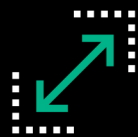**Hewlett Packard Enterprise**

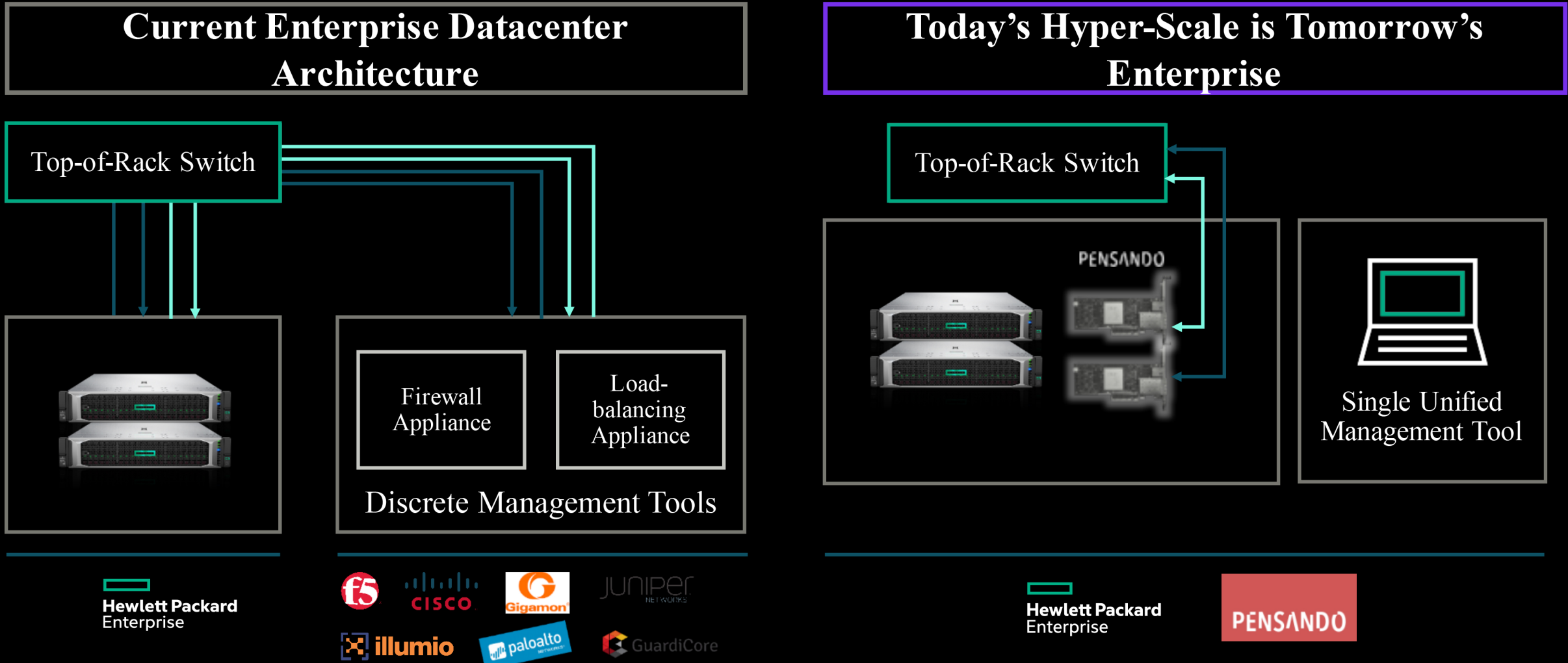# PENSANDO DISTRIBUTED SERVICES PLATFORM FOR HPE SERVERS

## MARKET TRENDS AND CHALLENGES

**72% of all network traffic worldwide is East-West within the data centers[1]**

| Scalability | Security | Complexity |
|---|---|---|
| **31 billion** devices online by **2021**[2] | **6 months** to **detect breach**[4] | **3x** more spending on network operations than on the network[3] |
| Centralized appliances unsuitable | Perimeter Security Inadequate | Slow and error prone operations |

## ENTERPRISE DATACENTER NETWORK COMPLEXITY

Appliance Based Services vs Distributed Services

### Current Enterprise Datacenter Architecture

Top-of-Rack Switch

Firewall Appliance
Load-balancing Appliance

Discrete Management Tools

**Hewlett Packard Enterprise**

F5 · cisco · G · JUNIPER · illumio · paloalto · GuardiCore

### Today's Hyper-Scale is Tomorrow's Enterprise

Top-of-Rack Switch

PENSANDO

Single Unified Management Tool

**Hewlett Packard Enterprise** · PENSANDO

## TRANSFORM TO A DISTRIBUTED ARCHITECTURE

Discrete Appliances
Course Security
Inefficient Resources
Expensive Operations

→

Granular Security
Integrated Intelligence
Optimized Operations

### Current State – Discrete Appliances

- Centralized appliances with limited scale and performance
- Macro segmentation and security
- Complex integration with overall infrastructure
- Inconsistent management interface and expensive operations
- Partial telemetry and observability

**Challenges Solved**

Scalability

Performance

Complexity

### Ideal State – Integrated Infrastructure

- High performance distributed intelligence
- Micro-segmentation, granular security, and encryption in hardware
- Simple centralized management
- Eliminate waste and sprawl of dedicated appliances and point products
- Complete visibility to every guest VM and container throughout infrastructure

## DISTRIBUTED SERVICES—CUSTOMER BENEFITS

World's most secure industry standard server extends to the network

| Granular Security | Improved Uptime | Higher Performance | Lower TCO |
|---|---|---|---|
| Stateful Firewall | Direct Paths | Offload CPU / Memory | Replace Point Products |
| Micro-segmentation | Always-On Telemetry | Processing in Hardware | Simplify Operations |
| End-to-End Encryption | Smaller Security Domain | Distributed Architecture | Optimize Resources |

**Optimize Performance, Boost Security, Simplify the Network**

[1] Source: Cisco Global Cloud Index 2019
[2] IDC 2019 Delivering Infrastructure at the Edge https://www.idc.com/getdoc.jsp?containerId=DR2019_GS3_RV
[3] Gartner report – Gartner's 2017 Strategic Roadmap for Networking
[4] Ponemon Research Institute Study on Malware Detection

## FOR MORE INFORMATION ON HPE SERVERS, PLEASE CONTACT US.