

Course Description

Overview

This course enables users of all levels to understand essential concepts and features required to create, edit and delete records in iBase as well as all methods of searching, querying reporting, charting and exporting iBase records.

The scenario-driven exercises include example reports, images and other information with instructions on how to create records directly from the raw data and document the information using a consistent methodology. Users will learn how to search for records using the different searching and analytical functions in both the iBase User and Analyst's Notebook interfaces.

The exercises introduces different ways to identify the extent of a network and how to incorporate some of the Analyst's Notebook visualisation and searching techniques with iBase data.

Understanding the way iBase works in creating unique records and how it works with Analyst's Notebook.

Course Objectives

Upon completion of this course, users should be able to:

- Understand the terminologies used in iBase - Entities, Links, End Types, Discriminator fields and Mandatory fields.
- Understand how to use iBase pick lists.
- Modify the iBase options.
- View a record using the Standard View, Datasheets, Links and iBase Link Chart.
- Create and edit iBase records from raw data using iBase drag and drop, iBase linked datasheets and via the Analyst's Notebook interface.
- Expand networks using different methods or find how two records are connected to each other.
- Search for keywords using Full-Text Search and Search 360.
- Create and run Queries and Scored Matches.
- Use Sets to compare or combine results of searches.
- Create Browse Definitions to view specific fields in the results of Queries and Sets.
- Create and run customised iBase Reports with and without links.
- Export data to Excel.
- View iBase records as a Timeline Chart in Analyst's Notebook.
- Create and manage Alerts.

Intended Audience

This course is suitable for the following audiences:

- Law Enforcement Agencies
- Intelligence Analysts
- Investigators
- Researchers
- Accountants
- Auditors
- Prosecutors, Lawyers, Solicitors
- Fraud Analysts
- National Security
- Telecommunications, Insurance, Banking, Retail industry
- Data Entry Users
- iBase Administrators & iBase Designers

Prerequisites

The prerequisites for taking this course are:

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

Follow-On Courses

This course is a prerequisite for the following courses:

- Q³i₂ - IBM i2 iBase Importing course
- Q³i₂ - IBM i2 iBase Designer & Setup course
- Q³i₂ - IBM i2 iBase Systems Administrator course

Course Elements

Exercises in this course are presented using the following elements:

Guided Exercises

Raw data is provided and students are guided through the process to solve the scenarios with detailed step-by-step instructions to obtain the required results.

The scenarios include multiple entities and links to ensure repetition and thereby reinforce the functionality of i2 iBase.

Revision exercises to reinforce functions and methodologies taught.

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 or record the information a different way.

Reinforcement

After learning the basics involved in different functions, students will be asked to use those functions again in subsequent exercises in different ways. This ensures repetition learnt early can be applied again in different circumstances, such as using a Set as the source of a Query or a Report.

Revision

After each exercise, the students WILL be asked to participate in the revision exercises to reinforce their knowledge and competency in that function.

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

0. Navigating iBase User

- Learn how to log into iBase, view user information and change password.
- Modify iBase Options to view dialogs in tabs.
- View Entities
- View Field Properties, Field Types, discerning the difference between Discriminator and Mandatory fields.
- Links & Valid Link Ends
- **Questions included to reinforce terms and navigation.**

1. Find Record

- Learn how to use the Find Record:
 - Use of wildcards
 - Searching using code lists.
 - Searching using dates / times.
- View records using the Standard View, unlinked Datasheet, linked Datasheet, Links view and iBase Link Chart.
- **Revision included after each section to reinforce knowledge.**

2. Create, Edit, Delete With iBase User Interface

Repetitive Reinforcement

Scenario: Secure USB found outside building containing sensitive information about the company's favoured bidders for a tender.

Reports: One report containing information about People, Organisations and their contact details.

- Use of Find Record to find if records already exist.
- Create new entity and link records using:
 - Standard view – includes Drag and Drop method to link records.
 - Unlinked Datasheet view – includes Drag and Drop method to link records.
 - Linked Datasheet view – includes creating links via the linked Datasheet

3. Using The Analyst's Notebook Interface

Repetitive Reinforcement

Scenario: continuation of previous scenario.

