

NetDevices, Inc.

Simplifying the Enterprise Edge

“Innovate to Succeed”

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About NetDevices

■ Background

- Founded in March 2003 by three Cisco veterans
 - Seenu Banda
 - Rob Haragan
 - Jeff Kidd
- 50+ people in Silicon Valley & India
- First to ship purpose-built services gateway

■ Management experience

- Cisco, Juniper/Netscreen, Nortel/Bay Networks, Cabletron

■ Investor

- Artiman Ventures

■ Mission

- *Simplify the Enterprise Edge*



Branch Networks Changing – why innovate?

Growing sophistication, applications at remote offices



CRM

ERP

SCM

email

Disruptive new appliances, management and support



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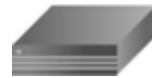
Firewall



VPN



IDS/IDP



VoIP



Router

Increasing cost & complexity of management

Configuration?

Staff hours?



Ability to maintain uptime?

Services Gateways = Answer



"The [Services] Gateway will be a modular, standards-based device offering high-availability, a wide variety of service modules, and integrated system management."



"A services gateway isn't a router or firewall with features added on. It's a purpose-built device designed from the ground up to do all these functions."



Purpose-Built Architecture = Key Innovations

1

Lifeline™ management framework

- Independent, dedicated backplane and processors
- Always-available system management
- Guarantees accessibility / manageability of all services

2

OnePass™ packet processing

- Each packet is classified / inspected only once
- Saves CPU resources and minimizes latency
- Guarantees performance + scalability

3

ModuLive™ operating system

- Carrier-class, modular, always live operating system
- Live upgrades/additions with no service disruption
- Carrier-class availability, serviceability and uptime

4

Programmability

- Software-based architecture enables new services
- Linux-based ASE card supports custom and 3rd Party applications
- Flexibility to add new services

NetD Innovation -> IP : 14 Patents

Architectural Foundation Patents Filed	
System and method for enabling management functions in a network	Globally Storing Packet Information
System and method for enabling redundancy in PCI architecture	Integrated System Providing Proxy for VM and Switching Functionality
Defending Denial of Service Attacks in an internetworked environment	System and method for data path independent AV and virus signature management
Booting intelligent components by a shared resource	Classifying Packets
Accessing shared resource by intelligent components	Facilitating User defined Protocol Anomaly Detection
Autoconfiguration of network services required to support operation of dependent network services	Enabling VoIP Calls to be Initiated When a Call Server is Unavailable
Inspecting Packets for Security before Routing	Community Based Defense

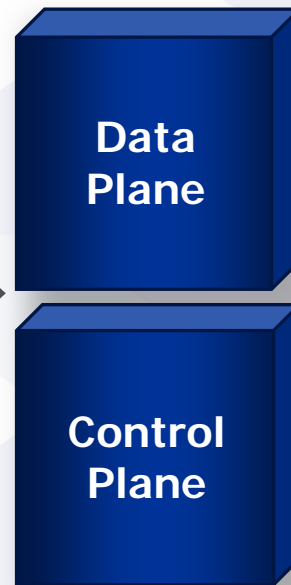
Lifeline™ Management Framework

1st Generation Early 90s



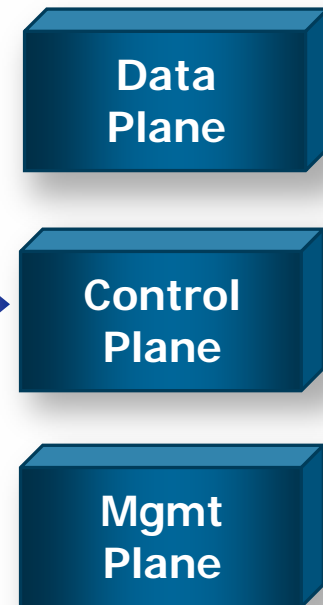
Data plane limits performance & mgmt access

