1. Low Latency Through Localized Inspection

By keeping security inspection within the customer's geographic region, HyeTech eliminates the latency penalties associated with global FWaaS platforms.

Benefits include:

- Faster SaaS access (Microsoft 365, Salesforce, Google Workspace)
- Better VoIP and video performance
- Reduced packet loss and jitter
- Improved user satisfaction

### 5.2. Strong Perimeter Defense

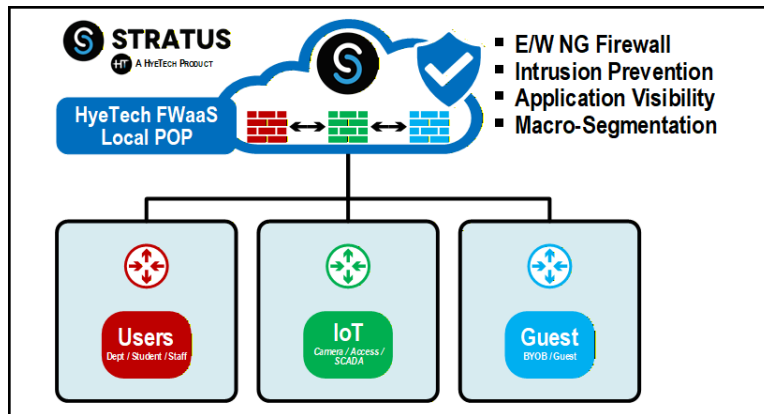
Stratus Shield provides a modern perimeter security layer with:

- Stateful and next-gen firewalling
- Threat intelligence-driven blocking
- IDS/IPS with real-time signatures
- Geo-IP filtering
- Application-layer controls

This ensures that threats are stopped **before** they reach internal networks.

### 5.3. East-West Segmentation and Internal Threat Containment

Traditional firewalls focus on North-South traffic. Stratus Shield can extend protection inside a customer's network.



*Graphic: East West Visibility*

Capabilities include:

- Stateful and next-gen firewalling
- Zero Trust architectures
- Macro-segmentation
- Lateral movement detection
- Internal IDS/IPS
- Identity-based access control
- Policy enforcement between workloads

This dramatically reduces the blast radius of ransomware and insider threats.

### 5.4. Simplified Operations and Centralized Management

Stratus Shield eliminates the need for:

- Hardware firewalls at every site
- Manual patching and updates
- Complex VPN concentrators
- Distributed logging systems

A single cloud platform provides:

- Unified policy management

- Real-time analytics
- Compliance reporting
- Automated updates

## 5.5. Cost Efficiency

Stratus Shield reduces both capital and operational expenses:

- No hardware refresh cycles
- No licensing complexity
- Customers pay for performance they need, not what they expect to need
- Pay for and increase performance as needed, when needed
- No on-prem maintenance
- Predictable subscription pricing

Organizations can scale security without scaling infrastructure.

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## 6. Use Cases

### 6.1. Multi-Site Enterprises

Replace dozens of branch firewalls with a single cloud-based policy engine

### 6.2. Remote Workforce

Provide secure access for remote users

### 6.3. Local Government & Education

Meet compliance requirements while keeping data within local jurisdiction

### 6.4. Zero Trust Architecture

Protect sensitive east-west traffic between systems with Zero Trust Architecture features and functionality

### 6.5. Cloud-First Organizations

Secure workloads without deploying virtual appliances.

## 7. Why HyeTech?

HyeTech combines **local presence**, **deep security capabilities**, and **modern cloud architecture** to deliver a FWaaS platform that is:

- Faster with lower latency
- Easier to manage
- More cost-effective
- More security with scalability
- Better aligned with Zero Trust principles

HyeTech's regional deployment model ensures that customers receive the performance of on-prem firewalls with the scalability of the cloud.

## 8. Comparison Table

Feature	On Premises Firewalls	Shield FWaaS
Deployment Model	Physical appliances deployed in customer datacenter	Delivered from HyeTech's cloud; no hardware required
Scalability	Limited by appliance capacity; requires hardware upgrades	Elastic, auto-scales with traffic demand
Management	Local management; manual updates and patching	Centralized, cloud-based console; zero-touch updates
High Availability	Requires HA pairs, clustering, and redundant power/cooling	Built-in redundancy across cloud infrastructure
Logging & Analytics	Limited by local storage; integration required	Cloud-scale retention, easy export
Maintenance	Hardware refresh cycles every 3–5 years; manual upkeep	No hardware lifecycle; provider handles upgrades
East-West Protection	Complexity in design and operation	Macro segmentation support; can be combined with micro segmentation
Perimeter Protection	Enforced at physical network boundary	Enforced at cloud edge or POP
Zero Trust Integration	Possible but requires additional tooling and integrations	Strong alignment with identity-based and cloud-native controls
Cost Model	High upfront costs + support contracts	Predictable cost; usage-based
Disaster Recovery	Requires secondary datacenter; complex design and build	Optional feature, local geographic diversity and disaster recovery
DDoS Protection	Limited to appliance capacity; separate service	Optional feature, integrated at cloud edge; large-scale absorption
Compliance	Depends on customer's environment and controls	Built-in compliance frameworks (based on design & needs)

## 9. Conclusion

Firewall-as-a-Service is the future of network security. HyeTech's localized Stratus Shield offering delivers:

- Low latency
- Strong perimeter protection
- Deep east-west visibility
- Centralized management
- Cloud-scale at lower cost
- Zero Trust alignment

As organizations modernize their networks, HyeTech's Stratus Shield provides the performance, security, and simplicity required to operate confidently in a cloud-first world.