RedBush Technologies

Course Name: Microsoft BI

Duration: 1.5 months

Normal Track-MON-FRI (1 hrs each day)

Weekend Track- SAT-SUN (3 hrs eachday)

Faculty: Mr. Suresh Kumar

Introduction to MSBI

- •What is BI and MSBI
- •Importance of MSBI in the current Enterprise.
- •Installation Steps and requirements.
- •ETL and OLAP Tools
- •Features of MSBI

Introduction to SSIS
- What is SSIS and use in the enterprise.
- Control flow
- Data flow
- Data pipeline
- Packages

Developing SSIS Solutions and Packages
- SSIS Solution and Project Creation.
- SSIS Package Creation.
- Connection Managers and Shared Data Sources.
- Control Flow Tasks
- Data Flow Task [ETL]
- Variables, Expressions & Parameters.

Data Flow Tasks and Transformations
- Objectives of Data Flow Tasks.

Common Transformations…

- Aggregate Transformation.
- Balanced Data Distributor
- Cache Transform
- Conditional Split Transformation.
- Data Conversion Transformation.
- Derived Column Transformation.
- Lookup Transformation.
- Merge Transformation.
- Merge Join Transformation.
- Multicast Transformation.
- Row Count Transformation.
- Script Components.
- Slowly Changing Dimesnsions
- Sort Transformation.
- Union All Transformation.
- Merge Vs Union All

Other Transformations…

- Audit Transformation.
- Copy Column.
- Export Column.
- Fuzzy Grouping.
- Fuzzy Lookup.
- Import Column.
- Percentage Sampling.
- Pivot.
- Row Sampling.
- Term Extraction.
- Term Lookup.
- Unpivot.

Common Control Flow Tasks

- Data Flow Task.
- Execute SQL Task.
- Bulk Insert Task.
- Data Profiling Task.
- Execute Package Task.
- Execute Process Task.
- Expression Task.
- File System Task.
- FTP Task.
- Script Task.
- Send Mail Task.
- Web Service Task.
- XML Task.

Containers

- For Loop Container.

- Foreach Loop Container.
- Sequence Container.

Logging and Events

- Using check points
- Implementing Transactions
- Logging ETL Operations.
- Various Events involved in the execution of Packages.

SSIS Administration

- Various ways of Deploying SSIS Package.
- Securing a Package
- Manually Executing SSIS Package
- Scheduling SSIS Package

Error Handling in SSIS

Introduction to SSAS

•Dimensions

•Facts

- Data Sources
- Data Source Views

Developing Cubes

- Cube Designer
- Partitions and Aggregations
- Dimension Usage
- Calculation and Kpis
- Perspectives, Actions
- Translations
- Write-back feature

MDX Language

- Axes, Slice
- Tuple and Set
- MDX Queries
- MDX Expressions
- MDX Scripts

SSAS Administration

- Installation
- Configuration
- Deployment
- Processing
- Security
- Backup and Restore

SSRS Architecture and Components

- What is SSRS, Need of Reporting Services
- Enterprise Report Life Cycle

SSRS Administration and Management

- Working with RS Configuration Tool
- Report Manager/Server/Database Creation
- Authenticating Manager/Server/Database
- RS Server starting and stopping

Report Creation and Authoring

- Working with various report facilities
- Report Server Wizard
- Report Server Project
- Report Model Project
- Report Builder
- Creating different reports and managing
- Table
- Matrix
- Chart
- List
- Gauge
- Sub Report
- Formatting
- Bar

Working with Reports Extensively

- Creating a report by connecting to
- OLAP cubes
- RDMBS
- Excel Sources
- Stored Procedures
- Creating Sub Report and using it
- Working with

- Sub Totals/Full Totals
- Page Breaks
- Page Footer/Header
- Table Header/Footer
- Sorting & Grouping
- Applying Colors, Fonts etc

Working with Drill Down, Drill Through

- Creating Drill Down & Through reports
- Various ways to create and manipulate

Adhoc Reporting, Report Builder

- Creating and working with report model
- Report Builder and various options, features

Actions, Expressions & Variables

- Implementing various Report Actions
- Working with various expressions
- Variables (Report and Group)
- Calculated members, Query fields

Parameterised Reports

- Passing Parameters
- Non Queried
- Queried
- Multivalued
- Cascading Parameters

Publishing and Executing Reports

- Deploying the Reports

- Executing the Reports
- Creating cached Instances
- Creating snapshots and report history

Creating Subscriptions & Optimization

- Normal, Data Driven, Null Subscription
- Email and File Share Delivery Tuning of SSRS, Components and Query