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Innovation In Network Security



Michael Geller

Principal Engineer Cisco Systems, Inc. @michaelge11er



Innovation In Network Security Is ...



- Visibility & Control
- The application of people, process and tools delivered as a service and as a set of products Threats are mitigated as close to the source as possible
- Security services are dynamically chained together and instantiated to form a service chain to mitigate a specific threat and/or to provide a managed security service on distributed compute resources
- Threat defense provides a distributed capability to mitigate threats targeted at the network, the Data Center, the Cloud and the applications that they serve



Stuff To Think About



- What do we do as encryption becomes more and more pervasive? If it's about visibility ...
- When it comes to NfV and SDN, do I go open source or build it myself?
- How do I securely have an application connect to the network to deliver a customer outcome?



Security Imperatives



Visibility-Driven



Network-Integrated,
Broad Sensor Base,
Context and Automation

Threat-Focused



Continuous Advanced
Threat Protection, CloudBased Security
Intelligence

Platform-Based



Agile and Open Platforms, Built for Scale, Consistent Control, Management



Network



Endpoint



Mobile



Virtual



Cloud



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What The Network Does For You



Visibility



End to End Network
Visibility From
Endpoint to Cloud

Agile Control



Consistent Policies
Across Network and
Data Center

Advanced Threat Protection



Detects and Stops Advanced Threats across CPE, Cloud, and Network

Complexity Reduction

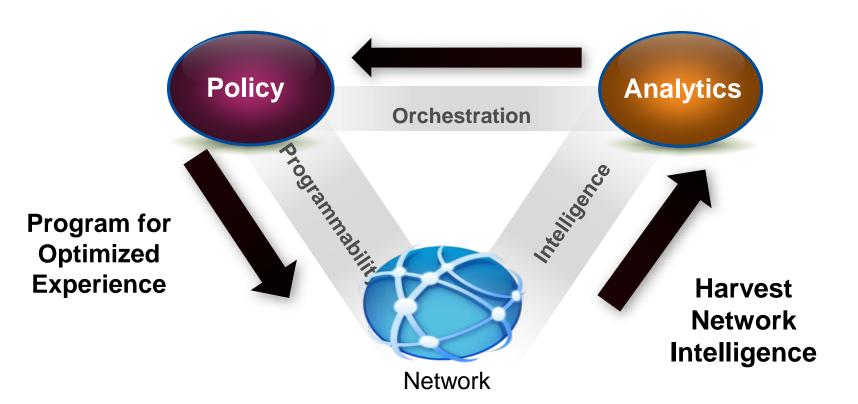


Fits and Adapts to Changing Business Models



Using Information Better



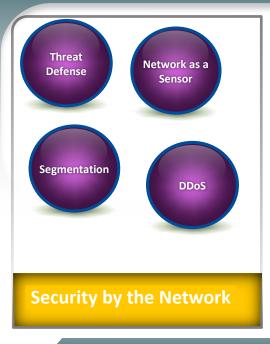


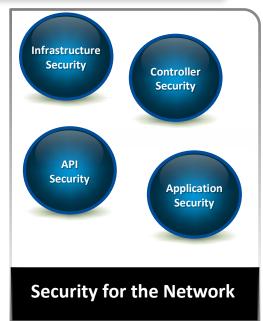


A Secure Network Architecture



Secure Network Architecture





Secure Network Architecture

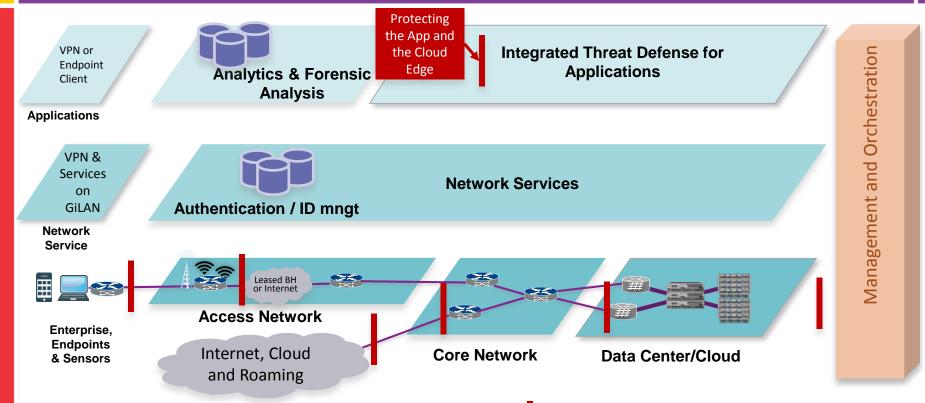


Protecting Trust Boundaries

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=Trust Boundary

Architectural Approach To Innovation



Services **Applications** Orchestration / Automation / Provisioning **Security Layer** SDN Layer (API / Controller / Overlays) Infrastructure Layer (Physical & Virtual)

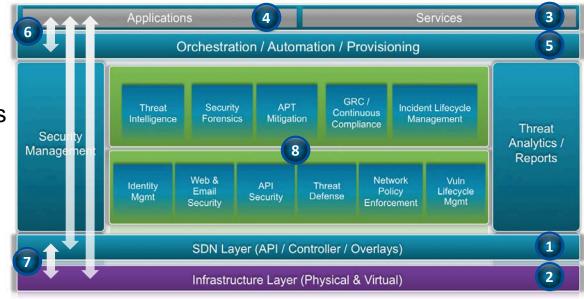
Securely Adding NfV and SDN



- Securing Controller
- 2. Securing Infrastructure
- 3. Securing Network Services
- 4. Securing Application
- Securing Management & Orchestration
- Securing API

CISCO.

- 7. Securing Communication
- 8. Security Technologies



Let's "Apply" What We've Learned



Visibility + Controls = Secure Outcome

Behavior Baseline & Analytics

Everything We Do to Mitigate an Attack

Innovating Delivery of Secure Outcomes

Security Innovation = {People, Process & Tools}



What Should You Do Now?



- When you leave today, you should ask yourself:
 - What can you see on the network, what you know and how you can validate it
 - Once you have a good working baseline, do you have a policy that defines acceptable behavior and business priority
 - How quickly can you get the mitigation controls in place?
 - Applications want to talk to your network... Are you ready?
 - How thorough is your capability to learn after the attack?
 - Am I prepared to be innovative in Security?



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Questions?

Thank you!