

IMS Database Administration Mastery Program



Role Description: The IMS Database Administration Mastery is for an IMS DBA. This individual is knowledgeable about the database administration concepts of IMS through either hands-on experience or formal and informal education. An IMS Database Administration Mastery requires an in-depth knowledge of the intermediate to advanced tasks required in day-to-day administration, basic DL/I, understanding how to create databases and database objects, and have a knowledge of database security and transaction isolation.

Mastery Requirements: Passing the IMS Database Administration test earns you an IMS Database Administration Mastery. It shows that you have the basic requisite information to administer and support the IMS Database Server.

Test Objectives: The IMS Database Administration test requires knowledge of the IMS components that are required for your system, an understanding of the tools that are available with the products, and the ability to understand the authorities and privileges required to access data. Further, you must have knowledge of basic DL/I and the control blocks required to work with IMS DB Data. Finally you must understand isolation levels, locking methods and database concurrence. The IMS Database Administration test contains 40-60 questions. Candidates are required to score 70% or better to pass the test.

Test: The test covers the following areas:

- Data Base calls/types/usage

 - Full Function, DEDB and HALDB

 - VSAM/OSAM

 - DB design

 - Secondary indexes and Logical Relationships

 - DB calls including SSA, Boolean qualifiers, and Command Codes

 - Batch Message Programming calls

 - System calls

- Services/support

 - PSBGEN

 - Performance

 - Locking

 - Application Checkpoint/Restart and backout

 - Use of DFSDDL0 and call trace

 - DB and buffer pool specification

 - Data Set allocation including multi-volume OSAM and KSDS components

 - IDCAMS

 - DB design characteristics/choices

 - Pointer selection

 - Randomizer selection

 - HALDB Partition Selection

 - Database Reorganisation

 - Database Recovery

 - DB integrity including logging and DBRC

- Control Block usage

 - PSBs and PCBs, DBDs and ACBs

 - Application Interface Block calls

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Test Preparation: There are a number of ways to obtain the knowledge and skills necessary. Below is a list of specific resources to help prepare for this test:

Education Courses offered:

IMS Physical Organization of Databases Workshop
IMS Fast Path Implementation
IMS DB Performance and Tuning
IMS Logical Relationships

Publications available:

IMS Administration Guide: Database Manager
IMS Administration Guide: System
IMS Application Programming: Design Guide
IMS Command Reference
IMS Database Recovery control (DBRC) Guide and Reference
IMS Operations Guide

Presentations available:

Exploring Database Recovery Control
What's New in IMS Tools
An Introduction to IMS High Availability Large Databases (HALDB)
New News in IMS HALDB Tooling
Database Image Copy 2 - A Better Story in IMS V8
IMS V8 DBRC Enhancements: A Brave New World
Migrating to HALDB
HALDB Database Administration
IMS Database Recovery: What's on the Way
IMS Disaster Recovery Techniques for IMS

Redbooks available:

Using IMS Data Management Tools for Fast Path Databases
Ensuring IMS Database Integrity using IMS Tools
A DBA's View of IMS Online Recovery Service
IMS/ESA Database Tools Volume II: System Extension and Other Tools
IMS Data Propagator Implementation Guide
The Complete IMS HALDB Guide All You Need to Know to Manage HALDBs
Database Recovery Control (DBRC) Examples and Usage Hints
IMS Version 7 High Availability Large Database Guide
IMS RECON Maintenance