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
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- Using SAS Formats
  - How It Works
  - 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