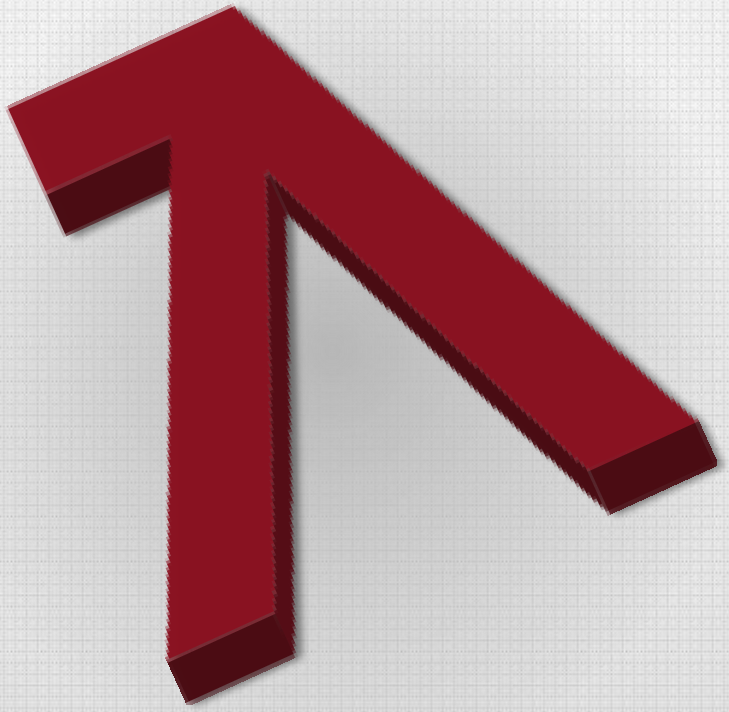

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# CA 2E CM Training

Mark Schroeder

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# Mark Schroeder Bio

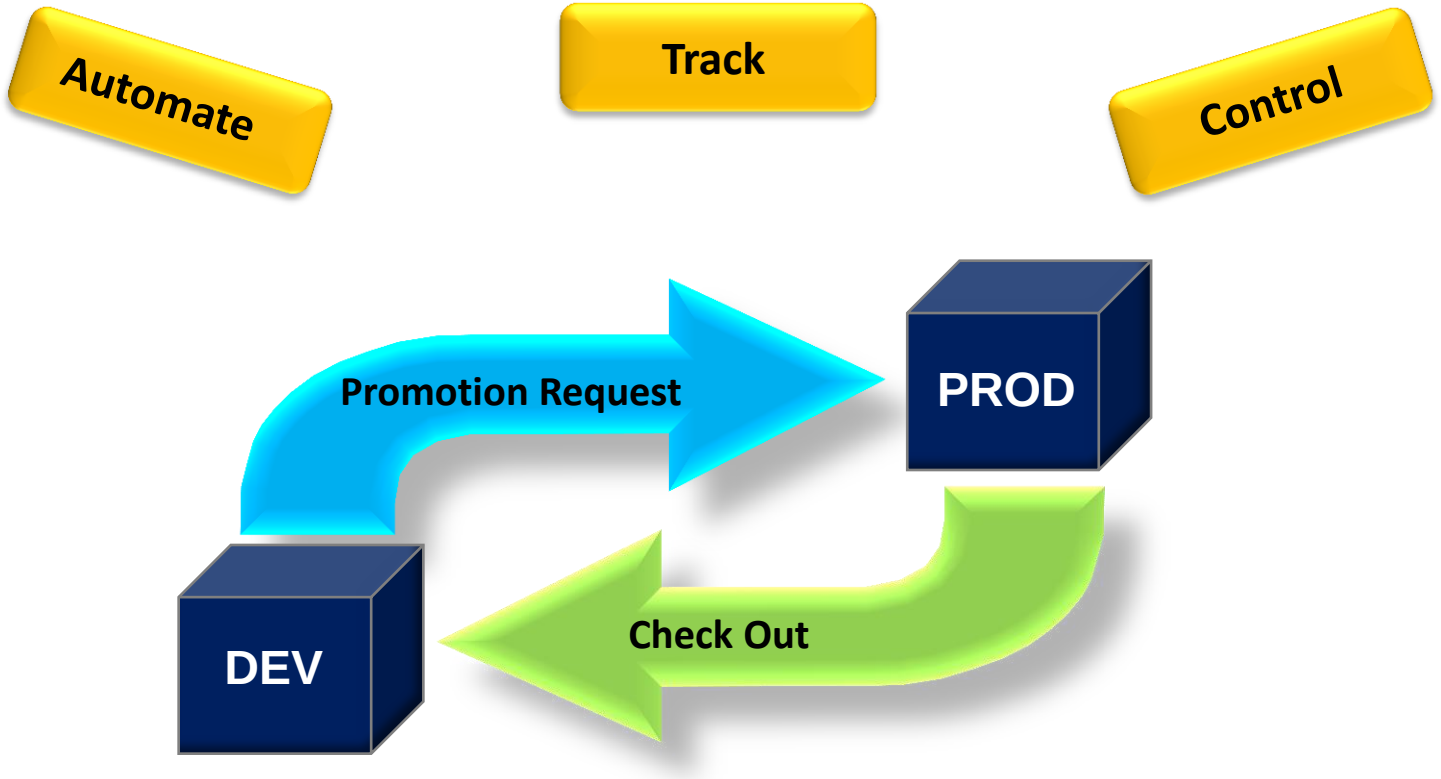
Mark holds a Master's Degree in Applied Information Technology and a Bachelor's Degree in Psychology. He holds graduate level certifications in web application development and IT organization management.

