SANS

Security Impact

of

IPv6

SUMMIT

Program Guide

Agenda

All Summit Sessions will be held in Georgetown West.

All approved presentations will be available online following the Summit at **https://files.sans.org/summits/ipv6security13**.
An e-mail will be sent out within 5 business days once the presentations are posted.

Friday, June 14

9:00-9:45 am

Keynote Address: The State of IPv6 Security

Widespread implementation of IPv6 is long overdue. The imminent shortage of IPv4 addresses has added additional urgency for organizations to transition to IPv6. When it comes to barriers to the implementation of IPv6, there is a lot of fear of the unknown. Network administrators have learned to live within the limited world of IPv4, and are hesitant to risk network stability and security to implement IPv6. What is needed is a strong business case for IPv6, and a good understanding of the risks an IPv6 network is exposed to. What is needed is operational experience with IPv6. This talk will provide a brief introduction to these challenges and provide pointers to solutions.

Dr. Johannes B. Ullrich, Dean of Research, SANS Institute

9:45-10:00 am

Networking Break

10:00-10:45 am

Real Solutions, Real Progress: Service Providers Share What Works

In this session, a panel of experts shares wisdom and best practices learned on the front lines, helping organizations like yours implement IPv6. Learn about the solutions available to minimize the growing pains of expanding your internet addressing protocol into the next generation.

Moderator: Dr. Johannes B. Ullrich, Dean of Research, SANS Institute
Panelists: Jason Brvenik, VP – Security Strategy, Sourcefire
*   Sean Siler, Engineer & IPv6 Program Manager, Microsoft*
*   Brian Vosburgh, Principal Security Architect, Stonesoft North America*

10:45-11:30 am

A Higher Degree of Implementation: What Universities Have Learned from Early Adoption

IPv6 is more than a decade old, but widespread implementation has been slow in coming. Colleges and universities, not surprisingly, have been early adopters. Hear what Virginia Tech has learned over the years and how it can help your organization tackle IPv6 securely.

Randy Marchany, Chief Information Security Officer, Virginia Tech

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11:30 am-12:15 pm

IPv6 and Risk Reduction

Mobile computing has become a standard practice among net citizens. Services and systems are now allowing access to home networks from remote locations and the idea of "cloud" has taken hold. Compound this with IPv4 Only Virtual Private Networking [VPN] access that companies and governments provide is nearly universal and expected. This presents a potentially significant risk to the dual stack system [1] that can impact users and causes diffusion in the line of network demarcation. Almost all current computing platforms both support IPv6 and give it preference over IPv4. This talk will both discuss and demonstrate risks in a dual stack environment showing VPN leakage. We further discuss methods and techniques for risk reduction.

Richard Porter, Senior Sales Engineer, FireMon

12:15-1:30 pm

Lunch

1:30-2:15 pm

IPv6 Network Attack and Mitigation Techniques

This session will cover network-based threats present in today's IPv6 networks.   Attack vectors based on the Neighbor Discovery Protocol, Router Advertisements, Fragmentation headers and tunnel techniques will be covered.   Additionally, adjacent technologies related to address preservation such as CGN and their implication on network security will be discussed.

Keith O'Brien, Distinguished Engineer, Cisco

2:15-3:00 pm

IPv6: Why and How

This talk will explore the drivers for IPv6, including the benefits and the mandates, alone with steps toward IPv6 implementation. Lastly, we'll examine the complexities of IPv6 in the real world, include the "gotchas" and lessons learned the hard way.

Waliur Rahman, Managing Principal, Verizon Network Services Consulting

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3:00-3:15 pm

Networking Break

3:15-4:00 pm

IPv6 Security Considerations for DOCSIS Deployments Abstract

DOCSIS 3.0 specified support for IPv6 nearly 8 years ago, as such production grade support for IPv6 across the cable ecosystem evolved early enabling cable operators to deploy IPv6 incrementally. Early adoption of IPv6 has created an excellent opportunity for adopters to identify security challenges and consideration, amongst others, as they leverage IPv6 to support business continuity and as a platform for innovation. This session will provide insight into these challenges as IPv6 is being widely deployed.

John Jason Brzozowski, Chief Architect, IPv6, Comcast Cable

4:00-5:00 pm

Closing Keynote: IPv6 and The Internet of Things

IPv6 is a key technology in enabling the latest Internet evolution: billions of "things" connecting to users, businesses and other "things" using mixtures of wired and wireless connectivity. This includes automobiles, home thermostats, airplanes, medical machinery, personal medical devices, windmills, environmental sensors, natural gas extraction platforms, you name it. While this promises new efficiencies and new business models, it will also open up exponentially more attacks paths – if security is not built in. This talk will provide an overview of the "Internet of Things" and detail the key security challenges and opportunities for using IPv6 evolution as a secure foundation.

John Pescatore, Director – Emerging Security Trends, SANS Institute

Please remember to complete your speaker evaluation for today. You may leave completed surveys at your seat or turn them in to the SANS registration desk.

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Austin, TX | July 9-16

ICS Security Training
Washington, DC | August 12-16

Critical Security Controls Summit
Washington, DC | August 12-18

Digital Forensics and Incident Response Summit & Training
Prague, Czech Republic | October 6-12

Securing the Internet of Things Summit
October 2013

Healthcare Summit
October 2013

Pen Test Hackfest Summit & Training
Washington, DC | November 7-14

Asia Pacific ICS Security Summit
Singapore | December 2-7

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