

# RACF Administration & Auditing

Learn via: **Classroom**

Duration: **4 Days**

**Overview** This four-day, hands-on class is the definitive RACF course for technicians and administrators. The course, designed and written by RACF specialists, is regularly revised and updated to match developments in the RACF and z/OS environments. It introduces and explains the concepts, terminology, commands, and procedures involved in administering and auditing RACF. All major aspects of day-to-day RACF administration and auditing are covered. To ensure full understanding, a number of realistic practical exercises are performed during this course. This course is also available for one-company, on-site presentations and for live presentation over the Internet, via the Virtual Classroom Environment service.

## Prerequisites

Attendees should have a clear understanding of z/OS at a conceptual and practical level. A working knowledge of TSO/ISPF and JCL is also required.

## What You Will Learn

- explain the need for security in business information systems
- describe how RACF meets business information systems security needs
- design a group structure to meet their installation's requirements
- explain & use RACF commands
- describe the effect of the various group profile related parameters
- explain the management and use of the various non-RACF segments in user profiles
- connect users to groups and manage the assigned group authorities
- use the dataset related commands to manage both discrete and generic profiles
- manage general resources
- use and explain the operation of the basic setropts management commands
- use and interpret the output of the Data Security Monitor
- use the database unload utility, cross reference utility, remove id utility, database verification utility, database split/merge/extend utility, and the database block update utility
- run and interpret auditing reports.

## Outline

### Introduction to RACF

What is RACF?; Why do we need security?; Security in the 'old days'; Security these days; What security do we need?; Where are the dangers?; How can RACF help?; RACF profiles; How RACF operates; The RACF database; Multiple data set database; Resource classes.

### The RACF Manuals

The manual library; RACF Security Administrators' Guide; RACF features; z/OS features; Other products; Related non-RACF manuals; RACF command language reference; BookManager and Adobe pdf.

### Planning for Security

The Security Policy; Resource ownership; How to protect resources?; Grouping resources and users; Document the plan.

### Group Structure

What are Groups?; Why have Groups?; Users and Groups; The initial group structure; The Group Hierarchy; System Special and Group Special; Group Profile ownership; Group connections.

### The RACF Commands

Entering RACF commands; RACF commands and the manuals; Entering RACF commands in batch; Entering commands via a CLIST; Online Help.

### Defining RACF Groups

Group profile commands; Basic ADDGROUP; Specifying the SUPERior GROUP & OWNER; Other ADDGROUP parameters; Non-RACF segments - DFP,

z/OS and zVM; Full ADDGROUP syntax; Full ALTGROUP syntax; Full LISTGRP syntax; LISTGRP output; Full DELGROUP syntax; Group command authority; SEARCH command.

## **Defining Users**

User profile commands; Basic ADDUSER; Specifying the default group; Group authority; Class authority; RACF authorities; RACF attributes; Security levels and security categories; Security level checking; Security category checking; Security labels; Other ADDUSER parameters; Non-RACF segments; Full ADDUSER syntax; Basic ALTUSER; ALTUSER-only parameters; Full LISTUSER syntax; LISTUSER output; Full DELUSER syntax; User command authority; Basic PASSWORD; Changing other users' passwords; Full syntax of PASSWORD; Password command authority.

## **Connecting Users to Groups**

Connect and Remove Commands; Basic CONNECT; Full CONNECT Syntax; Basic REMOVE; Full REMOVE Syntax; Connect/Remove command authority.

## **Dataset Profiles**

Dataset profile commands; Basic ADDSD; Discrete data set profiles; Discrete profile parameters; Generic data set profiles; Generic wildcard characters - %; Generic wildcard characters - \*; Generic wildcard characters - \*\*; Specifying data set attributes; Access levels; Auditing access attempts; Profile copying; Security level & category checking; Other profile attributes; Full ADDSD syntax; Basic ALTDSD; ALTDSD-only parameters; Full ALTDSD syntax; Basic LISTDSD; Listing many data set profiles; Listing generic or discrete profiles; Specifying what to list; Full LISTDSD syntax; LISTDSD output; Full DELDSD syntax; Data set command authority; Basic PERMIT; Conditional access lists; Permitting many users access; Removing users and groups; Deleting access lists; Full PERMIT syntax; PERMIT command authority; SETROPTS REFRESH GENERIC(data set); SEARCH command basics; SEARCH control parameters; The FILTER & MASK parameters.

## **General Resource Profiles**

General resource profile commands; Basic RDEFINE; Common RDEFINE parameters; Adding additional profile information; When the class is CONSOLE; When the class is OPERCMDS; When the class is CDT; When the class is SURROGAT; The Started Task Table; Using ICHRIN03; Using the STARTED class; When the class is TAPEVOL; Full RDEFINE syntax; Resource grouping classes; Protecting CICS transactions; Protecting load modules; Protecting SDSF; Basic RALTER; RALTER-only parameters; Full RALTER syntax; Basic RLIST; Common RLIST parameters; Listing Non-RACF segments; Special RLIST features; Full RLIST syntax; RLIST output; Full RDELETE syntax; Remember PERMIT?; General resource command authority; The Global Access Checking table; In-storage profiles; In-storage profile parameters.

## **Auditing RACF**

Auditing RACF; Auditor parameters; RACF Report Writer; Basic RACFRW commands; Full RACFRW syntax; Full SELECT syntax; Basic EVENT command; Full EVENT syntax; Full LIST syntax; RACFRW output example; Full SUMMARY syntax; RACF SMF data Unload utility; SMF Unload utility JCL; Using the unloaded RACF SMF data; Processing the RACF SMF data with DB2; Other reporting tools; The Data Security Monitor; The System & Group Tree Reports; Program Properties & Auth Caller Table Reports; Class Descriptor Table & RACF Exits Report; Global Access Table Report; Started Procedures Table Report; Selected User Attribute Reports; Selected Data Sets Report.

## **RACF Utility Programs**

The database unload utility; The database cross-reference utility; The database cross-reference utility output; The RACF remove ID utility; The database verification utility; The database split/merge/extend utility; The database block-update utility command.