2nd Generation Late 90s



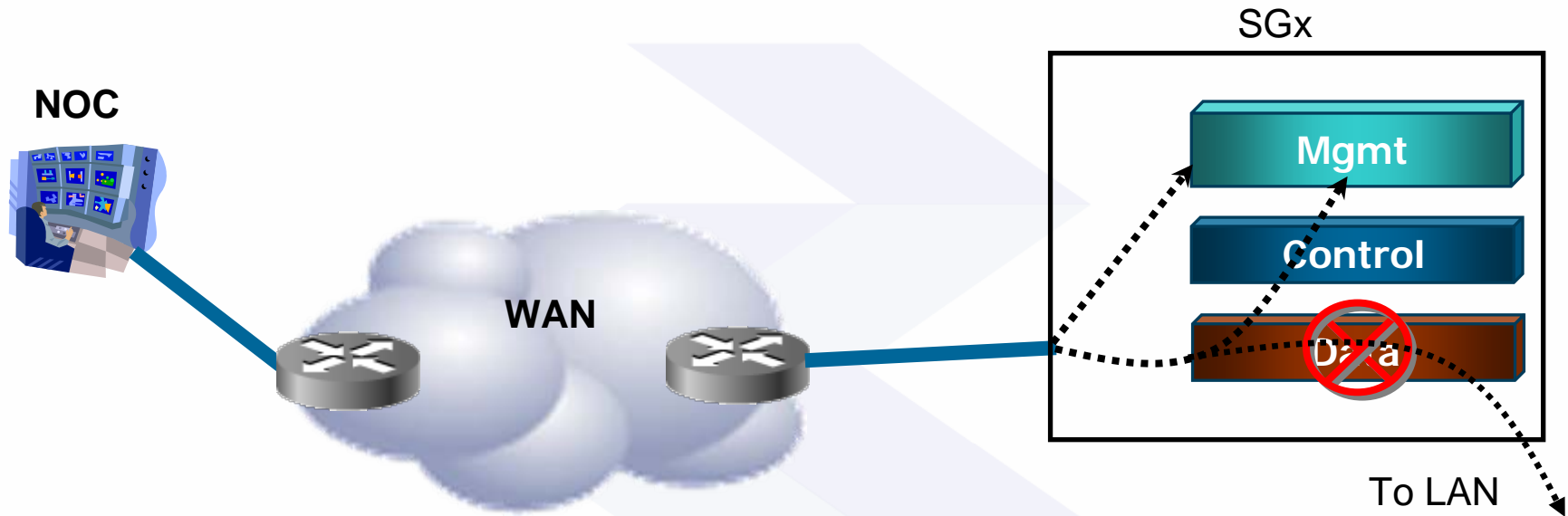
Data performance improved, mgmt still tied to data paths

3rd Generation NetDevices today



Full separation of data & mgmt traffic, accessible even if main processing unavailable

