

**Amazon Redshift Architecture and SQL**

**Course Number:** ARS-120  
**Duration:** 3 days

**Overview**

Amazon Redshift is a high performance, petabyte-scale data warehouse platform.  Accelebrate's Amazon Redshift Architecture and SQL training teaches participants the basic and advanced levels of Amazon Redshift Architecture and SQL, enabling them to take full advantage of the platform's capabilities.

**Prerequisites**

No prior experience is required.

**Materials**

All Amazon Redshift training students receive comprehensive courseware in electronic format.

**Software Needed on Each Student PC**

Internet access via Firefox, Chrome, or Microsoft Edge is required in order to access the remote environment used for this training.

**Objectives**

* Gain a detailed understanding of the Redshift architecture
* Create and manage tables and objects
* Utilize stored procedures and user-defined functions
* Master performance tuning
* Gain basic, intermediate, and advanced SQL skills

**Outline**

* The Redshift Architecture
* Best Practices For Table Design
* System Tables
* Compression
* Workload Management (WLM)
* Basic SQL Functions
* The WHERE Clause
* Distinct Vs. Group By AND TOP
* AggregationCasting a Data Type
* Join Functions
* Date Functions
* Analytics
* Temporary Tables
* Sub-query Functions
* Strings
* Interrogating the Data
* View Functions
* Set Operators Functions
* Table Create and Data Types
* Data Manipulation Language (DML)
* EXPLAIN
* User-Defined Functions
* Stored Procedures
* Statistical Aggregate Functions
* Mathematical Functions
* Conclusion