# **Datastage Training Topics**

Training Class Time: 11am to 12pm one hr per day

weekends 3 to 4hrs per day

How many weeks you need to complete with hands Practical real time sessions.

We are looking for a trainer with very good work experience on Datastage tool, Datastage development and having experience in upgrading jobs and Datastage administration.

### **Data Warehousing Concepts**

- Data Warehouse Concepts, Design
- Need of Data Warehouse
- Introduction to OLTP, ETL and OLAP Systems
- Data Warehousing Architecture
- Dimensional Modeling
- Data Marts and ODS
- Testing of Data warehouse
- Star Schema and Snowflake Schema
- Types of Fact and Dimension Tables

#### **Datastage Introduction**

- DataStage Architecture
- Installation & Configuration of Datastage
- DataStage Clients
- Designer
- Director
- Administrator
- DataStage Workflow

# **Types of DataStage Job**

- Parallel Jobs
- Server Jobs
- Job Sequences

#### **Setting up DataStage Environment**

- DataStage Administrator Properties
- Defining Environment Variables
- Importing Table Definitions
- Describing configuration files
- Defining Job level parameters
- Describing Runtime column propagations
- Exporting and importing the jobs
- Clear the logs and Cleanup the Resources

### **Creating Parallel Jobs**

- Design a simple Parallel job in Designer
- · Compile your job
- Run your job in Director
- View the job log
- Command Line Interface (dsjob)

#### **Accessing Sequential Data**

- Sequential File stage
- Data Set stage
- Complex Flat File stage
- Create jobs that read from and write to sequential files
- Read from multiple files using file patterns
- Use multiple readers
- Null handling in Sequential File Stage

#### **Platform Architecture**

- Describe parallel processing architecture Describe pipeline & partition parallelism
- List and describe partitioning and collecting algorithms
- Describe configuration files
- Explain OSH & Score

### **Datastage Administrator**

- Create, Edit & Delete Project
- Delete Project
- Protect Project
- Environmental variables
- Auto purge
- RCP
- OSH
- Commands Execute
- Multiple Instances
- Apt Config file
- User Maintenance & Permissions
- Job Sequence Settings

#### **Datastage Director**

- Introduction to Data stage Director
- Job status View
- View logs
- Scheduling
- Batches Creation
- Validation
- Status
- Monitoring
- Suppress and Demote the Warnings
- Peek view

#### **Datastage Designer**

- Introduction about Designer
- Repository
- Palatte
- Types of Links
- File Stages
- Sequential File
- Data set File
- Lookup file set
- Difference between Sequential file/Dataset/File set
- Database stages
- Dynamic RDBMS
- Oracle Enterprise
- ODBC Enterprise
- Stored Procedure

#### **Processing stages**

- Change Capture (Caption)
- Compare stage
- Difference Stage
- Aggregate Stage
- Transformer Stage
- Surrogate Generator Stage
- Join Generator Stage
- Merge Generator Stage
- Lookup Generator Stage
- Difference between join/Lookup/Merge
- Difference between join/Lookup
- Remove Duplicates
- Switch
- Pivot
- Modify

- Funnel
- Slowly changing dimension stage
- Slowly changing dimensions implementation
- Copy
- Compress
- Expand
- Filter
- Modify
- Sort
- Lookup
- Change Capture
- Change Apply
- Funnel
- Pivot stage

#### **Debugging stage**

- Head
- Tail
- Pea
- Row Generator
- Column Generator
- Sample
- Job Parameters
- Performance tuning techniques.
- · Handle errors and exceptions

#### Manager

- Introduction About Data stage Manager
- Importing the Job
- Exporting the Job
- Importing Table Definition
- Importing Flat File Definition
- Routines

#### **Containers**

- Difference between Local Container and Shared Container
- Local Container
- Shared Container

### **Combining Data**

- Combine data using the Lookup stage
- Combine data using merge stage
- Combine data using the Join stage
- Combine data using the Funnel stage

#### **Sorting and Aggregating Data**

- Sort data using in-stage sorts and Sort stage
- Combine data using Aggregator stage
- Remove Duplicates stage

#### **Transforming Data**

- Understand ways DataStage allows you to transform data
- Create column derivations using user defined code and system functions
- Filter records based on business criteria
- Control data flow based on data conditions
- Stage Variables, Derivations and Constraints.
- Functions

## **Repository Functions**

- Perform a simple Find
- Perform an Advanced Find Perform an impact analysis
- Compare the differences between two Table Definitions and Jobs.

### **Working with Relational Data**

- Import Table Definitions for relational tables.
- Create Data Connections.
- Use Connector stages in a job.
- Use SQL Builder to define SQL Select statements.
- Use SQL Builder to define SQL Insert and Update statements.

#### **Metadata in Parallel Framework**

- Explain schemas.
- Create schemas.
- Explain Runtime Column Propagation (RCP).
- Build a job that reads data from a sequential file using a schema.
- Build a shared container.

#### **Job Control**

- Job Activity
- Job sequencer
- Start loop Activity
- End loop Activity
- Notification Activity
- Terminator Activity

- Nested Condition Activity
- Exception handling Activity
- Execute Command Activity
- Wait for file Activity
- User variable Activity
- Adding Check Points
- Restart able

# **Quality Stage**

- Data Quality
- Data Quality Stages
- Investigate Stage
- Standardize Stage
- Match Frequency Stage
- Reference Match Stage
- Unduplicated Match Stage
- Survive Stage
- Viewing audit details in operational DASHBOARD reports