

# Software-Defined Networking

## Concepts and Implementation

Software-Defined Networking (SDN) is a new concept which is meant to revolutionize existing network structures. A central control of data flows by means of a control plane replaces the classical hop-by-hop forwarding. As a result, the existing line capacities can be used more efficiently and quality of service can be implemented in end-to-end mode. For this reason, this concept seems to be particularly advantageous for provider networks or data centers. SDN is also an interesting concept for the implementation of virtual networks in a cloud. The course at hand explains the basic concepts and discusses the state of the art. In addition, innovative application programming interfaces (APIs) of the operating systems of routers and switches are discussed. APIs permit the efficient implementation of SDN functions. Moreover, the currently available products and implementations are dealt with.

### Course Contents

- Motivation of Software-Defined Networking
- The Players—Vendors, Open Networking Foundation
- SDN Concepts
- Open Flow and Other Approaches
- SDN in Provider Networks
- SDN in the Data Center
- OpenStack: SDN and the Cloud
- Network Function Virtualization
- Standards
- APIs and the Options they Provide
- Specific Products and their Assessment
- Open Issues

**E-Book** The detailed digital documentation package, consisting of an e-book and PDF, is included in the price of the course.

### Target Group

The course addresses network designers and administrators who want to understand and assess the new SDN protocols, standards, and products.

### Prerequisites

General knowledge about IP networks, as well as specific know-how regarding routing in large-scale networks (data centers, service providers) are knowledge prerequisites.

### This Course in the Web



You can find the up-to-date information and options for ordering under the following link:

[www.experteach-training.com/go/SDNB](http://www.experteach-training.com/go/SDNB)

### Reservation

On our Website, you can reserve a course seat for 7 days free of charge and in a non-committal manner. This can also be done by phone under +49 6074/4868-0.

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<b>Date/course venue</b>		<b>Course language German</b> 	
16/06-18/06/25	 Hamburg	15/09-17/09/25	 Online
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