

Installing and Unleashing CA-Automation Point

Course Summary

Description

This course is designed to help you design, install, and implement the CA-Automation Point product. It is designed to give a complete understanding of the product essentials in a single course.

This enables the attendee to configure Automation Point and develop automation applications on the Windows platform. Quizzes, reviews, and hands-on labs are used to reinforce presented topics.

Topics

- Introduction to CA-Automation Point
- Automation Point Project Planning
- Windows Overview, including concepts, device drivers, services, networking, and install
- Host Connections and Adapter Cards (Terminal emulation, 3270, HLLAPI, and asynch)
- Installing Automation Point Automation Point
- Configuring Automation Point Parameters
- Configuring Keyboard mapping and Scan code files
- Configuring Asynchronous Terminal Sessions
- Using Automation Point Script files
- Automation Point Migration (optional Topic)
- Operating CA-Automation Point
- Using Remote Operations
- Coding Automation Point Rules
- Using REXX with Automation Point
- Using AXC Command Processors
- Designing High Availability, low maintenance automation
- Using Program to Program Queues (PPQ)
- Installation and use of the global variable environment (GLV)
- Editing Automation Point Menus
- Using the Automation Point APIs
- The Automation Point Voice Interface
- Notification Manager
- Using the OPS/MVS <-> Automation Point Interface (optional Topic)
- Using the Automation Point HMC Interfaces

Audience

This course is designed for operations personnel, automation analysts, and systems programmers.

Prerequisites

Students entering this course should have end user knowledge of Windows, and REXX programming experience (as covered in ProTech's [*Multiplatform REXX Programming*](#) course).

Duration

Five days

Note: Optionally, an instructor can be retained for additional days to provide on-site programming and systems expertise.

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Course Outline

I. Introduction to CA-Automation Point

- A. What is Automation Point?
- B. Automation Point Features
- C. Console Connections w/ Native Terminals
- D. Console Connections w/ Automation Point
- E. Obsolete Products now rolled into A.P.
- F. Automation Point Release Chart
- G. Automation Point Architecture
- H. New in 4.0: CMDIN Rules
- I. New in 4.0: CMDIN Availability
- J. Hardware Automation Facility (HAF)
- K. New in 4.0: Export Message Command
- L. New in 4.0: Notification Features
- M. Notification Manager Web Access
- N. New Notification Manager Features
- O. Notification Website Architecture
- P. Notification Website Security
- Q. New in 4.0: Two-Way Paging
- R. New in 4.0: Animated Text-to-Speech
- S. New in 3.5: AP Remote Viewer
- T. New in 3.5: Web Message Viewer
- U. What's Next?
- V. 4.next: Native TN3270 Connectivity
- W. 4.next: Native SMTP Email
- X. Future: Web Service Connectivity
- Y. Future: Expanded Instrumentation
- Z. Future: High Performance Notification Manager
- AA. Future: Automation Research
- BB. Related CA Products
- CC. Navigating Automation Point Documentation

II. Automation Point Project Planning

- A. Defining Automation Point
- B. Analyze current host environment
- C. Define the workstation
- D. PC Hardware
- E. Questions to ask?

III. Windows Overview

- A. Understanding Windows Versions
- B. Windows Version History
- C. Windows 2000 Block Diagram
- D. Windows Core Features
- E. Windows File Systems
- F. Windows Networking
- G. Windows Security
- H. Windows Remote Access

- I. Windows Maintenance
- J. Windows Diagnostic Tools
- K. Windows Support Options
- L. Add-on Windows Tools

IV. Installing Windows NT/2000/XP

- A. Planning your Install
- B. Performing the Install
- C. Post-Install Customization
- D. Example FTP Session

V. Host Connections and Adapter Cards

- A. Host Connection Options
- B. Understanding Mainframe Connections
- C. 3270 Adapter Card Options
- D. PCI Adapter Cards
- E. Attachmate 3270 Card (ISA)
- F. IBM 3270 Coax Card (ISA)
- G. 3270 PCI card Install Steps: AP 3.5+
- H. Multiple 3270 PCI card Install Steps
- I. PCI Expansion Kits
- J. SBS Technologies Product Line
- K. Serial Communication Cards
- L. NICs (Network Interface Cards)

