



Certified Apache Cassandra
Professional
VS-1046

Vskills Certifications

Vskills Brochure



Skills for a secure future

Certified Apache Cassandra Professional

Certification Code VS-1046

Vskills certification for Apache Cassandra Professional assesses the candidate for skills for Apache Cassandra database. The certification tests the candidates on various areas of Apache Cassandra distributed database which includes knowledge of installing, administering and configuring applications utilizing the Cassandra.

Knowledge of object-oriented programming and Java programming language is pre-requisite for the certification.

The certification is not approved by, accredited by, nor in any way endorsed by, the ASF (Apache Software Foundation).

Why should one take this certification?

This Course is intended for professionals and graduates wanting to excel in their chosen areas. It is also well suited for those who are already working and would like to take certification for further career progression.

Earning Vskills Certified Cassandra Professional Certification can help candidate differentiate in today's competitive job market, broaden their employment opportunities by displaying their advanced skills, and result in higher earning potential.

For employers, the certification provides skill-verification tools that not only help assess a person's skills in Cassandra database but also the ability to quickly complete on-the-job tasks across multiple programs.

Who will benefit from taking this certification?

Job seekers looking to find employment in various software and IT infrastructure companies, students generally wanting to improve their skill set and make their CV stronger and existing employees looking for a better role can prove their employers the value of their skills through this certification.

Test Details:

- **Duration:** 60 minutes
- **No. of questions:** 50
- **Maximum marks:** 50, Passing marks: 25 (50%); There is no negative marking in this module.

Certified Apache Cassandra Professional

Fee Structure:

Rs. 3,499/- (Excludes taxes)*

*Fees may change without prior notice, please refer <http://www.vskills.in> for updated fees

Companies that hire Vskills Certified Apache Cassandra Professional

Vskills Certified Cassandra Professional finds employment in big or small cloud based software development and IT infrastructure companies. There is a shortage of skilled professionals in this field and companies are in a constant look out of people well acquainted with the work culture and the processes involved.

Table of Contents

1. Introduction to NoSQL

- 1.1 NoSQL Basics
- 1.2 Cassandra Basics and Terminology

2. Cassandra Installation

- 2.1 Prerequisites
- 2.2 Installation
- 2.3 Configuration
- 2.4 Cluster Setup

3. Cassandra Architecture

- 3.1 Architecture of Cassandra
- 3.2 Cassandra Data Model
- 3.3 Data Replication
- 3.4 Write Operation
- 3.5 Read Operation
- 3.6 Data Compaction
- 3.7 Tunable Data Consistency
- 3.8 Gossip Protocol
- 3.9 Failure Detection
- 3.10 HintedHandoffs
- 3.11 Bloom Filters

4. Cassandra Data Modeling and CRUD

- 4.1 Data Modeling Basics
- 4.2 Cassandra Data Modeling
- 4.3 Cassandra Column Types
- 4.4 Cassandra Keyspace
- 4.5 Cassandra Tables
- 4.6 Cassandra Index
- 4.7 Triggers
- 4.8 Materialized Views

5. CQL

- 5.1 CQL Basics
- 5.2 Identifiers and keywords
- 5.3 Shell Commands
- 5.4 CQL Data Manipulation
- 5.5 CQL Datatypes
- 5.6 Functions
- 5.7 User Defined Functions
- 5.8 Collections
- 5.9 User Defined Datatypes

5.10 Security and Roles

6. Cassandra Configuration

6.1 Configuring Cassandra

7. Cassandra Performance Tuning

7.1 Observation Tools

7.2 Compression

7.3 JVM Tuning

7.4 System Tuning

7.5 Tuning Guidelines

8. Cassandra Maintenance

8.1 Snitch

8.2 Adding, Replacing, Moving and Removing nodes

8.3 Compaction

8.4 Change Data Capture

8.5 Monitoring and Metrics

8.6 Security

Sample Questions

1. **JMX** stands for _____.

- A. Java Managed Extension
- B. Java Management Extension
- C. Java Manipulated Extension
- D. None of the above

2. **Cassandra** is an _____.

- A. Centralized database
- B. Distributed database
- C. Peer-to peer database
- D. None of the above

3. **Cassandra's** orientation is _____.

- A. Header
- B. Row
- C. Column
- D. None of the above

4. A column family is collection of _____.

- A. Rows
- B. Columns
- C. Rings
- D. None of the above

5. **Super columns** store _____.

- A. Map of columns
- B. Byte array value
- C. Pointer to rings
- D. None of the above

Answers: 1 (B), 2 (B), 3 (C), 4 (A), 5 (A)

Certifications

➤ Accounting, Banking and Finance

- Certified AML-KYC Compliance Officer
- Certified Business Accountant
- Certified Commercial Banker
- Certified Foreign Exchange Professional
- Certified GAAP Accounting Standards Professional
- Certified Financial Risk Management Professional
- Certified Merger and Acquisition Analyst
- Certified Tally 9.0 Professional
- Certified Treasury Market Professional
- Certified Wealth Manager

➤ Big Data

- Certified Hadoop and Mapreduce Professional

➤ Cloud Computing

- Certified Cloud Computing Professional

➤ Design

- Certified Interior Designer

➤ Digital Media

- Certified Social Media Marketing Professional
- Certified Inbound Marketing Professional
- Certified Digital Marketing Master

➤ Foreign Trade

- Certified Export Import (Foreign Trade) Professional

➤ Health, Nutrition and Well Being

- Certified Fitness Instructor

➤ Hospitality

- Certified Restaurant Team Member (Hospitality)

➤ Human Resources

- Certified HR Compensation Manager
- Certified HR Staffing Manager
- Certified Human Resources Manager
- Certified Performance Appraisal Manager

➤ Office Skills

- Certified Data Entry Operator
- Certified Office Administrator

➤ Project Management

- Certified Project Management Professional

➤ Real Estate

- Certified Real Estate Consultant

➤ Marketing

- Certified Marketing Manager

➤ Quality

- Certified Six Sigma Green Belt Professional
- Certified Six Sigma Black Belt Professional
- Certified TQM Professional

➤ Logistics & Supply Chain Management

- Certified International Logistics Professional
- Certified Logistics & SCM Professional
- Certified Purchase Manager
- Certified Supply Chain Management Professional

➤ Legal

- Certified IPR & Legal Manager
- Certified Labour Law Analyst
- Certified Business Law Analyst
- Certified Corporate Law Analyst

➤ Information Technology

- Certified ASP.NET Programmer
- Certified Basic Network Support Professional
- Certified Business Intelligence Professional
- Certified Core Java Developer
- Certified E-commerce Professional
- Certified IT Support Professional
- Certified PHP Professional
- Certified Selenium Professional
- Certified SEO Professional
- Certified Software Quality Assurance Professional

➤ Mobile Application Development

- Certified Android Apps Developer
- Certified iPhone Apps Developer

➤ Security

- Certified Ethical Hacking and Security Professional
- Certified Network Security Professional

➤ Management

- Certified Corporate Governance Professional
- Certified Corporate Social Responsibility Professional

➤ Life Skills

- Certified Business Communication Specialist
- Certified Public Relations Officer

➤ Media

- Certified Advertising Manager
- Certified Advertising Sales Professional

➤ Sales, BPO

- Certified Sales Manager
- Certified Telesales Executive

& many more job related certifications

Contact us at :

Vskills

011-473 44 723 or info@vskills.in

www.vskills.com