




INFORMATION SECURITY DECISIONS

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The Real Deal on Plug n' Play Security Appliances

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Security Servers vs. Appliances

- **Introduction**
 - **Servers**
 - **Pros**
 - **Cons**
 - **Appliances**
 - **Pros**
 - **Cons**
 - **Servers vs. Appliances**
 - **Firewalls, VPNs, IDS, Anti-Virus**
 - **Integrated Security Appliances**
 - **The Future of Security Servers**

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What is a server?

- **Heavy duty commodity hardware**
- **Heavy duty commodity software**
- **Customized to your requirements**
- **Integrated based on your requirements, typically by you**



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What is an appliance?

- Purpose built device
- Specialized hardware
- Specialized software
- Highly integrated
- Support options
- Branding



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What are the pros of a server?

- Commodity hardware, multiple vendors
- Low up-front cost of hardware
- High level of configuration options
- Utilize existing in-house expertise
- Easy to upgrade
- Replacement parts close at hand



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What are the cons of a server?

- Integration
- No single point of contact for support
(one throat to choke)
- Complexity of integration
- Performance bottlenecks
- Ongoing security patching



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What are the pros of an appliance?

- **Pre-integrated**
- **Pre-secured, minimized attack surface**
- **High performance**
- **Dedicated support organization**
- **Streamlined updates**

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What are the cons of an appliance?

- **Up front costs are higher**
- **Ongoing annual maintenance and support costs**
- **It's a black box**
- **Reliance on external support organizations**

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Business types

- **Appliance**
 - **Small / Medium Business**
 - **Remote Office / Branch Office**
 - **Enterprise**
- **Server**
 - **Enterprise with specialized expertise**



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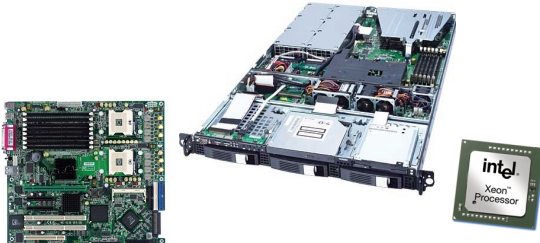
Is size a factor?





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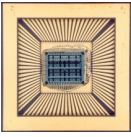
Security Appliance – commodity hardware meets specialized hardware



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Security Appliance – ASICs



- **Application Specific Integrated Circuits (ASICs) are ideal for high speed acceleration of a task is needed.**
- **However, ASICs force the logic designer to make critical decisions very early in the product's life cycle, at initial design time. This is because once an ASIC device is made, it can not be altered.**



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Security Appliance – Attack Surface

- **Specialized OS**
- **Hardened OS**
- **Only Required Services**
- **Unpublished, proprietary APIs**
- **Restricted locally addressable interface**

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Security Appliances – Firewalls



VS.


- **Throughput**
- **Specialized hardware optimizations**
- **High availability**


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Servers – Firewalls



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- **Check Point's SecurePlatform installs and VPN-1/FireWall-1 software on Intel and AMD-based PCs and servers.**
- **configures a fully hardened/secured operating system**

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Security Appliances - IDS



- **Throughput**
- **HA**
- **In-line optical fail pass-through**

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Security Appliances – VPN



- **Throughput**
- **Connections**
- **Co-processors**

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Security Appliances – Anti-Virus



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Security Appliances – Content Filtering




- Manage access to sites by type of content
- Manage P2P
- Manage IM

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Integrated Security Appliances




- Firewall
- Intrusion Detection
- Content Filtering
- VPN
- Anti-Virus

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Server vs. Appliance – The Future



Questions