HCIA-Big Data V3.0 Exam Outline

Huawei HCIA-Big Data V3.0 Certification Exam

Certification	HCIA-Big Data
Exam Code	H13-711
Exam Name	HCIA-Big Data V3.0
Language	ENU
Exam Format	Single Answer, Multiple Answer, True-false Question
Exam Cost	300USD
Exam Duration	90 mins
Pass Score/ Total Score	600/1000

Exam Contents

The HCIA-Big Data V3.0 exam covers:

1. Development trend of the big data industry, big data features, and Huawei Kunpeng big data.
2. Basic technical principles of common and important big data components (including HDFS, ZooKeeper, Hive, HBase, MapReduce, YARN, Spark, Flink, Flume, Loader, Kafka, LDAP and Kerberos, Elasticsearch and Redis).
3. Huawei big data solutions, functions and features, and success stories in the big data industry.

Key Points Percentage

Knowledge Point	Percentage
1. Big Data Development Trend and Kunpeng Big Data Solution	3%
2. HDFS and ZooKeeper	12%
3. Hive - Distributed Data Warehouse	10%
4. HBase Technical Principles	11%
5. MapReduce and YARN Technical Principles	9%
6. Spark In-Memory Distributed Computing	7%
7. Flink, Stream and Batch Processing in a Single Engine	8%
8. Flume - Massive Log Aggregation	7%
9. Loader Data Conversion	5%

10. Kafka - Distributed Publish-Subscribe Messaging System	9%
11. LDAP and Kerberos	5%
12. Elasticsearch - Distributed Search Engine	5%
13. Redis In-Memory Database	5%
14. Huawei Big Data Solution	4%

Knowledge Points

Chapter 1 Big Data Development Trend and Kunpeng Big Data Solution

1. Big Data Era
2. Big Data Application Fields
3. Opportunities and Challenges in the Big Data Era
4. Huawei Kunpeng Big Data Solution Technical Presentation

Chapter 2 HDFS and ZooKeeper

1. HDFS Overview and Application Scenarios
2. HDFS System Architecture and Key Features
3. ZooKeeper Overview and Architecture

Chapter 3 Hive - Distributed Data Warehouse

1. Hive Basic Principles
2. Hive Functions and Architecture
3. Common SQL Operations of Hive

Chapter 4 HBase Technical Principles

1. Introduction to HBase
2. Functions and Architecture of HBase
3. HBase Key Processes
4. HBase Performance Tuning
5. HBase Practice

Chapter 5 MapReduce and YARN Technical Principles

1. Introduction to MapReduce and YARN
2. Functions and Architectures of MapReduce and YARN
3. Resource Management and Task Scheduling of YARN

4. YARN Enhanced Features

Chapter 6 Spark In-Memory Distributed Computing

1. Spark Overview
2. Spark Principles
3. Spark RDD, DataFrame, DataSet
4. Spark SQL
5. Spark Structured Streaming and Spark Streaming

Chapter 7 Flink, Stream and Batch Processing in a Single Engine

1. Principles and Architecture of Flink
2. Time and Window Mechanisms of Flink
3. Flink Watermark Mechanism
4. Fault Tolerance and Status Management of Flink

Chapter 8 Flume - Massive Log Aggregation

1. Flume Overview and Architecture
2. Key Features of Flume
3. Flume Applications

Chapter 9 Loader Data Conversion

1. Introduction to Loader
2. Loader Job Management

Chapter 10 Kafka - Distributed Publish-Subscribe Messaging System

1. Introduction to Kafka
2. Kafka Architecture and Functions
3. Key Data Management

Chapter 11 LDAP and Kerberos

1. IAM (Identity and Access Management)
2. Directory Services and Basic Principles of LDAP
3. SSO and Basic Principles of Kerberos
4. Scenario Architecture of Huawei Big Data Security Authentication

Chapter 12 Elasticsearch - Distributed Search Engine

1. Introduction to Elasticsearch
2. Elasticsearch System Architecture
3. Elasticsearch Key Features

Chapter 13 Redis In-Memory Database

1. Redis Application Scenarios
2. Redis Service Process
3. Redis Features and Data Types
4. Redis Optimization
5. Redis Application Cases

Chapter 14 Huawei Big Data Solution

1. Development Trend of the ICT Industry
2. HUAWEI CLOUD Big Data Services
3. HUAWEI CLOUD DAYU

Note:

The exam content includes but is not limited to that mentioned in this document.

References

HCIA-Big Data V3.0 Training Material

HUAWEI CLOUD MRS help document

Recommended Training

HCIA-Big Data V3.0 training.