



FIRST STEP IN ENTERPRISE'S IPV6



Case Study
September 2011

**Importance of
efficient and
reliable
information
infrastructure**

**Client-customized
workshop**

**IPv6
implementation on
enterprise network**

■ Workshop and pilot IPv6 network implementation

Jay Van Andel and Rich DeVos founded Amway in 1959. Today it's one of the world's largest and most successful direct sales companies and a global leader in health and beauty products. Amway is part of the Alticor Group, which offers more than 450 quality products and has more than 3 million distributors. AMWAY™ products are available in more than 80 countries and territories.

Amway's business success relies heavily on an efficient and reliable information infrastructure. They are aware that the IPv6 transition is on the way and that keeping their network and communication services on an optimal level will sooner or later require an IPv6 implementation on their enterprise network. It's crucial for Amway to make this upgrade without any negative effect on their business.

"As a global enterprise providing business-critical Internet services, Amway needs to ensure a consistent, high-quality experience for our customers and distributors as the Internet transitions from IPv4 to IPv6. NIL provided the necessary expertise to bring our technical teams up to speed on the current challenges and best practices surrounding IPv6, assisting us in laying out a roadmap for implementation."

Bryan Farmer, Network Services, Amway

Attendees rated course and instructor at an excellent score of 4.7 out of 5 points

IPv6 introduction and overview

Theory, lab work, best practices and open discussion

Customer IPv6 design and implementation discussion

The first step in this process was intensive onsite training for 15 of Amway's engineers, who will be responsible for IPv6 deployment in the company's regional branches. Amway was looking for customized IPv6 training that would address their specific requirements and network preferences.

You don't change a winning team

Based on Amway's previous experiences with NIL - the company consulted NIL's Ivan Pepelnjak about implementing DMVPN in their network in Europe in 2010 - Amway again asked for NIL's assistance, this time for help in the IPv6 network transition, by conducting an onsite workshop and training on the topic.

The training was delivered by NIL's IPv6 expert Bojan Radulović, CCSI #33283, who conducted a four-day onsite workshop from September 12-15, 2011. Beginning with a focused subset of the latest Cisco IPv6 training to bring everyone up to speed, the workshop then blended in custom material and open discussion on IPv6 implementation in the Amway network. Approximately half of the time was devoted to strengthening attendees' theoretical foundation and practice it in lab exercises, with the remaining half spent on analyzing Amway's network specifics and discussing the pilot network implementation.

All attendees had at least a solid CCNP-level knowledge of all analogous technologies, protocols and best practices in the IPv4 environment, and all were very keen on discovering specific IPv6 advantages and issues. "Working with Amway's team of engineers was great. I would especially point out their high level of interest in the topic and willingness to collaborate," says instructor Radulović. "I guess the reason lies in their positions within the company and their upcoming tasks. Sooner or later they will have to use the presented knowledge on their real network."

"Great instructor! I really learned a lot regarding IPv6 from the class."

"He did a great job with the customized week of training."

"Bojan is a great person and a great instructor. It was a pleasure having him here with us for the week."

Quotes from the class about Bojan Radulović's training

Based on the course feedback, these opinions were consistent among all attendees. The overall average evaluation score of the course was 4.7 out of 5, marking the training as a success for both NIL and Amway. In only four days, Radulović delivered an overview of the IPv6 protocol (addressing, enabling IPv6 on hosts, ICMPv6 and neighbor discovery, troubleshooting, DNS, DHCPv6, routing, tunneling, IPv6 ACLs, IPsec, IKE and VPN) and explained how to avoid some security problems that might arise from the transition. He also presented custom lectures on IPv6 DMVPN and NAT64.

After concluding the theoretical part of the class, a preliminary IPv6 readiness assessment was conducted for Amway's IPv6 lab environment, and in the final phase attendees and trainer together implemented and deployed the pilot IPv6 network that Amway will continue to use for testing and assessment.

This training was Amway's first step toward making their enterprise network IPv6-ready. No doubt some issues will occur on the way. Equipped with strong theoretical knowledge and best practices from real-life scenarios, Amway's engineers will have an ace in the hole for handling those situations.

SOLUTION CHARACTERISTICS:

addressing, enabling IPv6 on hosts, ICMPv6 and neighbor discovery, troubleshooting, DNS, DHCPv6, routing, tunneling, IPv6 ACLs, IPsec, IKE and VPN

IPv6 security issues

custom lectures on IPv6 DMVPN and NAT64

preliminary IPv6 readiness assessment in lab environment

pilot network implementation

NIL is a leading global ICT solutions provider, with more than 20 years of experience in IT and the communications industry. Our expertise is in advanced and emerging technologies. NIL's core offer includes professional services, managed services and learning services. NIL is headquartered in Slovenia, with regional offices in Croatia, Serbia, Morocco, USA, Turkey and South Africa.

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