He has over 20 years of experience in software development. His experience has been in IBMi application development using CA2E and web application development in Java, PHP, CA Plex, LANSA and EGL. He specializes in building enterprise web and mobile business applications.

# Agenda

- Common Terms
- Administrator Overview
- 2E CM Workflow

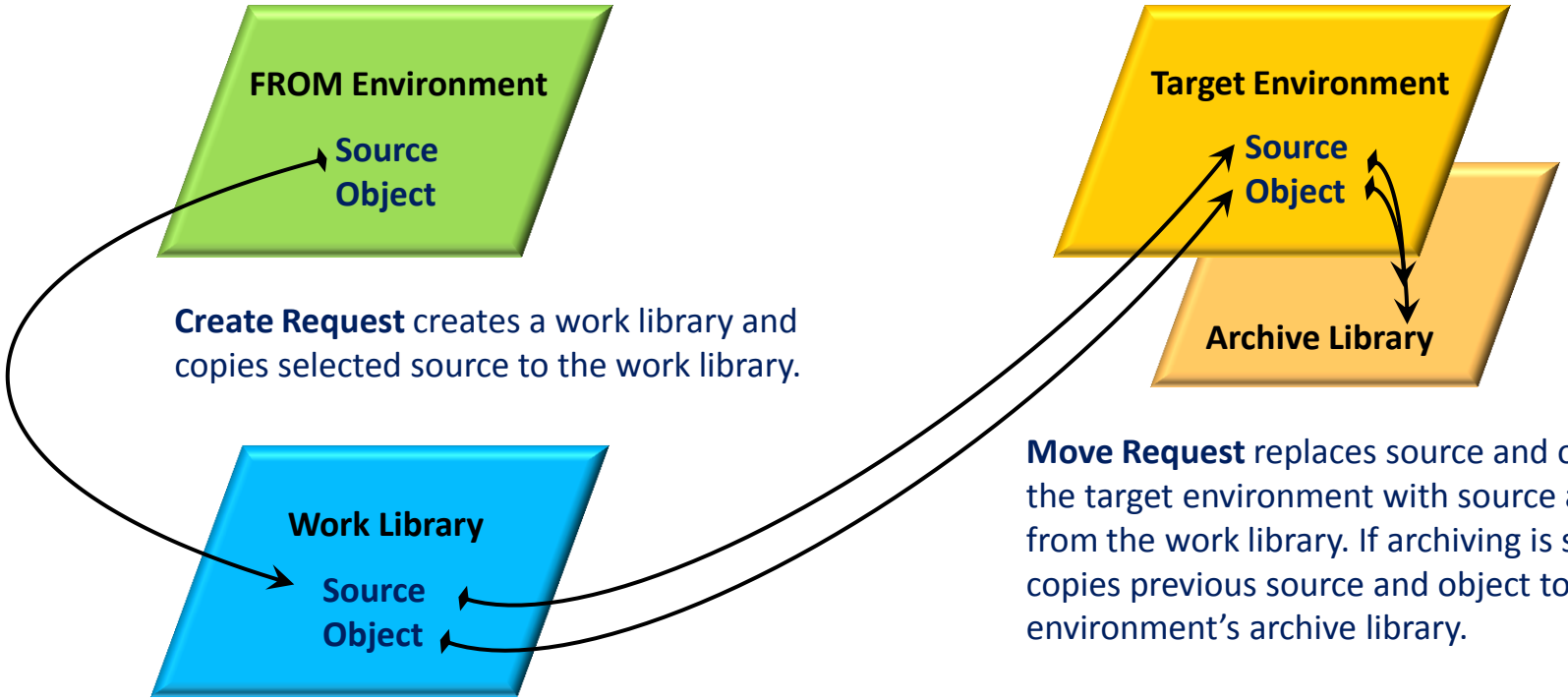
# What is Implementer / CA 2E CM?




