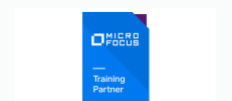


Szkolenie: Micro Focus VT120 - Vertica Essentials



Cel szkolenia:

The Vertica Essentials course explores the capabilities of the Vertica platform solution, and prepares you to manage the operational success of your deployment.

During this course, you will learn:

- The architectural elements of a Vertica cluster
- How to load and manage data in the database
- How to manage database users and resources
- How to back up and restore the database
- Introductory information about Vertica's built-in analytic functions
- How to work with semi-structured data
- Database security environment concerns

This class combines lectures with hands-on laboratory exercises performed in a live Vertica database cluster.

Upon successful completion of this course, you should be able to:

- Describe Vertica's database and data storage structures
- Load and remove data from a Vertica database
- Optimize the database to improve query performance
- Create and manage database users and resources
- Back up and restore a Vertica database
- Find additional information and resources for working with Vertica

Audience/Job Roles

This course is intended for database administrators, database architects, data analysts, and application developers.

Plan szkolenia:

- Introduction to the Training Environment

- Accessing the training environment and reviewing its contents and structure
- Reviewing the Student Guide
- Starting and stopping a Vertica database
- Vertica Overview
 - Describe the building blocks of the Vertica platform
- Introduction to Projections
 - Read a projection DDL to determine its structure
 - Identify replicated and segmented projections
 - Use the database K-safety value to identify dependent nodes
- Loading Data
 - Review the structure of tables and projections
 - Load data using Vertica's hybrid storage model
 - Manually run the moveout and mergeout tasks
- Query Execution
 - Generate a query plan
 - Time a query
 - Profile a query
 - Identify the database epochs
 - Find data loaded at different epochs
- Optimizing the Database
 - Create a comprehensive database design using Management Console
 - Review the Database Designer output files
 - Deploy the comprehensive database design
- Partitioning Data
 - Create partitioned tables
 - Load data into partitions
 - Move partitioned data into archive tables
- Removing Data
 - Remove data by dropping and truncating tables
 - Bulk delete data from tables
 - Purge delete vectors
 - Remove data by dropping partitions
- Database User Management
 - Create new database users
 - Create new database user roles
 - Assign a role to a user

- Create a role hierarchy
- Table Access Privileges
 - Assign inheritable privileges to a database schema
 - Limit access to database columns and rows by role
 - Restrict non-administrative access to system tables
- Resource Management
 - Review the default resource pools and parameters
 - Create a new resource pool
 - Test the user access to the new resource pool
- Database Backup and Restore
 - Create a backup configuration file
 - Back up the database
 - Review the database backups
 - Restore the database
- Overview of Analytic Functions
 - Discuss the structure of an analytic query
 - Review Vertica-specific functions:
 - Conditional events
 - Gap filling and interpolation
 - Pattern matching
 - Geospatial definitions
 - Predictive analytics through machine learning
- Securing the Database
 - User authentication options
 - Securing your environment from outside threats
 - User authorization options
- Flex Tables and SemiStructured Data
 - Define and describe semi-structured data
 - Create new flex tables and their supporting tables
 - Load data in different formats into a flex table
 - Explore data stored in flex tables
- Introduction to Vertica SQL on Hadoop
 - The challenges for accessing information in data lakes
 - The SQL on Hadoop architecture
 - Integrating Vertica and Hadoop information
- Next Steps

- Find additional information on using Vertica
- Review additional Software Education training
- Introduce Micro Focus Software Vertica Certification
- Introduce Vertica Community portals

Wymagania:

To be successful in this course, you should have the following prerequisites or knowledge:

- Intermediate knowledge of RDBMS concepts (understanding databases and schemas, database normalization, etc.)
- Basic understanding of SQL (familiarity with basic SQL syntax, ability to troubleshoot syntax errors, etc.)
- Basic experience with the Linux operating system (how to change directories and list the contents, how to view and edit files, etc.)

Poziom trudności



Certyfikaty:

The participants will obtain certificates signed by Micro Focus (course completion).

This course prepares you also for such related Micro Focus certification exam: VT120C-90-ASP - Vertica Accredited Software Professional EXAM.

Prowadzący:

Authorized Micro Focus Trainer.