



## Course Data Sheet

### VT200 – Vertica 9.x Database Administration

Course No.: VT200-92	Category/Sub Category: Big Data/Vertica
For software version(s): v9.2 Software version used in labs: v9.2	Course length: 4 days
Delivery formats: Instructor Led (ILT) and Virtual Instructor Led (VILT)	Training is available as a private session onsite or virtually.
To order visit: <a href="#">Software Education</a>	

### Course Description

This course provides details regarding typical periodic maintenance and management tasks employed by Vertica Database Administrators, including:

- Monitoring
- Database Design
- Backup and Restore
- Workload Analysis
- Modifying the size of a Vertica cluster

### Audience/Job Roles

This course is intended for:

- Database Administrators
- System Administrators
- Other personnel responsible for the maintenance, monitoring and configuration of the Vertica database.

## Course Objectives

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

- Manage a Vertica cluster
- Perform day-to-day Vertica database management tasks
- Create and maintain database users
- Collect and manage database performance metrics

## Prerequisites/Recommended Skills

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

- An understanding of the Vertica database functionality and architecture as typically acquired via three-six months of usage and administration of a Vertica database
- Ideally have attended the Vertica Essentials class to obtain core knowledge

## Learning Path



## Related Courses

- VT320 – Vertica 9.x Query Performance Tuning

## Course Topics

Modules	Objectives
<b>Module 1: The Vertica Training Environment</b>	<ul style="list-style-type: none"><li>• Log in to the training environment</li><li>• Review the training environment configuration</li><li>• Associate the Management Console with a Vertica database</li><li>• Start a database</li></ul>
<b>Module 2: Managing Vertica Clusters</b>	<ul style="list-style-type: none"><li>• View the database state in the system tables</li><li>• Shut down and restart a node in the Management Console</li><li>• Manage system messages</li></ul>
<b>Module 3: Loading Data</b>	<ul style="list-style-type: none"><li>• Load data into the database from a file</li><li>• Identify and correct data parsing errors</li><li>• Load semi-structured data</li><li>• Correct a projection for data skew</li></ul>
<b>Module 4: Monitoring Data</b>	<ul style="list-style-type: none"><li>• Monitor the ROS container count</li><li>• Manually run the Tuple Mover tasks</li><li>• Monitor DELETE VECTORS</li><li>• PURGE deleted records</li><li>• Update the database statistics</li></ul>
<b>Module 5: Optimizing the Database Design</b>	<ul style="list-style-type: none"><li>• Create and deploy a comprehensive database design using admintools</li><li>• Review Database Designer outputs from admintools and MC</li><li>• Create and deploy an incremental database design using MC</li><li>• Review the database logging tables</li><li>• Identify concerns with DELETE optimization</li></ul>
<b>Module 6: Epoch Management</b>	<ul style="list-style-type: none"><li>• Find and identify epochs using the SYSTEM table and database functions</li><li>• Determine the duration that epochs can be used in a predicate</li><li>• Find the epoch in which data has been loaded</li><li>• Use historical queries to find data loaded at different epochs</li></ul>
<b>Module 7: User Management</b>	<ul style="list-style-type: none"><li>• Create a new user password profile</li><li>• Create new database users</li><li>• Create new database user roles</li><li>• Assign a role to a user</li><li>• Create a role hierarchy</li></ul>
<b>Module 8: Table Access Privileges</b>	<ul style="list-style-type: none"><li>• Assign inheritable privileges to a database schema</li><li>• Limit access to database columns by role</li><li>• Restrict non-administrative access to system tables</li></ul>
<b>Module 9: Resource Management</b>	<ul style="list-style-type: none"><li>• Define the default resource pools</li><li>• Describe the purpose of resource pool parameters</li><li>• Create and modify a resource pool</li><li>• Test the user access to the new resource pool</li><li>• Analyze and correct a user resource issue</li></ul>

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<b>Module 10: Database Backup and Recovery</b>	<ul style="list-style-type: none"> <li>• Determine the required backup disk storage space</li> <li>• Back up the database</li> <li>• Review the database backups</li> <li>• Restore the database</li> </ul>
<b>Module 11: Maintaining a Database and Cluster</b>	<ul style="list-style-type: none"> <li>• Identify the Vertica database version</li> <li>• Estimate the database size</li> <li>• Audit and update an Vertica license</li> <li>• Add a host to a cluster</li> <li>• Add a node to a database</li> </ul>
<b>Module 12: The Catalog and Data Directories</b>	<ul style="list-style-type: none"> <li>• Describe the contents of the Catalog and Data directories</li> <li>• View the vertica.log file in Management Console</li> <li>• Rotate the vertica.log file</li> </ul>
<b>Module 13: System Maintenance</b>	<ul style="list-style-type: none"> <li>• Determine and modify the amount of system data maintained in a system table</li> <li>• Run the Workload Analyzer to find system tuning recommendations</li> <li>• Enable SNMP Traps and Syslog</li> </ul>
<b>Module 14: Next Steps</b>	<ul style="list-style-type: none"> <li>• Accessing Micro Focus Software's additional training offerings</li> <li>• Additional information located in the MyVertica portal</li> </ul>