

Cisco Big Data Analytics, Architecture and Management

Varighed: 4 Days Kursus Kode: ANDMB

Beskrivelse:

The goal of the course is to enable the student to choose and design scalable, reliable, and intelligent data center solutions using Cisco UCS Integrated Infrastructure for Big Data and Analytics (formerly known as CPA for Big Data v4). The course will explain how the reference architectures are carefully designed, optimized, and tested with the leading big data software distributions to achieve a balance of performance and capacity to address specific application requirements. The course will cover big data fundamentals and architecture. Lessons will explore Hadoop, streaming analytics, performance tuning and UCS Director Express for big Data. The student will leave with an introductory understanding the benefits of Cisco UCS Integrated Infrastructure for Big Data and Analytics.

This course is worth 32 Credits in the Continuing Education Program.

Målgruppe:

This course is aimed at individuals looking to design scalable, reliable, and intelligent data center solutions using Cisco UCS Integrated Infrastructure for Big Data and Analytics

Agenda:

- **After completing this course you should be able to:**
- Describe a high-level overview of big data fundamentals
- Describe big data storage, compute, and data networking architecture
- Introduce Hadoop core components
- Gain working knowledge of Streaming Analytics usage
- Identify the Cisco UCS CPA components, features, and advantages for deploying big data (Hadoop cluster) solutions
- Describe the design and sizing of the compute, network, and storage component of Cisco UCS Integrated Infrastructure for Big Data
- Identify the Cisco UCS Integrated Infrastructure for Big Data, understand how Cisco Advanced Services for Big Data supports the Cisco Validated Designs that fit into Cisco CPA for Big Data.
- Explain Cisco (UCS) Director Express for Big Data product features, benefits, installation, implementation, and management

Forudsætninger:

It is recommended that attendees meet the following prerequisites:

- Knowledge of Cisco Unified Computing System (UCS)
- Intermediate level knowledge of Modern Data Centers and virtualisation technologies
- Conceptual understanding of basic scripting
- Basic understanding of Big Data

Test og certificering

Recommended as preparation for the following exams:

- There are currently no exams aligned to this course

Yderligere Kurser:

The following course is recommended for further study:

- **ANDMA** - Advanced Big Data Analytics, Architecture, Management and Applications

Indhold:

Understanding the Big Data Ecosystem

- Big data fundamentals
- Distributed storage
- Distributed computing

Understanding Architecture for Big Data Technologies

- Big Data Storage and HDFS features
- Big Data Compute
- Big Data Networking

Introduction to Hadoop

- Core components
- Projects
- Management tools
- Hadoop distributions

Streaming Analytics

- Real-time data streaming and analytics
- Platforms
- Computational frameworks for streaming
- Use cases for Big Data

Cisco Solutions for Big Data

- Cisco UCS common platform architecture for Hadoop solutions
- Cisco CPA components
- Cisco UCS integrated infrastructure for Big Data

Cisco UCS Design and Tuning for Big Data

- Network
- Storage
- Compute

Cisco Integrated Infrastructure for Big Data Applications and Deployments

- Cisco UCS Integrated Infrastructure for Big Data
- Cisco validated designs
- Integrated infrastructure solutions
- Cisco Advanced services

Cisco UCS Director Express Automation

- Features and benefits
- Cisco UCSD Express with Cisco UCS integrated architecture for Big Data
- Cisco UCS Director Express installation
- Hadoop service selection
- Service and workflow requests
- Cluster management

Labs

- Lab 1: Introduction to Hadoop
- Lab 2: Introduction to Spark
- Lab 3: Spark Streaming
- Lab 4: Administering Hadoop on Cisco UCS
- Lab 5: Cisco UCS Configuration for Integrated Infrastructure for Big Data
- Lab 6: Sizing Big Data
- Lab 7: Cisco UCS Director Express for Big Data

Flere Informationer:

For yderligere informationer eller booking af kursus, kontakt os på tlf.nr.: 44 88 18 00

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