VI. Installing CA-Automation Point

- A. AP 3.5+ Installation Philosophy
- B. Upgrading AP from Previous Version
- C. Online Manuals
- D. Configuration Manager
- E. Configuration Mgr Wizard Interface
- F. Expert Interface
- G. AP 4.0+ Session Configuration
- H. AP 4.0+ Site Directory
- I. Planning the Install
- J. Planning the Install – License Keys
- K. Performing the Install
- L. Acquiring AP Maintenance
- M. Applying AP Maintenance
- N. Post-Install Customization
- O. Optional Post-Install Customization

VII. Configuring Automation Point Parameters

- A. Automation Point Parameter Setting
- B. AP 4.0+ Session Configuration
- C. AP Parameter Summary
- D. Syntax for Profile Parameters
- E. Selected Session Parameters
- F. Session Parameter Examples

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Course Outline (cont'd)

VIII. Keyboard and Scan Code Files

- A. What is a Keyboard Parameter file?
- B. Three Keystroke Parameters
- C. Syntax for Keyboard Parameters
- D. Keyboard Parameter File Example
- E. Customizing Keyboard Parameter Files
- F. Scan Code File Example

IX. Configuring Asynchronous Terminal Sessions

- A. Creating Asynchronous Sessions
- B. AP 4.0 Session Definitions
- C. AP 3.5- Asynchronous Parm Files
- D. Asynchronous Parm File Syntax
- E. Sample RS-232 Async Parmfile
- F. Async Parameters
- G. Async Status Display
- H. Message Parsing Status Display

X. Script Files

- A. What is a Script file?
- B. Script File Syntax
- C. Script Keywords
- D. Example MCS Console Script
- E. Doing away with Scripts

XI. Migrating Automation Point

- A. Assessing your environment
- B. New Features to Consider Using
- C. Possible Automation Point Roles
- D. Conversion Planning: What to Reuse?
- E. Conversion Planning: Incompatibilities
- F. REXX Incompatibilities
- G. REXX Workaround - CMDRESP
- H. REXXUTIL Incompatibilities
- I. Planning your conversion
- J. Performing the conversion
- K. Handling Sticky Issues
- L. Testing
- M. Testing - Simulate.cmd
- N. Operator Training
- O. Cutover

XII. Operating Automation Point

- A. Starting Automation Point
- B. Automation Point Windows
- C. Terminal Emulator Window
- D. AP Function Windows
- E. Merged Message Window
- F. Action Message

- G. Normal Message Recall
- H. Host Log
- I. Command Area
- J. Choosing a Operation within AP
- K. Menu
- L. Listmgr submenu
- M. Pausing Automation
- N. Executing Scripts & REXX Execs
- O. Stopping a REXX
- P. Controlling Font Sizes
- Q. Stopping Automation Point
- R. 3270 Terminal Considerations

XIII. Using Remote Operations

- A. Options for Remote Operations
- B. APVIEW Features
- C. Selecting Automation Point Remote
- D. APView on Windows9x
- E. Defining Remote Access Security
- F. Web Message Viewer
- G. Web Message Viewer Architecture

XIV. Coding Automation Point Rules

- A. So What Are Rules??
- B. Syntax For Rules
- C. Rules Keywords By Category
- D. Rules: Event Filtering Keywords
- E. Rules: Message Display Keywords
- F. Rules: Message Logging Keywords
- G. Rules: Automation Action Keywords
- H. Keywords (Event Traffic Controller)
- I. Types of Variables
- J. Environment Variables
- K. Status Variables
- L. Variable Characteristics
- M. Dynamic Status Variables
- N. Using Dynamic Status Variables
- O. Event Filtering Keywords: Every
- P. Event Filtering Keywords: Limit, Matchlim
- Q. Event Filtering Keywords: Session
- R. Event Filtering Keywords: When
- S. Message Display Keywords: Alarm
- T. Message Display Keywords: Color
- U. Message Display Keywords: Suppress, Display
- V. Message Display Keywords: Hilight, Lowlight
- W. Message Display Keywords: Prefix

