

# FREE SANS COURSE

## SANS IMPACT: IPv6 Essentials

Half-Day Course – Followed by Afternoon Presentations

26 May 2010 • IPv6 Course: 9:00am - 12:30pm

Afternoon Presentations: 2:00pm - 4:30pm

Laptop Required • Instructor: Dr. Johannes Ullrich

Already, modern operating systems implement IPv6 by default. Windows 7, for example, ships with Teredo enabled by default. Your existing firewall may not block it. Learning more about IPv6 is essential to securing your network. This course is designed not just for implementers of IPv6, but also for those who just need to learn how to detect IPv6 and defend against threats unintentional IPv6 use may bring.



### International Multilateral Partnership Against Cyber Threats (IMPACT)

Jalan IMPACT • 63000 Cyberjaya  
Selangor, Malaysia

**Your network may not be ready for IPv6,  
but operating systems and network devices will not hold back.**

IPv6 is currently being implemented at a rapid pace in Asia in response to the exhaustion of IPv4 address space, which is most urgently felt in rapidly growing networks in China and India. Even if you do not feel the same urgency of IP address exhaustion, you may have to connect to these IPv6 resources as they become more and more important to global commerce.

This course will introduce network administrators and security professionals to the basic concepts of IPv6. While it is an introduction to IPv6, it is not an introduction to networking concepts. You should understand and be aware of the basic concepts of IPv4, and networking in general. It is an ideal refresher if you took SEC503: Intrusion Detection in Depth. However, you do not need to know IPv4 in the full detail in which it is presented in SEC503. The networking and IPv4 principles taught in SEC401: Security Essentials should prepare you for this course.

### Author Statement

THE FIRST TIME I HEARD ABOUT IPV6, I HEARD ABOUT THINGS LIKE "UNLIMITED ADDRESS SPACE", AND "ALL YOUR TRAFFIC WILL BE ENCRYPTED". HOWEVER, I KNEW LITTLE ABOUT THE MEANING OF THESE STATEMENTS. AS I DELVED DEEPER INTO IPV6 AND STARTED TO DEPLOY IT IN SOME OF MY NETWORKS, I FOUND THAT MUCH OF WHAT WAS SAID ABOUT IPV6 WAS MORE MYTH THAN REALITY. IMPLEMENTING IPV6, AND IN PARTICULAR SECURING IPV6, TURNED OUT TO BE A MUCH LARGER CHALLENGE THEN I ORIGINALLY PLANNED. WHILE MANY NETWORKS ARE ALREADY "IPV6 READY", YOU AS A NETWORK ADMINISTRATOR ARE LIKELY NOT. THIS COURSE SHOULD MAKE YOU "IPV6 READY" AS WELL.

### Johannes Ullrich, PhD - SANS Certified Instructor

As chief research officer for the SANS Institute, Johannes is currently responsible for the SANS Internet Storm Center (ISC) and the GIAC Gold program. He founded DSshield.org in 2000, which is now the data collection engine behind the ISC. His work with the ISC has been widely recognized, and in 2004, Network World named him one of the 50 most powerful people in the networking industry. Prior to working for SANS, Johannes worked as a lead support engineer for a Web development company and as a research physicist. Johannes holds a PhD in Physics from SUNY Albany and is located in Jacksonville, Florida. He also enjoys blogging about application security tips.

Johannes will be teaching

**SEC503: Intrusion Detection In-Depth**  
in Singapore 17-22 May

[www.sans.org/singapore-2010](http://www.sans.org/singapore-2010)  
and

**SEC542: Web App Penetration Testing & Ethical Hacking**  
in Singapore 4-11 October

[www.sans.org/secure-singapore-2010](http://www.sans.org/secure-singapore-2010)

