

Course Description

Overview

This course enables users of all levels to understand essential concepts and features required to create an iBase database from scratch.

The scenario-driven exercise is tailored around an Insurance iBase solution with example Users and restrictions. The training will be conducted in a VM Session that includes a SQL Server instance.

The exercises introduces the methodology involved in database design including customised Icons and Code Lists. The schema will include Labelling Schemes, Charting Schemes, Mapping Configurations and customised Analyst's Notebook templates and semantics.

After successfully creating an iBase database, the users will create a Development MS Access database and a Production SQL database environment. The Production database will include setting up Search 360, Full-Text Search, Alerting and SCC Data Access Control.

Course Objectives

Upon completion of this course, users will create a side-by-side Development and Production environment. The Database environment will contain an MS Access database that will allow designers to modify the database offline. The Production environment will contain a fully functional SQL Server database.

During this course, students will learn the following concepts and processes:

- Understand the consultation and design process
- Understand the use of Database Design Models and schemas in planning the database
- Modify the iBase options:
 - Use customised Icon List text file
 - Specify the User Template pathway
- Create a new Insurance Claims database:
 - Create Entity Types
 - Create Link Types – valid entity end types
 - Create Fields – use of Discriminator fields and Mandatory fields
 - Create and import iBase Code Lists
 - Pick Lists & Hierarchical Pick Lists
 - Icon Lists
 - SCC Lists
 - Modify the iBase Iconlist.txt file
- Use MS Access to fix some errors
- Use Schema Integrity Check
- Use Database Repair & Compact
- Use Link Integrity Check
- Suggested Windows Folder Structure
- Create database template
- Create database from database template
- Upsize security and database files to SQL Server
- Set up Search 360, Full-Text Search and Alerting
 - Includes references on 3rd party software installation guide for iFilters and MS Access Database Engine
- Create security restrictions:
 - Security Policies
 - Security Group Restrictions
 - Database SCC restrictions
 - Users

Intended Audience

This course is suitable for the following audiences:

- iBase Administrators
- iBase Designers

Prerequisites

The prerequisites for taking this course are:

- Knowledge using the Microsoft Windows operating system.
- Basic understanding of analytical techniques.
- Q³i₂ - IBM9I03G IBM i2 Analyst's Notebook Essentials.
- Q³i₂ IBM i2 iBase User Course.

Follow-On Courses

This course is a prerequisite for the following courses:

- Q³i₂ - IBM i2 iBase Systems Administrator course.

The following course is recommended and can be run as a prerequisite or follow-on to iBase Designer:

- Q³i₂ - IBM i2 iBase Importing course

Course Elements

Exercises in this course are presented using the following elements

Guided Exercises

To facilitate the training, all participants will learn how to create a small customised iBase database for a fictitious client who requires analysis of Insurance Claims. To understand how iBase works, the database will be created from scratch, with detailed step-by-step instructions to assist the training.

To facilitate the training, concise spreadsheets containing the necessary schema specifications are provided to assist students who may be slow typists.

There are no revision exercises.

There is enough repetition in most steps to reinforce knowledge.

To facilitate the training, staged versions of completion are provided.

Guided Error Handling Exercises

In some cases, the students will be guided towards forcing errors or bad practices. These are designed to show how to fix the error.

Estimated Training Schedule

Note: Course speed will vary depending on individual's computer skills, willingness and prior knowledge so exercises may start / finish either earlier or later than can be anticipated.

Day 1

1. iBase Database Design Model
 - The Consultation Process
 - iBase Design Visual Schema
 - iBase Database Design Model
2. Creating The iBase Database Security & Database Files
 - Create iBase Security IDS File
 - Create iBase Database IDB File
 - Modifying Database Properties
 - iBase Database Logo
 - Modify iBase Options
3. Defining The Entity Types & Link Types
 - Entity Types
 - ◆ Customised Icons & The iBase Icon List
 - ◆ Create Entity Types
 - Link Types
 - Modifying The iBase Record ID Prefix
4. Creating IDT Templates
 - Specifying IDT Template Location
 - Creating IDT Template File

Day 1-2

5. Fields, Attributes, Code Lists
 - This exercise may start on Day 1 and continue to Day 2
 - Non-Standard Fields
 - ◆ Attributes
 - ◆ Code Lists
 - ▲ Manually Creating Code Lists
 - ▲ Hierarchical Code Lists
 - ▲ Importing Code Lists
 - ◆ Field Semantics
 - Create Non-Standard Fields For Claims Database
 - Create IDT Template Of Claims Database
 - Opening A Completed Stage
 - ◆ Changing The IDS Security File Pathway

