Enterprise Computing Solutions - Education Services

# TRAINING OFFERING

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Kronborgsgränd 7, 164 46 Kista

Email: edu.ecs.se@arrow.com
Phone: +46 8 555 188 00

# IBM InfoSphere DataStage v11.5 - Advanced Data Processing - SPVC

| CODE: | LENGTH: | PRICE: |
|---|---|---|
| 2M423G | 16 Hours | kr7,100.00 |

## Description

**Contains:** PDF course guide, as well as a lab environment where students can work through demonstrations and exercises at their own pace.
This course is designed to introduce you to advanced parallel job data processing techniques in DataStage v11.5. In this course you will develop data techniques for processing different types of complex data resources including relational data, unstructured data (Excel spreadsheets), and XML data. In addition, you will learn advanced techniques for processing data, including techniques for masking data and techniques for validating data using data rules. Finally, you will learn techniques for updating data in a star schema data warehouse using the DataStage SCD (Slowly Changing Dimensions) stage. Even if you are not working with all of these specific types of data, you will benefit from this course by learning advanced DataStage job design techniques, techniques that go beyond those utilized in the DataStage Essentials course.
If you are enrolling in a Self Paced Virtual Classroom or Web Based Training course, before you enroll, please review the Self-Paced Virtual Classes and Web-Based Training Classes on our Terms and Conditions page, as well as the system requirements, to ensure that your system meets the minimum requirements for this course. http://www.ibm.com/training/terms

## Objectives

•Use Connector stages to read from and write to database tables
•Use the File Connector stage to read from and write to Hadoop HDFS files •Handle SQL errors in Connector stages
•Use the Unstructured Data stage to extract data from Excel spreadsheets
•Use the Big Data stage to read from and write to Hadoop HDFS files
•Use the Data Masking stage to mask sensitive data processed within a DataStage job
•Use the XML stage to parse, compose, and transform XML data
•Use the Schema Library Manager to import and manage XML schemas
•Use the Data Rules stage to validate fields of data within a DataStage job •Create custom data rules for validating data
•Design a job that processes a star schema database with Type 1 and Type 2 slowly changing dimensions
•Use the Surrogate Key Generator stage to generate surrogate keys

## Audience

Experienced DataStage developers seeking training in more advanced DataStage job techniques and who seek techniques for working with complex types of data resources.

## Prerequisites

DataStage Essentials course or equivalent.

## Programme

Unit 1 –Accessing databasesTopic 1: Connector stage overview• Use Connector stages to read from and write to relational tables• Working with the Connector stage propertiesTopic 2: Connector stage functionality• Before / After SQL• Sparse lookups• Optimize insert/update performanceTopic 3: Error handling in Connector stages• Reject links• Reject conditionsTopic 4: Multiple input links• Designing jobs using Connector stages with multiple input links• Ordering records across multiple input linksTopic 5: File Connector stage• Read and write data to Hadoop file systemsDemonstration 1: Handling database errorsDemonstration 2: Parallel jobs with multiple Connector input linksDemonstration 3: Using the File Connector stage to read and write HDFS files
Unit 2 – Processing unstructured dataTopic 1: Using the Unstructured Data stage in DataStage jobs• Extract data from an Excel spreadsheet• Specify a data range for data extraction in an Unstructured Data stage• Specify document properties for data extraction.Demonstration 1: Processing unstructured data

Unit 3 – Data maskingTopic 1:  Using the Data Masking stage in DataStage jobs• Data masking techniques• Data masking policies• Applying policies for masquerading context-aware data types• Applying policies for masquerading generic data types• Repeatable replacement• Using reference tables• Creating custom reference tablesDemonstration 1: Data masking
Unit 4 – Using data rulesTopic 1:  Introduction to data rules• Using the Data Rules Editor• Selecting data rules• Binding data rule variables• Output link constraints• Adding statistics and attributes to the output informationTopic 2:  Use the Data Rules stage to valid foreign key references in source dataTopic 3:  Create custom data rulesDemonstration 1:  Using data rules
Unit 5 – Processing XML dataTopic 1:  Introduction to the Hierarchical stage• Hierarchical stage Assembly editor• Use the Schema Library Manager to import and manage XML schemasTopic 2:  Composing XML data• Using the HJoin step to create parent-child relationships between input lists• Using the Composer stepTopic 3:  Writing Hierarchical data to a relational tableTopic 4:  Using the Regroup stepTopic 5:  Consuming XML data• Using the XML Parser step• Propagating columnsTopic 6:  Transforming XML data• Using the Aggregate step• Using the Sort step• Using the Switch step• Using the H-Pivot stepDemonstration 1:  Importing XML schemasDemonstration 2: Compose hierarchical dataDemonstration 3: Consume hierarchical dataDemonstration 4:  Transform hierarchical data
Unit 6:  Updating a star schema databaseTopic 1:  Surrogate keys• Design a job that creates and updates a surrogate key source key file from a dimension tableTopic 2:  Slowly Changing Dimensions (SCD) stage• Star schema databases• SCD stage Fast Path pages• Specifying purpose codes• Dimension update specification• Design a job that processes a star schema database with Type 1 and Type 2 slowly changing dimensionsDemonstration 1: Build a parallel job that updates a star schema database with two dimensions

## Session Dates

| Date | Location | Time Zone | Language | Type | Guaranteed | PRICE |
|---|---|---|---|---|---|---|
| 28 Mar 2024 | | | English | Self Paced Training | | kr7,100.00 |

## Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.