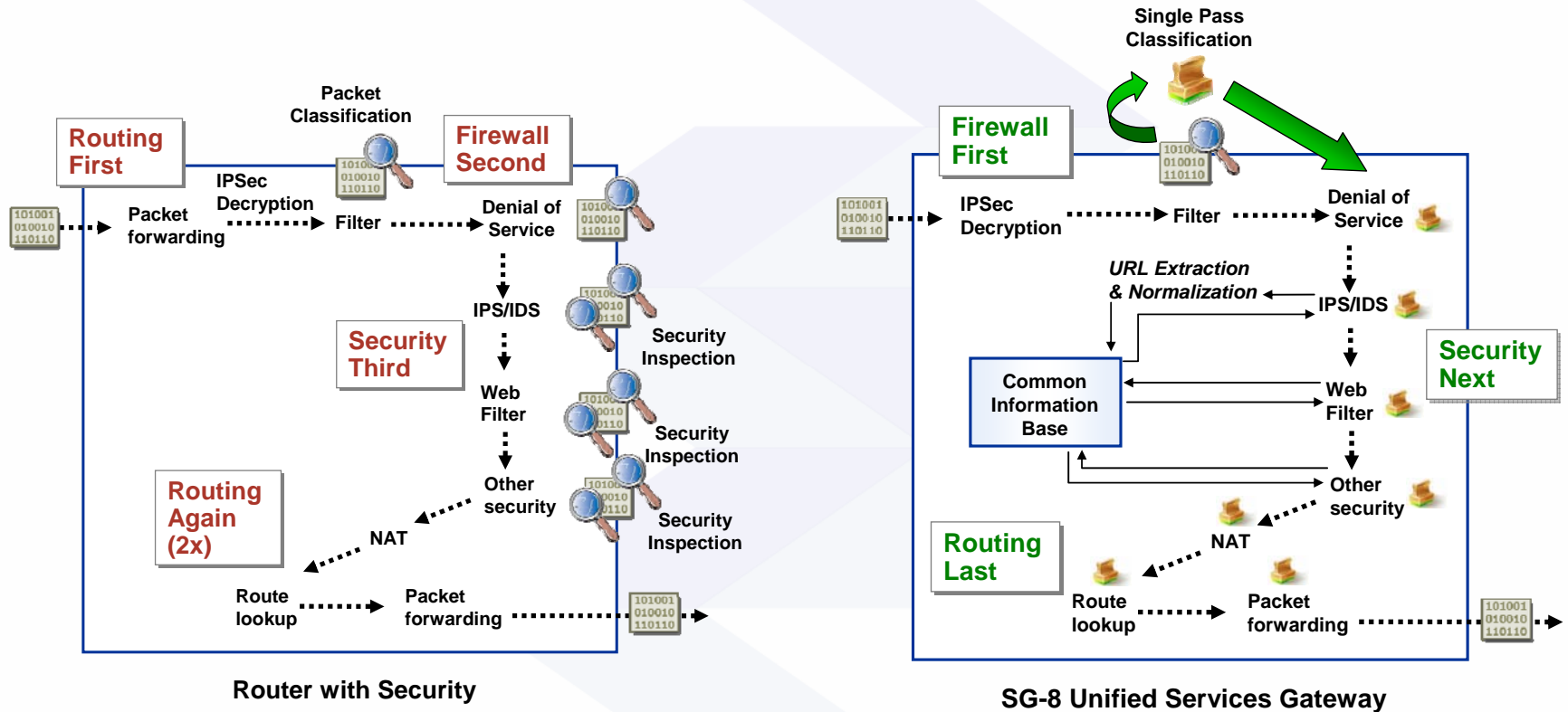
Lifeline™ - 100% remote access



- Normal mode of operation
- Device Failure causes loss of manageability
- Lifeline architecture re-routes traffic to dedicated management nodes and provides access

System is always remotely reachable & manageable

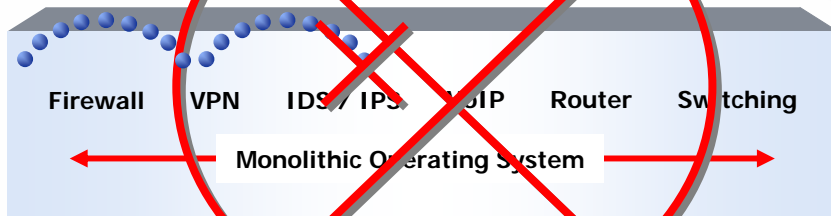
OnePass™ Packet Processing



Next generation devices must be built for services

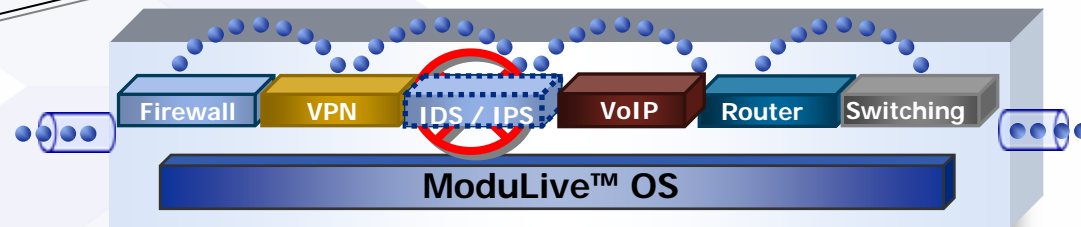
ModuLive™ Operating System

Traditional Router



- Monolithic OS is high risk for multiple services
- One failure or upgrade = all services down