**Implementer provides visibility to and control of software changes on your system**

# Common Terms:

## Promotion Framework



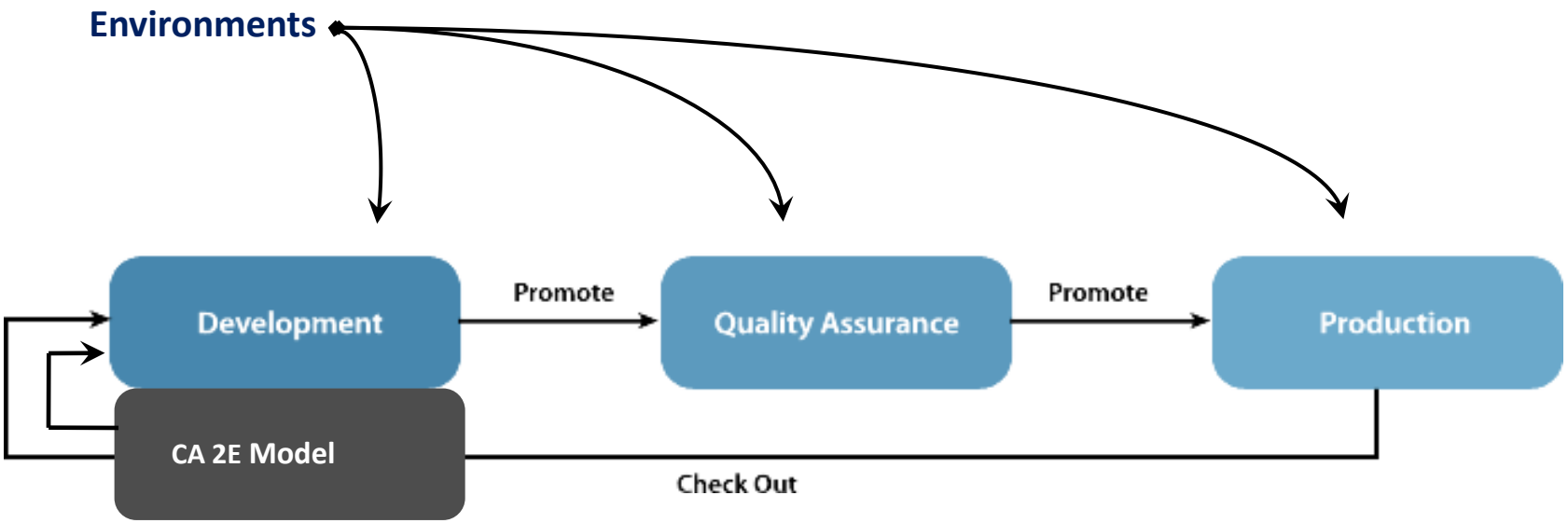

**Create Request** creates a work library and copies selected source to the work library.

**Move Request** replaces source and object in the target environment with source and object from the work library. If archiving is specified, copies previous source and object to the environment's archive library.

**Compile Request** creates objects in the work library from source in the work library, using commands defined on object codes and the library list defined for the target environment.

