

DBASE01 IBM Database Concepts & Facilities (DB2/IMS)

Course Description This course gives an overview of both relational (DB2) and hierarchical (IMS/ESA) database management systems and describes some of the concepts & facilities of both and how they interact.

Who Should Attend Participants should be anyone within the I.T environment who requires a functional overview of IBM database management systems.

Pre-Requisites At least 6 months practical experience gained within an IBM I.T environment.

Duration 5 Days

Database Management Systems

Functional Overview

DB2I

IMS/ESA

DB2 Overview

Functional Overview

Operational Environments

The Relational Database

Tables, Rows & Columns

DB2 Objects

Tables

Indexes

Tablespaces

Databases

Storage Groups

The DB2 Catalog

The Structured Query Language (SQL)

The Basic Select

Insert

Update

Delete

Referential Integrity

Primary Keys

Foreign Keys

Indexes

Referential Constraints

DB2 User Facilities

SPUFI

QMF

DB2 Application Programs

Embedded SQL

The Preprocessor

Bind

The Optimiser

The DB2 Catalog

IMS/ESA

Functional Overview

IMS/ESA Components

IMS/DB

Functional Overview

The Hierarchical Database

IMS/ESA Control Blocks (DBD, PSB, PCB, ACB)

Segment Search Arguments

DL/1 Calls - Retrieval

DL/1 Calls - Update

Full Function Access Methods

Access Method Services

IMS/DC(TM)

Functional Overview

Transactions / Messages

Transaction Flow

MPP's, IFP's, BMP's

Fast Path Access Methods

IMS/ESA - DB2 Joint Considerations

The Runtime Environment

Inter System Communications

Reorganisation

Backup

Recovery

Tuning

Data Integrity

Restart & Recovery