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Course Outline (cont'd)

- X. Message Display Keywords: WTO, Reword
- Y. Message Display Keywords: WTXC
- Z. Message Logging Keywords: Log, NoLog
- AA. Rules Example: Log
- BB. Message Logging Keywords: Print
- CC. Automation Action Keywords: DOM
- DD. Automation Action Keywords: OSCMD
- EE. Automation Action Keywords: Reply, Script
- FF. Automation Action Keywords: Sesscmd
- GG. Automation Action Keywords: DOSCmd, XCCmd
- HH. Automation Action Keywords: REXX
- II. Automation Action Keywords: Set, PPQWrite
- JJ. Specifying Text Strings
- KK. Rules Coding Exercises
- LL. How Rules Are Processed
- MM. Coding Efficient Rules
- NN. AP Rules Processing Order
- OO. Tuning Rules
- PP. Rules Member
- QQ. How AP Processes Errors
- RR. More On Tuning Rules
- SS. Rules Tuning Exercises
- N. Host Session Interaction: SESSLIST
- O. Variable-related Commands
- P. GETVARL Example
- Q. Message-related cmds: GetMsgl, DOM
- R. GETMSGI & DOM Example
- S. Message-related commands: MSG
- T. Message-related commands: WTO
- U. Miscellaneous Commands: GETREXXL
- V. Miscellaneous Commands: STOPREXX
- W. Miscellaneous Commands: REXX, Script
- X. Miscellaneous Commands: LOADRULES
- Y. Miscellaneous Commands: PLOT
- Z. PLOT Example & Lab
- AA. Miscellaneous Commands: WAIT
- BB. Designing Your Own REXX Exec
- CC. Hints For Cursor Location

XV. Using REXX with Automation Point

- A. The Big Picture
- B. Automation Point REXX Options
- C. Invoking REXX Programs
- D. Automation Point REXX Environments
- E. Open-REXX Proprietary REXX functions

XVI. Using AXC Command Processors

- A. Automation Point Commands
- B. ADDRESS AXC Commands by Category
- C. Host Session Interaction: GETSCRN
- D. Host Session Interaction: SESSCMD
- E. GETSCRN & SESSCMD Variables
- F. SESSCMD Special Keystrokes
- G. SESSCMD HLLAPI Keystrokes
- H. Selected Keyboard Mnemonics
- I. GETSCRN & SESSCMD Example
- J. Binding to a Session
- K. Host Session Interaction: Buffers
- L. OPENBUF & READBUF Example
- M. Host Session Interaction: SESSCNTL

XVII. Using PPQs

- A. What is a PPQ?
- B. Types of PPQs
- C. Client - Server PPQ Design Flow
- D. Install: What is needed?
- E. PPQ Commands - Create
- F. PPQ Commands - Write
- G. PPQ Commands - Read
- H. PPQ Commands - Delete
- I. PPQ Commands - Lock
- J. PPQ Commands - Unlock
- K. PPQ Commands - List
- L. PPQ Commands - Misc.
- M. Debugging PPQ Programs
- N. Sample PPQTRY.COM session
- O. Diagnosing with ASOTRACE
- P. Sample ASOTRACE.LOG
- Q. PPQ Lab: Client - Server PPQ

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Course Outline (cont'd)

XVIII. Using GLV

- A. Understanding A.P. Global Variables
- B. Understand GLV Groups
- C. GLV Variable Naming Standards
- D. ADDRESS GLV Commands by Function
- E. GLV Commands: Select
- F. GLV Commands: Get
- G. GLV Commands: GrpList
- H. GLV Commands: GrpListV
- I. GLV Commands: List
- J. GLV Commands: ListV
- K. GLV Commands: Purge
- L. GLV Commands: Put, PutP
- M. GLV Commands: Set, SetL
- N. GLV Commands: SetP, SetLP
- O. GLV Commands: Ver, VerV
- P. ADDRESS GLV Lab