# Common Terms:

## CA 2E Change Management




**Check Out** member/objects from production environment to development environment.

**Lock** created at check out remains until promotion to production.

**Promotion Request** moves changed member/objects from development to QA environment, and from QA environment back to production environment.

# Administration Overview

Set up Implementer to reflect your change control process …

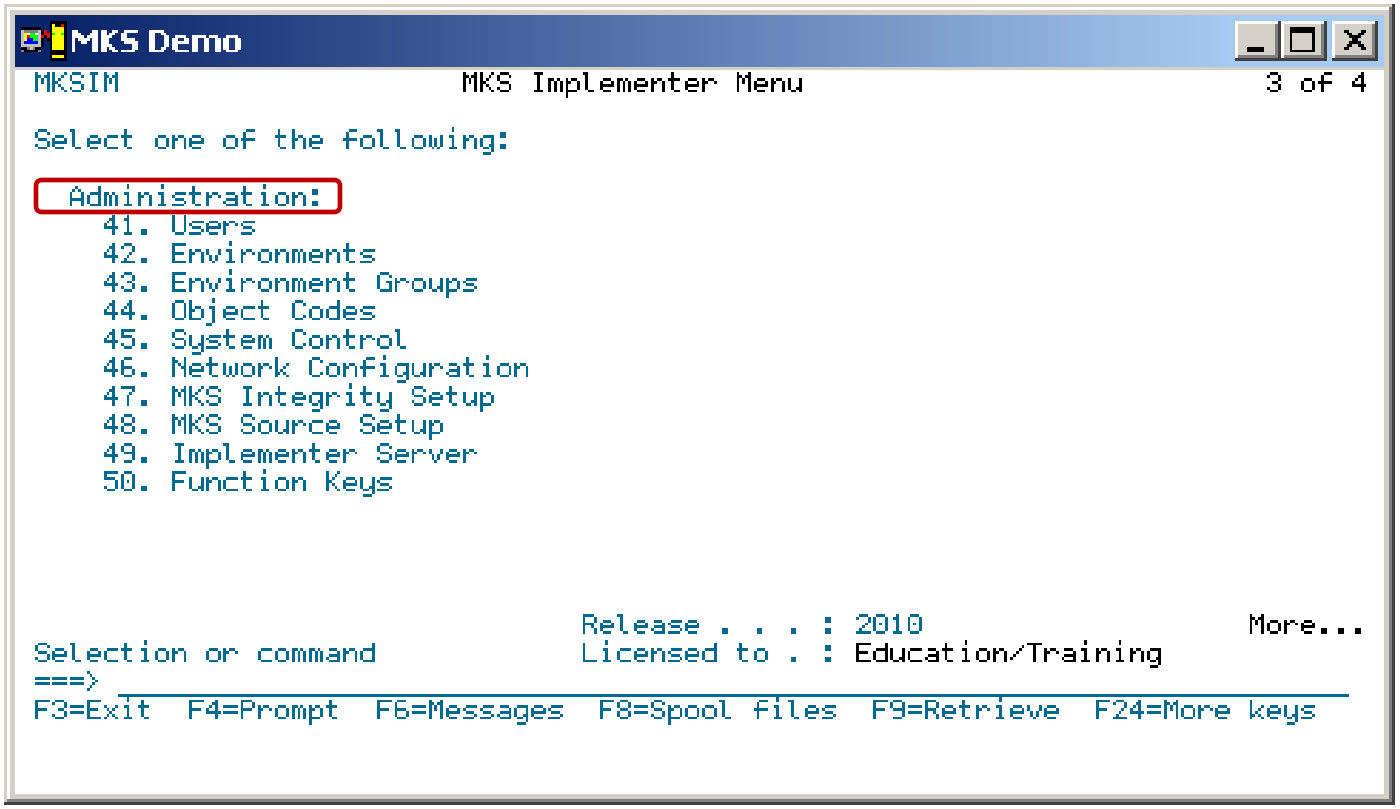
- User profiles
- Object codes
- Environments
- Promotion Scheduling
- Special Commands
- Standard Promotion Path

# Accessing CA 2E

To access CA 2E in Implementer:

- On the command line, issue the STR*xx* command, where *xx* is the abbreviated product name, as follows:
  - To access the CA 2E Menu, type `STRCM`, and press **ENTER**.
  - To access the CA 2E Receiver Menu, type `STRCR`, and press **ENTER**.

