Training title: **Advanced configuration of the Software-Defined Network**.

An independent course presenting pros and cons of Software-Defined Networking as well as strengths and weak points of particular SDN deliverers' offers.
The training is presented by a professional trainer who has wide experience in network administration on a large scale.
The seminar is aimed at network engineers who would like to understand and practice what SDN is. It will prepare its participants to conscious software-defined network implementation.

An outline:

A. Basic questions about the SDN technology.
What is Software-Defined Networking?
The prodcers of network equipment use SDN concept to describe various mechanisms. In tis part of course implementation differences, opportunities and limitations will be discussed.
What is OpenFlow?
OpenFlow is a protocol which appears while SDN implementation by some producers. Different versions of the protocol will be described in this section. Also, restraints of protocol implementation in network equipment depending on specification will be prestented.

B. SDN configuration - a practice class.
Introduction to Mininet and Wireshark tools.
The aim of the class is to create the first network based on OpenFlow protocol.

C. SDN controller.
SDN controller - a brain of the network.
An idea of central network management is known for a while, but the conception of central management in SDN is different. This part of the seminar will present functional guidelines.

D. SDN configuration - a practice class.
A controller installation.
This class will teach how to connect a network of OpenFlow switches with a controller, generate traffic, and how to monitor and diagnose problems.

E. Protection of SDN.
How to protect the reliability of SDN controller?
All benefits of SDN solution will be irreleant if the network is vulnerable to breakdowns from the focal point of the management. There are a few ways to prevent such a situation. In this part of the seminar there will be presented scenarios of SDN implementations which ensure its reliability.

F. Configuration of SDN protection mechanisms - a practice class.
The protection on the application and network levels.
This class will show how to link a group of controllers in a way to ensure the reliability on a application level. On the other hand, it will present how to configure available SDN mechanisms to do the same on a network level.

G. SDN Applications.
Introduction to the basic SDN applications classified by their functions.
Tasks of SDN controller are the basis to the implementation of the network solutions essential for SDN. In this section, SDN applications will be introduced along with their descriptions and usage examples. With respect to their range of operation, applications can be divided into four goups: tool apps, security apps, automation apps and optymalization apps. The examples of the each category will be discussed.

H. Installation and configuration of SDN application - a practice class.
A number of practice tasks concerning application installation and configuration will be carried out in this section of the course.

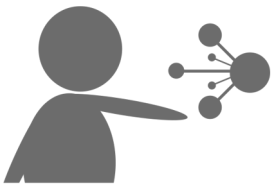
I. Basics of SDN application making.
Individual applications- opportunities and limitations.
The main potential of SDN is the possibility of individual programming accordind to one's needs. In this part of the course, the basics of individual application making will be introduced, as well as the limitations that follow.

J. SDN application making - a practice class.
Introduction to the application programming tools.
This class will be an occasion to make a simple SDN application of participants' own and to learn new possibilities of network programming.

K. Training summary.
Advantages and risks of SDN implementation. When and why is it worth to use SDN? How to plan a network development to be ready for SDN implementation?

course id:	NSDN02
course title:	Advanced configuration of the Software-Defined Network
duration:	4 days
price:	2500 EUR net

more information:
training@narmox.com



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