

MSBI (SSIS, SSRS, and SSAS) Online Course in a true global setting

#### Unit1: Introduction to SSIS

- What is SSIS?
- Need for SSIS Component
- SSIS and MSDB Database
- SSIS and DTS Comparisons

#### Unit2: SSIS Architecture

- Control Flow Architecture
- Data Flow Architecture
- Data Pipeline Usage
- Buffer Space Allocation Rules
- SSIS Precedence Constraints

#### Unit3: Basic SSIS Entities

- SSIS Data Types
- SSIS Variables and Usage
- Dynamic Precedence Constraints
- Connection Managers
- Data Flow Tasks usage
- Monitoring Data Migrations
- Handling Enumerations in SSIS

#### Unit4: SSIS Customizations

- SCRIPT Task in SSIS
- Custom Scripting and Tuning
- Expressions and Iterations

#### Unit5: SSIS Expressions

- Dynamic Connection Managers
- Dynamic Scripting
- Expression Builder Usage

- Control Flow Breakpoints
- Data Flow Data Viewers
- Limitations of SSIS Debugging

## Unit6: Data Flow Transformations

- Column Transformations
- Combining and splitting data
- Data Cleansing Operations
- Managing BLOB & CLOB data
- Performing database operations
- Lookup and Fuzzy Grouping
- MERGE Vs UNION ALL Transformations
- SORT Vs AGGREGATE Transformations
- OLE-DB Command Transformation

## Unit7: Custom Activities

- Data Analytics and Debugging
- Custom Code Handling
- SSIS Event Notifications
- Data Sampling Techniques
- Type I and Type II SCDs
- Performing PIVOT operations
- SSIS Data Profiling Task

## Unit8: Package Configurations

- Configurations and benefits
- Applying Configuration Options
- Choosing correct providers
- Practical Applications
- System Events and Audits
- Package Event Handling
- Container Event Handling
- Limitations of Event Handling
- Event Bubbling Escalations

## Unit9: SSIS Logging

- Benefit of SSIS Logging

- Different Logging Options
- Environment Variables
- Windows Event Logs and SSIS
- SQL Server Logging Limitations
- Choosing correct log providers
- Managing SSIS Log Providers
- Package Execution Audits

## Unit10: Deployment Procedures

- Preparing for Deployment
- Primary Pre-requisites
- SSIS Deployment Phases
- Securing Manifest Files
- SSIS Deployment Options
- Verification Techniques
- File System Deployment
- Package Execution Options
- File System Security
- SQL Server Deployment
- Package Execution Options

## **SSRS Development:**

### Unit11: Introduction to SSRS

- Need For Reporting
- Introduction to Reporting Services
- Why SQL Server Reporting Services?

### Unit12: Reporting Services Architecture

- Three-Phase Life Cycle
- Reporting Engine Architecture
- SSRS 2005 and IIS
- SSRS 2008 and Web Services
- Configuring SSRS 2005
- Configuring SSRS 2008 and 2008 R2

### Unit13: Introduction to SSRS Tools

- Report Designer

- Report Builder
- Report Manager
- RSCONFIG Tool

#### Unit14: Report Planning and Design

- SSRS Report Planning
- Using SSIS to extract Data Sources
- Enterprise and Ad-hoc Reports
- Optimizing Data Sources

#### Unit15: Report Data Sets

- Creating Data Sets
- Configuring Dynamic Data Sets

#### Unit16: Report Designs

- Designing Wizard based Reports
- Designing Custom Reports
- Using Tables and Matrix
- Chart Based Reports and Images
- Using SSRS Expressions
- Using SSRS Globals
- Sub Reports and Usage
- BUILD and DEPLOY Options

### **Advanced Reports**

#### Unit17: Using Report Designer

- Parameters and Dynamic Populations
- Report Filters in Data Sets
- Sub Reports
- Gauge Reports
- Pie Charts and Data Bars
- Exporting Reporting Data
- Understanding RDL Entries