

Understanding CA-OPS/MVS RDF and SSM

Course Summary

Description

This course is designed to enable the student to create, execute, debug and maintain Relational Data Framework (RDF) and System State Manager (SSM) applications. The course will walk the student through the logic necessary to create an application using RDF and SSM. Some of the applications that will be discussed are IPL, network management, on-line tracking and downtime tracking. This course can be customized to customer's specific needs. Hands-on labs are used to reinforce presented topics.

Objectives

At the completion of this course, the student will be able to:

- Use the OpsView ISPF RDF Table Editor and tools
- Create, query, and update tables using OPS/REXX
- Understand how Stateman works
- Activate and deactivate Stateman if necessary
- Define and maintain Stateman automation for started tasks and other resources
- Diagnose Stateman problems
- Migrate to StateMan Version 2
- Configure the StateMan Global Application
- Display and override schedules
- Monitor groups of resources with Schedule Manager

Topics

- RDF overview
- Using the RDF Table Editor
- SQL Overview
- System State Manager
- Operating a Stateman Controlled System
- Understanding the SSM Global Application
- Understanding the Schedule Manager
- Understanding the Group Manager

Audience

This course is intended for automation analysts, systems programmers, and lead MVS Console Operators.

Prerequisites

Prior attendance at PT1189 *Understanding and Using CA-OPS/MVS*, or equivalent knowledge and experience.

Duration

Two days

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Course Outline

I. Relational Data Framework Overview

- A. RDF
- B. Why Use RDF vs. Variables?
- C. Comparison
- D. Intro to Data Modeling

II. Relational Data Framework Editor

- A. Functions of the RDF Editor
- B. Accessing the RDF Table Editor
- C. RDF Editor Entry Panel
- D. RDF Table List
- E. Inserting a new table w/ RDF Editor
- F. RDF Table Structure Editor
- G. RDF Table Data Editor
- H. Table Editor Primary Cmds
- I. RDF Table Editor Line Commands
- J. RDF Table Editor Restrictions

III. Structured Query Language

- A. OPS/MVS Relational Data Framework
- B. Where Can SQL Code Run?
- C. Types of SQL Statements
- D. Common SQL Return Codes
- E. A Wrapper for OPS/MVS SQL
- F. OPS/MVS SQL Reserved Words
- G. Some SQL Definitions
- H. OPS/MVS SQL - Create a Table
- I. Create a Table Example
- J. SQL - Alter a Table
- K. SQL - Delete a Table
- L. SQL - Basic Select of Data
- M. SQL SELECT - Returned Data
- N. WHERE Clause
- O. Example Select w/ Expressions
- P. SQL Performance Advice
- Q. SQL Functions
- R. OPS/MVS Scalar SQL Functions
- S. WHERE Predicates: IN, LIKE
- T. SQL - Update Existing Rows
- U. SQL - Insert New Rows
- V. SQL - Delete Existing Rows
- W. SQL Summarization w/ Group By
- X. Aggregate Functions
- Y. Example of Aggregate Function
- Z. Cursored SQL - Declare Cursor
- AA. Open & Close SQL Cursor
- BB. Cursored SQL - Fetch Cursor
- CC. Cursored SQL - Update Current Row
- DD. Cursored SQL - Example
- EE. Complex Queries - Join
- FF. Understanding SQL Join

GG. Complex Queries - Subquery

HH. RDF Utility Programs

II. Data Modeling

IV. System State Manager Overview

- A. SSM V1 Overview
- B. StateMan V1 Components
- C. Monitoring StateMan From Console
- D. Monitoring StateMan From ISPF
- E. SSM Versions
- F. SSM STCTBL Resource Table
- G. Resource Table Structure
- H. STCTBL Table View
- I. System State Manager
- J. Phases in the SSM Cycle
- K. Basic PREREQ Checking
- L. StateMan Modes & States
- M. StateMan Action Table
- N. SSM V1 STCTBL Action Table
- O. SSM V2 STCTBL Action Table
- P. SSM V2 Action Table Columns
- Q. ACTION_TEXT Clauses
- R. SSM V2 ACTION_TEXT Clauses
- S. Action Substitution Variables
- T. Additional Action Substitution Variables
- U. STCTBL Supplied Text Actions
- V. Review SSM Rules
- W. Setting the Desired State
- X. SSMBegin REXX Exec
- Y. IPL Time
- Z. System Shutdown
- AA. StateMan IPL Walk-thru
- BB. StateMan Parameter Review
- CC. Directory Table
- DD. StateMan Administration
- EE. StateMan Table Editor
- FF. SNAPSHOT
- GG. Understanding SSM V2
- HH. SSMV2 Required Resource Table Columns
- II. Process Exit example
- JJ. SSMV2 Prerequisite Enhancements
- KK. SSM v2 PREREQ Syntax
- LL. Minimum Number of Prerequisites
- MM. Positive & Negative (+/-) PREREQS
- NN. WLM Scheduling Environments
- OO. SSM v2 Global Events
- PP. Global Event Action Table
- QQ. SSMv2 Global Event Audit Trail
- RR. SSM v2 Global Event Samples
- SS. Auxiliary Tables

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- TT. Sysplex Resource Monitor
- UU. Other SSM Enhancements
- VV. SSM v2 Migration Considerations
- V. Monitoring and Diagnosing System State Manager**
 - A. MVS Console Interface vs. ISPF Interface
 - B. Using SSMDISP
 - C. Using STATESET
 - D. Using the SSM ISPF operator interface
 - E. ISPF status screen
 - F. ISPF primary and line commands
 - G. Understanding problem sources
 - H. Stateman operations lab exercise
 - I. Stateman diagnosis overview
 - J. Understanding problem sources
 - K. Stateman operational problems
 - L. Stateman definition problems
 - M. Stateman component problems
 - N. Stateman internal problems
 - O. General Stateman diagnosis technique
- VI. Understanding and Migrating to the SSM Global Application**
 - A. SSMGA Capabilities
 - B. SSMGA Architecture
 - C. SSM to SSMGA Migration
 - D. Cross-system requisites
 - E. SSMGA Cross System Prereq Lab
 - F. SSMGA Resource Movement
- G. SSMGA Resource Movement Lab**
- H. SSMGA Group movement**
- I. SSMGA Group movement Lab**
- J. Migrating the SSMGA Global System**
- K. Lab: Migrate the SSMGA Global System**
- VII. Understanding the Schedule Manager**
 - A. Schedule Manager capabilities
 - B. Schedule Manager terminology
 - C. Schedule Manager ISPF dialogs
 - D. Decoding Schedule Manager colors
 - E. Schedule Manager line commands
 - F. Defining Schedule Manager periods
 - G. Finding Schedule Manager conflicts
 - H. Schedule definition exercise
 - I. Schedule Manager reports
 - J. Schedule loading and unloading
 - K. Schedule Manager diagnosis
 - L. Performing temporary schedule overrides
 - M. Schedule Manager override exercise
- VIII. Understanding the Group Manager**
 - A. Group Manager concepts
 - B. Relationship between State Manager and Group Manager
 - C. Group Manager tables
 - D. Group Manager ISPF dialogs
 - E. Group membership table
 - F. Understanding group status definitions
 - G. Group Manager exercise