- Use of Find Record to find records that already exist and add them to the chart.
- Create new entity and link records using:
 - Analyst's Notebook interface – includes creating links via iBase shortcuts, iBase Data Sources Pane and Analyst's Notebook user palette.

4. Expand & Explore Records In Analyst's Notebook

This exercise may start on Day 1 and continue on Day 2

Repetitive Reinforcement

- Use the Expand records on selected entities on the chart to retrieve records one level of separation on whatever is highlighted on the chart.
- Use Expand With Settings to:
 - Expand many level in one step.
 - Expand and include Common Neighbours and/or Connecting Neighbours in one step.
 - Expand and exclude specific Entity Types or Link Types in one step.
 - Expand and change whether the links are merged (Single or Directed multiplicity) and whether the link label is from the database, a total frequency or a total sum of numerical link labels.
- Use the Explore function to preview what is linked to an entity and selectively add individual linked entities to the chart.
- Use the Combination Settings to change the way records are shown when records are charted and/or expanded on the chart.
- Use Find Path to find and chart the connection between two selected entity records on the chart.

- Use Find Common Neighbours and Connecting Links between all selected entities on the chart.

Day 2

5. Text Searching Options

Repetitive Reinforcement

- Use the Full-Text Search to look for key words.
 - Use of Person Name Variants and User Defined Synonyms.
 - Use of excluded words.
 - Create and use Selection Restrictions to narrow the search area.
 - Use Phrase Search to look for phrases.
 - Use Fuzzy search to search for multiple keywords.
- Use the Search 360 Search to look for key words.
 - Change the options to include all results and specify whether strong or weak matches are used.
 - Search for keywords.
 - Search for linked keywords.

6. Queries

Repetitive Reinforcement

- Create and run queries.
 - Single Entity queries.
 - Linked Entity (dumbbell) queries.
- Create and run parameterised queries to prompt the user what parameters to use.
- Use the Coordinate Query Builder to retrieve records that:
 - Are within a fixed distance from a single coordinate.
 - Fall within a grid defined by two coordinates.

7. Scored Matching

Scenario: CCTV camera of person believed to have dropped the secure USB in Exercise 2 and 3.

- Create a Scored Match to build a profile to find possible suspects based on the appearance of the footage.

8. Using Sets & Field Calculator

This exercise may start on Day 2 and continue on Day 3

Reinforcement of query building.

- Create Sets based on queries.
- Append results to existing sets.
- Use the Analyse Sets to find what is common or uncommon to many sets.
- Use the Combine Sets to run Van Diagrams to find what is part of set A but not part of set B.
- Create a set of Targets of Interest from Exercise 2 and 3 to be used for later exercises.
- Run Field Calculator to obtain statistics of queries /sets without running or opening the query / set.

Day 3

9. Browse Definitions

- Create and run Browse definitions to view a customised list of results of a query / set.
- Create an Auto Browse to show results of a query when the user logs into iBase each time.

10. Reports

- Run the Report Wizard to create a report on an Email / Online Account showing all the linked communications using an existing Report Definition and an existing query.
- Create a new Report definition to view a customised list of field for the Person entity and run the report using the Report Wizard on the Targets of Interest from Exercise 8.
- Create a report definition based on the Person report and include some links. Run the report on the Targets of Interest set from Exercise 8.

11. Export Data To Excel

- Run the Export Data To Excel function to export single entity types and linked entity information.

12. Timeline Charting Options

- Chart records using the Timeline Assistant in iBase User and in Analyst's Notebook.
- Chart records using Combination Settings. Includes creating a chart based on the iBase Analyst's Notebook template.

13. Alerts

Reinforcement of query building.

- Create an Alert Definition based on a set of existing records to see who edits or deletes the existing records.
- Create a query and then create an Alert Definition based on the query to see if new records are created which will match the query.
- Testing the alerts by creating / editing records that would match either of the alerts.
- Managing Alerts in the Alert Inbox.
- Managing Alert Subscriptions and Expired Alert Definitions.