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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"Charting the Course …"

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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. Cur sor e d SQL - Declare Cursor
    AA. Open & Close SQL Cursor
    BB. Cur sor e d SQL - Fetch Cursor
    CC. Cur sor e d SQL - Update Current Row
    DD. Cur sor e d SQL - Example
    EE. Complex Queries - Join
    FF. Understanding SQL Join
    GG. Complex Queries - Subquery
    HH. RDF Utility Programs

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 EXIT
   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