

A 3-day Course in English

Effective IPv6 Migration and Security

Expert Training, Duration 3 Days, Speaker Enno Rey

Description

In this course Enno Rey – one of the world's leading figures in IT security – will give you detailed IPv6 knowledge. We have specifically designed it for network planners and network administrators. It includes an optional third day which will specifically discuss security questions.

After an introduction into the basics of the protocol family important infrastructure functionalities (ICMPv6, DHCP, DNS, Routing & protocols) will be explained in detail and demonstrated via practical examples from different networks.

On top Enno Rey will discuss migration strategies and all technologies which are important in context of a co-existence of IPv4 and IPv6 (dual stack, tunnel technologies, different NAT approaches).

The course's goal is to enable you to plan and operate complex IPv6 networks.

A series of demonstrations and exercises with devices provided by the trainer will make sure that the contents will not only be conveyed in a theoretical manner but also deepened via practical exercises.

The third day will deal with security related questions when using IPv6. You can also book it as a single course but it will require a very good IPv6 knowledge (like it is provided on the first two days).

7–9 May 2012, Vienna/Austria

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Course Outline

First Day

Basics

- Design Basics of IPv6
- Current IPv6 status of standardisation
- Protocol header
- Addressing and address types

Differences of important infrastructure functionalities in comparison to IPv4

- ICMPv6: Protocol configuration and function in IPv6 networks
- Neighbor Discovery
- Router Advertisements: Function, flags, router preference

Auto Configuration

- Stateless address autoconfiguration (SLAAC)
- DHCPv6
- RFC 6106 und co-existence of SLAAC & DHCPv6

Multicast's Role in IPv6 Networks & Multicast Listener Discovery (MLD)

DNS in the IPv6 Network

Routing & Routing Protocols in IPv6-Networks

"Mobile Devices"

Second Day

OS-Support of IPv6 – What is and what is not supported?

Examples of Configuration

Migration & Co-existence

- Dual Stack, default behaviour of important operating systems and typical problems
- Tunnel technologies (6in4, 6to4, ISATAP, Teredo)
- Tunnel broker & configuration
- What about NAT?

Microsoft Direct Access

Design of IPv6 Networks

- Address allocation & -structure
- Hardware support

Typical Activities when Migrating

- Review and categorisation
- Parallel operation, adaption of applications

Migration Strategies

- Business drivers & business cases
- From core to edge vs. edge to core
- RFC 5211

Connecting Remote Locations

Solutions for Services and Applications Which Cannot be Migrated

Discussion of Case Studies from Different Organisations

Third Day – Security

Typical Security Problems due to Protocol Specifications and/or Configuration Errors

REQUIREMENTS: Very good IPv6 knowledge like you will receive it on the first two days

Security Implications of Address Configuration & Attack Vectors

Security Implications of Tunnel Technologies

Overview for IPv6 Support of Typical Security Controls (Firewalls, IDS/IPS, VPN Gateways)

Checklist for the Secure Operation of IPv6 in Big Networks

/// Leader's Profile

Enno Rey is a globally leading expert of IT security. As a consultant of international companies with a long-term activity, he is plays an important part in global security concepts and assessments.

As a developer of the models "Rapid Risk Assessment" (RAA) he has been preparing IT security and his customers to reach the next evolutionary step.

His long-term activity as a speaker but also his technical background enable him to teach technical as well as organizational aspects in a way which is easily understood by participants.

As a regular speaker on international security conferences (Black Hat, Hack in the Box, ShmooCon, DayCon, Troopers and many more) Enno communicates complex IT security topics in a clear and comprehensible manner.

He is managing director and founder of ERNW GmbH and leads and co-ordinates a team of designated IT security experts.

Enno is one of the first persons who were certified by BS 7799 as a Lead Auditor. He has also successfully achieved a certification as CISSP/ISSAP and CISA. His M.SC. Information Security Management Training completes his academic career.

/// Why You Should Attend

You will learn

- How IPv6 functions
- What are the tasks of the single protocol parts and how they can be reasonably implemented
- What is the impact of changes for IPv4 in practice
- Which aspects of IPv6 networks need to be taken into consideration when designing them
- What are the steps for an efficient migration strategy
- Which security problems can arise and how can they be addressed (third day)
- What is the impact on network security when implementing dual stack and tunnel technologies

/// What other Delegates say about Enno's Courses

»A realistic course held by an excellent expert on Pv6. Highly recommendable.«

Thomas Zurk, Engineering Services, Austro Control, Austria

»The seminar covers all aspects and interesting topics«

»Impressing presentation by Enno – understandable, clear...«

»Excellent speaker with good fundamentals ...«

HM TRAINING SOLUTIONS ON-SITE SERVICE

All HM Training Solutions Seminars are available as On-Site presentations, tailored to meet the specific requirements of your organisation. For details please telephone +49 (60 22) 50 82 00 (international).

REGISTRATION DETAILS

/// Three ways to Register

- By Post:** Please complete and return this form to
HM Training Solutions
- By Fax:** Please fax this registration form to:
+49 60 22 508 9999
- By e-mail:** info@hmtrainingsolutions.com

/// Registration Fees

The seminar must be paid before attendance.
€ 1,695/€ 1,270/€ 695 – For courses in Vienna and Zürich
we do not charge VAT due to the Reverse Charge Procedure.

/// Joining Instructions

Your booking will be confirmed by e-mail or letter containing full event and location details. Lunch, coffee breaks and the course documentation are included in the seminar price.

/// Change of Terms

It may be necessary for reasons beyond our control to alter the venue, timetable or content of this seminar or to appoint another speaker alternatively or to cancel the event. We accept no liability for any other cost.

/// Cancellations

Should you need to cancel your booking please confirm in writing either by e-mail (info@hmtrainingsolutions.com), fax (+49 6022 508 9999) or post. No refunds will be considered for cancellations occurring within six weeks of the start of the event. However, we are happy to accept substitutions at any time; prior notice is appreciated.

/// Accommodation

Hotel information will be sent to you with our letter of confirmation upon receipt of your registration.

/// On-Site Presentations

All HM Training Solutions seminars are available as on-site presentations tailored to meet the specific requirements of your organisation. For more information please telephone +49 (60 22) 50 82 00.

/// The number of delegates is limited. Therefore please immediately return this booking form!

REGISTRATION FORM

Effective IPv6-Migration and Security (three days)

(M 44 E) 7–9 May 2012, Vienna/Austria

Please reserve _____ places at a cost of **€ 1,695**

Effective IPv6-Migration (first and second day)

(M 44 E) 7–8 May 2012, Vienna/Austria

Please reserve _____ places at a cost of **€ 1,270**

Security (only third day)

(M 44 E) 9 May 2012, Vienna/Austria

Please reserve _____ places at a cost of **€ 695**

Mr/Mrs/Miss/Other _____ First Name _____ Last Name _____

Job Title _____

Company _____

Address _____

Postcode _____

Country _____

Telephone _____

Mobile number _____

E-mail _____

Signature _____

BOOKING REFERENCE:

HM

/// Payment

Cheque enclosed for € _____

Please invoice my company _____

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Purchase order no. _____

/// Additional Registrations

1. Mr/Mrs/Miss/Other _____ First Name _____ Last Name _____

Job Title _____

2. Mr/Mrs/Miss/Other _____ First Name _____ Last Name _____

Job Title _____

3. Mr/Mrs/Miss/Other _____ First Name _____ Last Name _____

Job Title _____