Day 2

6. Standard Fields
 - Security Classification Code (SCC)
 - Creation / Update & iBase Record ID Fields
 - Create Standard Fields For Claims Database
 - Create IDT Template Of Claims Database
7. iBase Semantics
 - Assigning Semantics To Sub Icons
 - ◆ Using The Semantic Types Dialog
 - ◆ Fixing Icon List Errors
 - ▲ Icon List Entry Not In The Iconlisttxt File
 - ▲ Icon List Entries Not Sorting Correctly
 - Saving Customised Semantics
 - Create Semantics For Sub Icons For Claims Database
 - Create IDT Template Of Claims Database
8. Schema & Link Integrity Checks
 - Schema Integrity Check

- Link Integrity Check
 - ▲ Add Dummy Data To Claims Database
 - ▲ Database Statistics
 - ▲ Run Link Integrity Check
- Create IDT Template Of Claims Database
- 9. Labelling, Schemes & Configurations
 - Labelling Scheme
 - Analyst's Notebook Template
 - ◆ Create iBase Chart Based On Empty Analyst's Notebook Template
 - ◆ Assign Semantics For Entity & Link Types
 - ◆ Modify iBase Attribute Classes
 - ▲ Set Attribute Class User Palette
 - ▲ Set Text Attribute Class Paste & Merge Behaviour
 - ▲ Set Vertical Order Of Attribute Classes
 - ▲ Assign Semantics For Critical Attribute Classes
 - ◆ Modify Default Grading, Line Strengths & Date & Time Format
 - ◆ Modify Default Behaviours & Styles
 - ▲ Chart Properties
 - ▲ Set Default Style
 - ◆ Create Analyst's Notebook Timeline Template
 - ◆ Test Template
 - Charting Schemes
 - ◆ Create Charting Schemes
 - ◆ Test Charting Scheme
 - GIS Mapping Configurations (Only If Client Has GIS Interface)
 - ◆ Initialising The Database For Mapping
 - ◆ Create Mapping Configuration
 - Create IDT Template Of Claims Database

Day 2-3

- 10. Datasheets
 - This exercise may start on Day 2 and continue to Day 3
 - Unlinked Entity Datasheets
 - ◆ Create Default Unlinked Datasheets For Claims Database

Day 3

- Fixing Datasheets Errors
- Linked Datasheets
 - ◆ Create Linked Datasheets With All Link For Claims Database
 - ◆ Create Filtered Linked Datasheets
- Create IDT Template Of Claims Database
- 11. Repair & Compact
 - Security File Repair & Compact
 - Database File Repair & Compact
- 12. Setting Up iBase Environments For Development & Production
 - Setting Up The Development Environment
 - ◆ Windows Folder Structure
 - ◆ Setting Up The Development Database
 - Setting Up The Production Environment
 - ◆ Pre-iBase SQL Permissions
 - ◆ Instructions on how to install additional 3rd party software
 - ▲ Office iFilters
 - ▲ PDF iFilter
 - ▲ MS Office Access Database Engine
 - Create The SQL Production Security file and Database file

- ◆ Upsize The IDS Security File
 - ◆ Create The Production SQL Database based on the template
 - ◆ Setting Up Search 360
 - ▲ Specify the Search 360 Fields
 - ▲ Import User-Defined Synonyms
 - ▲ SQL Server Management Studio Options
 - ▲ iBase Index Service Configuration
 - ◆ Setting Up Full-Text Search
 - ▲ Specify the Full-Text Search Fields
 - ▲ Import Excluded Words
 - ▲ Create, Import and Export Synonyms
 - ▲ Update Person Name Variants
 - ◆ Setup Alerting (Optional)
 - ▲ Alerting Configuration & Schedule
 - ◆ SQL Server Agent Jobs
13. Security Permissions & Restrictions
- Security Manager
 - Security Policy
 - Restricted Group Permissions
 - ◆ Yellow Key: Database Management Group
 - ◆ Green Key: Systems Commands Access Control Group
 - ◆ Red Key: Data Access Control Group
 - ◆ Blue Key: Folder Object Control Group
 - Security Access For Users
 - Test Security On Production Database
 - Test Security On Development Database