Big Data on AWS

Kód kurzu: AWSBD

Big Data on AWS introduces you to cloud-based big data solutions such as Amazon Elastic MapReduce (EMR), Amazon Redshift, Amazon Kinesis and the rest of the AWS big data platform. In this course, we show you how to use Amazon EMR to process data using the broad ecosystem of Hadoop tools like Hive and Hue. We also teach you how to create big data environments, work with Amazon DynamoDB, Amazon Redshift, and Amazon Kinesis, and leverage best practices to design big data environments for security and cost-effectiveness.

Pre koho je kurz určený

- Individuals responsible for designing and implementing big data solutions, namely Solutions Architects and SysOps Administrators
- Data Scientists and Data Analysts interested in learning about big data solutions on AWS

Čo vás naučíme

- Fit AWS solutions inside of a big data ecosystem
- Leverage Apache Hadoop in the context of Amazon EMR\Identify the components of an Amazon EMR cluster
- Launch and configure an Amazon EMR cluster
- Leverage common programming frameworks available for Amazon EMR including Hive, Pig, and Streaming
- Leverage Hue to improve the ease-of-use of Amazon EMR
- Use in-memory analytics with Spark and Spark SQL on Amazon EMR
- Choose appropriate AWS data storage options
- Identify the benefits of using Amazon Kinesis for near real-time big data processing
- Define data warehousing and columnar database concepts
- Leverage Amazon Redshift to efficiently store and analyze data
- Comprehend and manage costs and security for Amazon EMR and Amazon Redshift deployments
- Identify options for ingesting, transferring, and compressing data
- Use visualization software to depict data and queries
- Orchestrate big data workflows using AWS Data Pipeline

Požadované vstupné znalosti

- Basic familiarity with big data technologies, including Apache Hadoop, MapReduce, HDFS, and SQL/NoSQL querying
- Students should complete the Big Data Technology Fundamentals web-based training or have equivalent experience
- Working knowledge of core AWS services and public cloud implementation
- Students should complete the AWS Technical Essentials course or have equivalent experience
- Basic understanding of data warehousing, relational database systems, and database design

Študijné materiály

Amazon Web Services authorized e-book included.

Osnova kurzu

Note: course outline may vary slightly based on the regional location and/or language in which the class is delivered. This course will cover the following concepts on each day:

Day 1

Overview of Big Data

Ingestion, Transfer, and Compression

Storage Solutions

Storing and Querying Data on DynamoDB

Big Data Processing and Amazon Kinesis

GOPAS Praha

Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 **info@gopas.cz** **GOPAS Brno** Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 **info@gopas.cz** GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved

Big Data on AWS

Introduction to Apache Hadoop and Amazon EMR Using Amazon Elastic MapReduce Day 2 Hadoop Programming Frameworks Processing Server Logs with Hive on Amazon EMR Processing Chemistry Data Using Hadoop Streaming on Amazon EMR Streamlining Your Amazon EMR Experience with Hue Running Pig Scripts in Hue on Amazon EMR Spark on Amazon EMR Interactively Creating and Querying Tables with Spark and Spark SQL on Amazon EMR Managing Amazon EMR Costs Securing your Amazon EMR Deployments Day 3 Data Warehouses and Columnar Datastores Amazon Redshift and Big Data Optimizing Your Amazon Redshift Environment Big Data Design Patterns Visualizing and Orchestrating Big Data Using Tibco Spotfire to Visualize Big Data

GOPAS Praha

Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz GOPAS Brno Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved