



## **SAP- ABAP/4 – ADVANCED COURSE CONTENT**

- SAP Basic Introduction
- SAP R/3 Overview
- SAP POC – BRD Creation
- Blue-Print Roadmap Asap Methodology
- Project Management – Overview

### **ABAP Dictionary Concepts**

- Tables, Data Elements and Domains
- Transparent, Pooled and clustered tables
- Buffering, Indexes etc.,
- Structure, Table types and Type pools
- Views, Search helps and Lock objects

### **ABAP Programming Basics**

- Data Types, Variables, Types, Operators, Expressions etc
- I/O Statements, Formatting commands
- Conditional statements, Loops and termination statements
- String and Date operations and System fields
- Fields Strings and Text Elements
- Internal Tables (All Operations)
- Types of Internal Tables (Standard, Sorted and Hashed)
- Joins, Nested selects Sub queries and For All Entries etc
- Open SQL statements and performance issues
- Messages (Creating and Calling etc.,)
- Modularization (Subroutines, Function Modules, Macros and Includes)
- Field Symbols
- Revision
- Debugging programs (Break Point, Watch points etc)
- Extended syntax check, Runtime Analysis, Performance Trace



## Reports

- Classical Report Events
- Control Level Commands (AT First, AT New etc).,
- Selection Screen: Parameters
- Select –options and variants
- Selection screen designing (Blocks, Pushbuttons, Radio buttons etc)
- Interactive report events
- Menu painter: Designing and calling GUI Status
- Hide, Read Line, Get cursor, Modify line, Window etc., statements
- System fields of reports
- Logical database (Designing, Events)
- SAP Query (User groups, Info Sets and Queries)
- ALV reporting



## **Dialog Programs**

ABAP Memory and SAP Memory

LUW and Update bundling technique

Screens, flow logic events and Module pool

Basic Screen elements (I/O field, Radio buttons and Check box etc.,)

Maintaining screen sequences (Set screen, Call Screen and leave to screen)

Field checks (Automatic, flow logic and module pool)

Calling Programs (Submit, Call Transaction, Leave to list processing)

Sub screens and modal Screens

Table Controls, Steploops and Tabstrips

## **File Handling**

Local Files (Upload, Download etc)

Sequential Files (Open dataset, Read Dataset, Transfer etc.)

Files Formats

Logical Files and Physical files

Data Transfer Scenarios and methods

BDC session method (Creating, Processing, Analyzing and Correction errors in Sessions)

Recording Technique

BI Session features, Status and OK codes

Call Transaction method (Options, Tracing errors and Correction)

Background Processing (Creating, Scheduling and Monitoring Jobs)

LSMW (Methods, Steps and Conversions rules etc.)

## **SAP Scripts**

Form designing (Pages, Windows, Page windows and Paragraphs etc.)

SAP Script symbols

Control commands

Standard Text and Styles

Inserting Logos (TIFF and Bitmap images)

Modifications to Form and Print program

Debugging, copying forms etc.

## **Smart Forms**

Smart form and Form Logic

Calling a Form from print program



Different types of nodes (Page, Table, Loop etc)

Difference between SAP Script and Smart Forms



## **Enhancements**

Changing SAP Standard

User Exits and Customer exits

Implementing Function, Menu, Screen exits

BADI

## **ALE**

Distributed Systems

ALE Services and features

ALE Inbound and Outbound process

ALE Configuration (Logical systems, RFC Dest., Model view, Port, Partner Profiles etc)

ALE Distribution Scenarios

Transferring of Master Data (PUSH, PULL and Change Pointers)

Filtering concepts (IDOC and Segment filtering, Message reduction)

## **IDOC**

Features and structure of IDOC

Idoc type and Message type

Segment definition and components

Creating Segments

Creating Idoc types (Basics Type and Extension)

Crating Message types and Process codes

Developing Selection and Posting programs

Idoc Enhancements



## **RFC**

Introduction of RFC

Communication mechanisms through RFC

ABAP interfaces (RFC,tRFC, ARFC)

Difference between tRFC and ARFC

## **BAPI**

SAP Business Objects

Business Object Builder and BOR

Features and applications of BAPI

Creating Business Object types

Developing BAPIs

Working with a standard BAPI

**After completion of all topics there will be a case study**