XIX. Editing Menus

- A. Menu Terminology
- B. What you can customize
- C. Files used by Menu Processing
- D. Steps to add new item to a Menu
- E. Steps to add a new Submenu

XX. Interfacing to Automation Point TNG

- A. CA-Automation Point Overview
- B. Automation Point TNG Architecture
- C. SNMP Manager-Agent Design
- D. Agent Types
- E. Platform-specific System Agents
- F. Automation Point Event Browser
- G. 3-D, 2-D WorldView Interface
- H. Areas of Integration
- I. Automation Point - Automation Point Interfaces
- J. TNG Interface Using PPQs
- K. Automation Point Interface - Rules & REXX
- L. Automation Point Interface - Rules Keywords
- M. Automation Point Interface - REXX Commands
- N. Event Traffic Controller Sessions
- O. Event Traffic Controller Logic
- P. Installing Automation Point Interfaces
- Q. Address TNG WorldView Interface
- R. WorldView Interface - REXX Cmds

XXI. The Automation Point Voice Interface

- A. Voice Overview
- B. Voice Hardware
- C. Dialogic® CT hardware Overview
- D. Setting up a Voice Card
- E. Post-Install configuration & testing
- F. Programming ADDRESS VOX
- G. Sample Voice Application: Txt2vox
- H. Sample Voice Application: CALLXFER

XXII. Notification Manager

- A. Notification Services
- B. What Notification Manager Does
- C. Contacts
- D. Predefined Methods
- E. User Written Methods
- F. Parameters
- G. Day-of-Week Schedules
- H. Date Specific Schedules
- I. Ordering Multiple Active Schedules
- J. NMFIND: Interface to Automation
- K. NMFIND Syntax & Examples
- L. NMANSWER
- M. Forwarding
- N. Escalation
- O. Loops and Duplicates
- P. Broadcasting
- Q. The Call Tree
- R. Message Store and Forward
- S. Notification Manager, Voice, & PPQ
- T. Configuring Notification Manager
- U. Creating an Automation Point DBMS
- V. Configuring NM Web Services
- W. Select Notification Server to Configure
- X. Assigning Notification Server Channels
- Y. Tracing and Logging
- Z. Sample Methods
- AA. REXX API
- BB. New Features for Release 4.0
- CC. Notification Website
- DD. Security-Controlled Actions
- EE. Notification Manager Features
- FF. Notification Manager Web Access
- GG. Notification Website Operations

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Course Outline (cont'd)

XXIII. Using the OPS/MVS <-> Automation

Point Interface

- A. Interface Overview
- B. Installation Requirements
- C. Using the Interface from OPS/MVS
- D. Address AP NMFIND Example
- E. Address AP PPQ Command
- F. Address AP REXX Command
- G. Address WTO & Automation Point
- H. Using the Interface from Automation Point
 - I. Address OPS CMDRESP
 - J. Address OPS LIST Command
 - K. Address OPS OPER Command
 - L. Address OPS OSFTSO Command
 - M. Address OPS VER Command
 - N. Address OPS WTO Command
 - O. Installation and setup (MVS)
 - P. Installation Requirements (MVS)
 - Q. Connection Type and Protocol
 - R. CAICCI Install - Mainframe
 - S. Defining AP Session From OPSVIEW
 - T. CA-OPS/MVS Parameters
 - U. Security Options
 - V. Address AP Security Rule
 - W. OS/390 CCI Commands
 - X. AP Server CCII Connection Response
 - Y. Installation and Setup (PC)
 - Z. Problem Diagnostics

XXIV. Using the Automation Point HMC

Interfaces

- A. Mainframe IPL Considerations
- B. HMC Interfaces
- C. Automating the IPL Process
- D. APCMOS Program
- E. APCMOS Details
- F. Understanding HMC DLLs
- G. APCMOS Example
- H. Hardware Automation Facility (HAF)