

Netezza/PDA in Database Processing Using SAS[®] Software

Course Length: 2 days **CEUs** 1.2

AUDIENCE

This workshop is designed to show how to take existing SAS programs and transform processing to take advantage of an IBM/Netezza massively parallel environment. Typical SAS processes will be assessed and conversion of processing methodologies to a Netezza based environment will be taught and discussed.

PREREQUISITES

Knowledge of SAS programming and SQL basics.

COURSE TOPICS

Introduction and SAS/Access Architecture

- What is Netezza?
- Innovation
- Performance
- Simplicity
- IBM Netezza Analytics
- Netezza's Approach to Data Warehousing
- Multiple Engine Architecture in SAS
- Interface Engine
- SQL Pass-Through Facility
- SAS/Access Interface to Netezza supported features

Libname Statements with Netezza

- Libname Syntax
Arguments
- Netezza Libname Statement Examples
SAS/Access Libname Statement
- Connecting to a Database with a Libname Statement
Explorer Window
- Efficiency Considerations
- Workshop Session

Procedures Supported by SAS Inside Netezza

- Proc Means / Summary
- Proc Tabulate
- Proc Report
- Proc Sort
- Proc Rank
- Proc Freq
- Workshop Session

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SQL Pass-Through

- SQL Procedure Pass-Through Facility
- Syntax for the SQL Pass-Through Facility
- Overview of SQL Procedure Interactions with SAS/Access
- Select Expression
- Connect Statement
 - Arguments*
 - Connect Statement Examples*
- Disconnect Statement
 - Arguments*
 - Disconnect Statement Example*
- Execute Statement
 - Arguments*
 - Useful Statements to Include in Execute Statements*
- Connection to Component
 - Arguments*
 - Example*
- SQL Pass-Through Facility for Netezza
 - Special Catalog Queries*
- Temporary Table Support For Netezza
 - Establishing a Temporary Table*
 - Terminating a Temporary Table*
 - Examples*
- Libname Capabilities vs. The Proc SQL Pass-Through Facility
 - Libname Statement*
 - PROC SQL Pass-Through Facility*
- Embedded Libnames
 - Example*
- Workshop Session

IBM Netezza Analytics

- What they are
- How to use them
- Syntax Required
- Reference Discussion
- Workshop Session

Bulk Loading and Unloading In Netezza

- Bulk Loading Data Into Netezza Tables
 - Examples*
- Bulk Unloading Data From Netezza Into SAS Data Sets
 - Examples*
- Workshop Session

Deploying and Using SAS Formats in Netezza

- Using SAS Formats
 - How It Works*

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Process

- Deployed Components for In-Database Processing
- User-Defined Formats In The Netezza Data Warehouse
- Publishing Sas Formats

Overview of the Publishing Process

- Running the %Ind_Publish_Formatsmacro
%Ind_Publish_Formats Macro Syntax

Arguments

Tips for using the %Ind_Publish_Formats Macro

Special Characters in Directory Names

Netezza Permissions

Format Publishing Macro Example

- Using the SAS_Put() Function in the Netezza Data Warehouse
Implicit use of the SAS_Put() Function
Explicit use of the SAS_Put() Function
- Determining Format Publish Dates
- Workshop Session

Advanced SAS and Netezza Concepts

- Data Set Options for Netezza
- Passing SAS Functions to Netezza
- Passing Joins to Netezza
- Workshop Session

Netezza Naming Conventions and Data Types

- Naming Conventions for Netezza
- Data Types for Netezza
String Data
Numeric Data
Date, Time, and Timestamp Data
Netezza Null Values
- Libname Statement Data Conversions
- Workshop Session

Macro Variables with Netezza

- Macro Variables for Netezza
- Workshop Session