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IBM DataStage Advanced Enterprise Edition Outline 4 day course (32 hrs)

1. Introduction to the Enterprise Edition Architecture
 - Parallel processing architecture
 - Partition parallelism
 - Pipeline parallelism
 - Enterprise Edition development environment
 - Enterprise Edition framework
 - Enterprise Edition job execution model
2. Compilation and Execution
 - Code generation
 - Viewing and understanding the generated OSH
 - Stage to operator mappings
 - EE runtime architecture
 - Viewing and understanding the Score
3. Enterprise Edition Data Types
 - Datasets
 - Schemas
 - Datatype mappings and conversions
 - Processing external data
 - Null handling
 - Runtime Column Propagation (RCP)
4. Partitioning Data
 - Understand how Partitioning works in the Framework
 - Viewing partitioners in the Score

- Selecting partitioning algorithms
- Generate sequences of numbers (surrogate keys) in a partitioned, parallel environment

5. Collecting and Sorting Data

- Collecting data
- Collector algorithms
- Sorting data in parallel framework
- Inserted sorts
- Optimizing Fork-Join jobs
- Using Sort stages to determine the last row

6. Buffering in Enterprise Edition

- Buffering in EE
- Buffer tuning
- Avoiding buffer contentions

7. Extending Enterprise Edition

- Create BuildOp stages
- Create new External Function Routines
- Introduce CustomOp stages

8. Best Practices and Job Design Guidelines

- Overall job design tips
- Stage usage tips

9. Database Usage

- Overall Database Guidelines
- DB2 Guidelines
- Oracle Guidelines
- Teradata Guidelines

10. Environment Variables

- Runtime environment
- Exporting environment variables

- Job monitoring variables
- Job debugging variables
- Job design variables
- Sequential file variables
- Database variables

11. Performance Tuning

- Performance tuning methodology
- Selectively Disabling Operator Combination
- Configuration file guidelines
- Impact of partitioning
- Impact of sorting
- Impact of Transformers
- Impact of buffering