

## **SMP/E for Installation & Maintenance**

*An absolutely essential course for all z/OS Systems Programmers, this four-day course is a complete introduction to the use of SMP/E for installing new software and applying changes to existing software (PTFs, APARs, etc.) for the z/OS environment.*

*All the important aspects of using SMP/E are covered, including a detailed explanation of what happens 'under the covers'.*

*The course contains valuable and extensive hands-on exercises that demonstrate all the major aspects of using SMP/E to install products and apply maintenance.*

**Duration: 4 days**

### **Contents**

#### **SMP/E Overview**

What is 'System Modification Program Extended'?; What makes a product?; SMP/E elements; How products are packaged; System modifications; SMP/E database; Receiving a SYSMOD; Applying, accepting and restoring a SYSMOD; System Generation; Consolidated Software Inventory; CSI configuration option; Invoking SMP/E.

#### **RECEIVE Processing**

The RECEIVE process; Modification Control Statements; MCS: header statement functions, software environment statement; the Global Zone definition entry; GZONE entry example; Global Zone options entry; options entry example; Global Zone utility entry; Utility entry example; SMP/E allocation; Global Zone DDDEF entry; DDDEF entry example; review of Global Zone entries; creating Global Zone entries - UCLIN; relative file packaged tapes; receive processing; Global Zone sysmod entry example; Exception sysmods; held sysmod entry example; Holddata example; the RECEIVE command; Sysmod entry with SOURCEID example; REPORT SOURCEID output examples; SMP/E dialogs primary option menu & query selection menus.

#### **APPLY Processing**

Product function & installation methods; Target Zone definition entry; TZONE entry example; Target Zone DDDEF entry; Target Zone DDDEF entry example; Target Zone DDDEF PATH entry; Target Zone DDDEF PATH entry example; MAC, SRC, and MOD element MCS; Data Element MCS; Program Element MCS; identifying the target system structure; how JCLIN processing works; JCLIN processing example; JCLIN report example; JCLIN - MAC and ASSEM entries; JCLIN - MOD and LMOD entries; JCLIN - DLIB entries; Invoking JCLIN; the save control dataset; determining target libraries; apply processing; concatenating macro libraries for assemblies; SYSLIB DDDEF example; the APPLY command; Target Zone SYSMOD entry example; element service level; Target Zone MAC and SRC element entries; Target Zone MOD and DATA element entries; base and dependent functions revisited; replacing an existing product; Sysmod installation via the SMP/E dialogs; SMP/E dialogs - sysmod management options.

## **ACCEPT Processing**

Function installation methods; Distribution Zone definition entry; DZONE entry example; Distribution Zone DDDEF entries; Distribution Zone DDDEF entry example; ACCEPT processing; concatenating macro libraries for assemblies; the ACCEPT command; Distribution Zone SYSMOD entry example; Distribution Zone MAC and SRC element entries; Distribution Zone MOD and DATA element entries; Sysmod installation via the SMP/E dialogs; SMP/E dialogs - sysmod management options.

## **Product Maintenance**

Product maintenance (service); product maintenance sysmods; product maintenance sysmod naming convention; product maintenance ++VER statement; updating MAC and SRC elements; updating MOD (and LMOD) elements; Sysmod relationships; the prerequisite relationship; the requisite relationship; the supersede relationship; the negative prerequisite relationship; TZONE sysmod entries - examples; related APPLY command parameters; element service level; tracking the service level of an element; element entries - service level; exception sysmods; resolving error holds; resolving system holds; the RELEASE MCS statement; maintenance exposure; the REPORT ERROR SYSMODS command; Sysmod regression; Sysmod construction rules; managing regression; restore processing; concatenating macro libraries for assemblies; the RESTORE command; Sysmod relationships and restore; Reject processing; the REJECT command.

## **Additional SMP/E Features**

The conditional requisite relationship; the REPORT CROSSZONE command; cross product 'borrowing' - the problem, the solution; cross zone 'borrowing' - the problem, the solution; callable services support; processing SYSLIB in JCLIN; CALLIBS in LMOD element entries; installing LMODs that use CALLIBS; the zone management commands; installing SYSGEN and SMP/E products; the GENERATE command; the CLEANUP command; descriptive MCS statements; product and feature entries.

## **Installing Products and Service**

Reporting problems to the vendor; Preparing for installation; Installing maintenanc; Product delivery mechanisms used by IBM; CustomPac service; The Recommended Service Upgrade; ShopzSeries; PSP buckets; HOLD FIXCAT; Fix Categories; Receiving FIXCAT HOLDS; APPLY / ACCEPT FIXCAT operand; REPORT MISSINGFIX command.