NetDevices SG-8

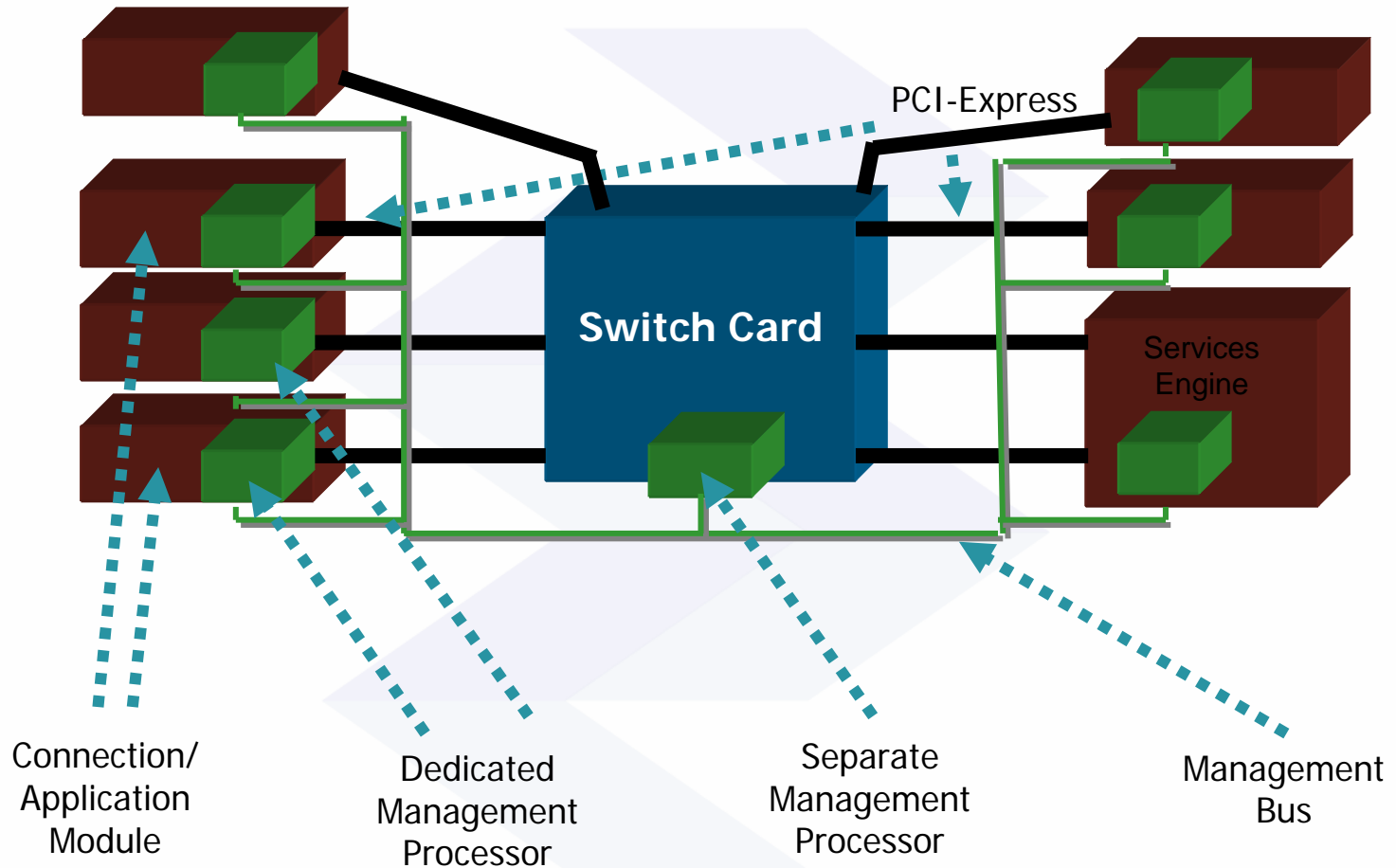


Modularity = major advantage
in managing services

- Modular, always-live operating system
- Start / stop individual software modules
- Real-time service addition w/o disruption
- Insulate system from failure of any service

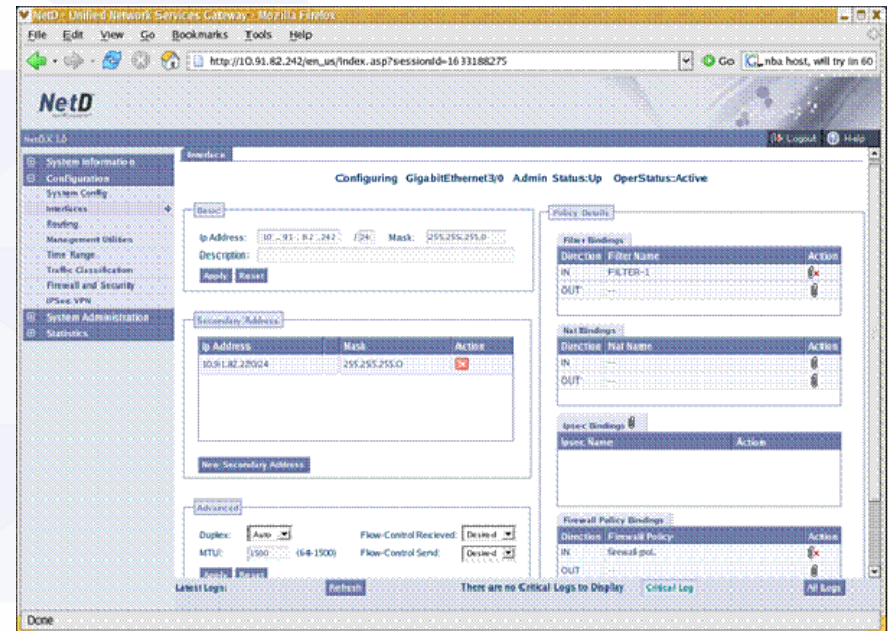
NetD ManageLive™

Dedicated Management Plane + Processors



Unified Services Management

- Familiar CLI & GUI
- Single data entry for multiple services
- Live service upgrades
- Ability to create policies across multiple services
 - Built-in logic to avoid conflicts
- Export to common network management systems



Services Gateway Family

SG8



SG4



SGX500



Purpose-built to simplify branch operations

- **100%** remote accessibility
- Maximum availability
- Unified services
 - Security services (firewall, IDS/IPS, VPN)
 - Voice services (SIP ALG, QoS)
 - Network services (switching, routing, QoS)
 - Branch office services (DNS, DHCP, etc)

Thank you !

