

Day 1

What you will learn

- The benefits of Big Data technologies
- An overview of Big Data technologies
- The concept of Big Data architecture
- What is Hadoop and what is it typically used for?
- What are the Hadoop distributions?
- What are the components of Hadoop, and how should you choose the right one to solve your problem?
- Key tools for gathering and handling data
- The principles of data transmission

Programme

Introductions; schedule

- A quick introduction of participants and familiarisation with the workshop schedule

An introduction to Big Data technologies

- An introduction to the concept of Big Data
- Key features of Big Data technologies
- Why Big Data technologies appeared and what purposes they serve
- How to approach the architecture for Big Data platforms
- An introduction to Hadoop distributions

An introduction to cloud and on-premise variants

- Key features of on-premise Big Data platforms
- Key features of Big Data platforms in the cloud
- What is the typical use of both types of platform

Hadoop tools

- An overview of key Hadoop tools
- Proven tools for different purposes
- Which tool to use for which task – best practices
- A tool for online data capture – Kafka
- A tool for data analysis – Spark

How to implement data transmission

- One-time data capture
- Batch data processing
- Real-time data processing

Programme

Big Data in an on-premise environment

- The specifics of on-premise Big Data platforms
- The architecture of on-premise Big Data platforms
- Key factors in configuring a platform
- Examples of the size, performance, and speed of platforms for various purposes
- Aspects influencing the acquisition of HW and SW for the platform
- Licensing models and support

Big Data in a cloud environment

- The specifics of Big Data platforms in the cloud
- The possibilities and support offered by different cloud service providers
- The architecture of cloud solutions for Big Data platforms
- Key factors in configuring platforms
- Examples of platform size, performance, and speed for various purposes
- The principle and implications of shutting down cloud services and starting them up
- Licensing models and support

Integrating a Big Data platform into a company's IT environment

- A proven method for deploying Big Data platforms
- The importance of PoC projects, laboratories, education, training
- The role played by business, and tasks for its platform usage

Big Data platform security

- Encrypting Big Data platforms in the cloud and on the premises
- Integration into IT infrastructure from the perspective of security

Day 2

What you will learn

- The specifics of on-premise Big Data environments
- The specifics of Big Data cloud services
- Modelled examples proving Big Data concepts
- What are the possibilities for integration into the surrounding IT environment?
- Key aspects of acquiring a Big Data platform
- Key aspects of integrating a Big Data platform into a company's IT environment
- Approaches to ensuring Big Data security