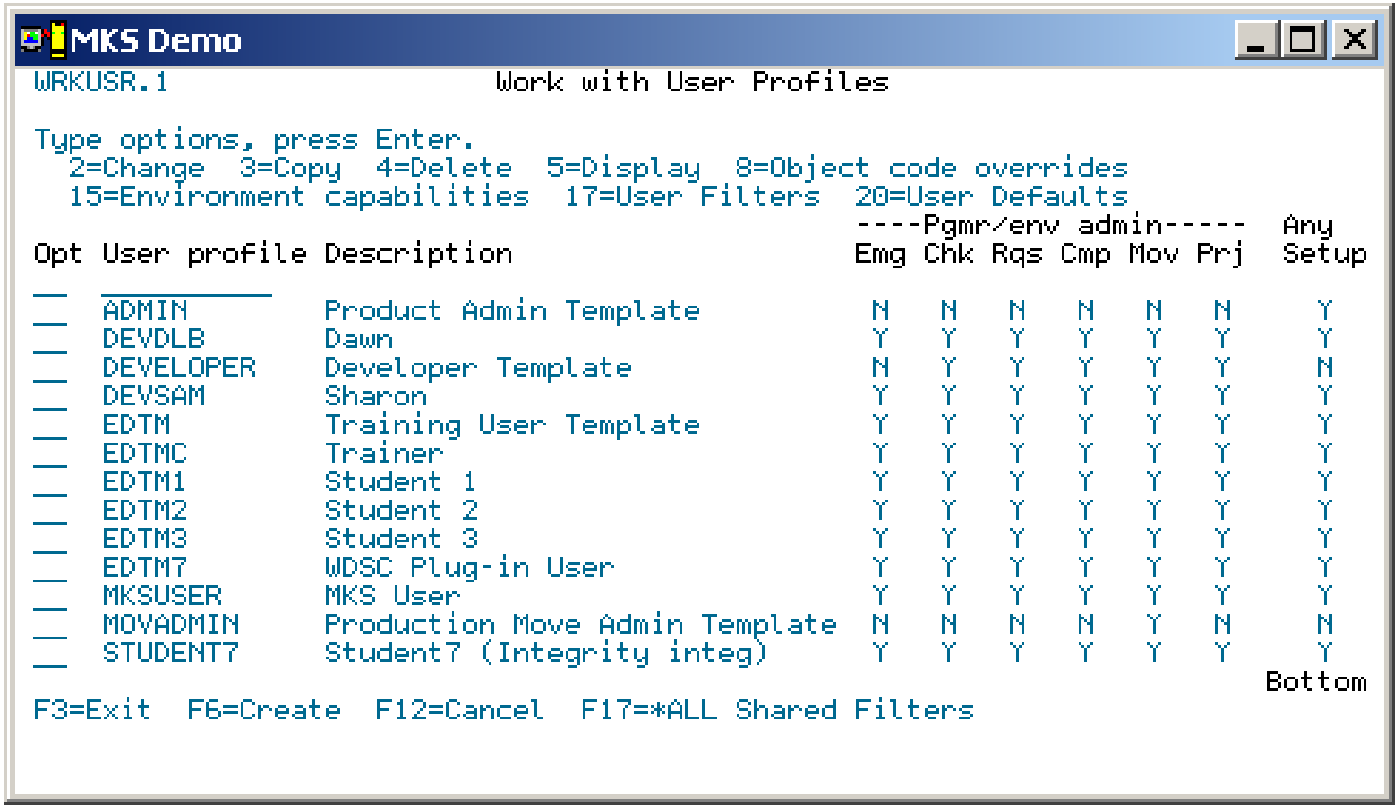
# Administration Menu



# Examples of Implementer Users

- **Implementer Administrator**
  - sets up and maintains Implementer
- **Environment Administrator**
  - has all capabilities to specific assigned production environments
- **Deployment Administrator**
  - performs Move Requests to QA and production environments
  - has no development capabilities
  - can be a single user or part of a group profile
- **Software Engineers**
  - have limited capabilities to production environments
  - can be individual user profiles or part of a group profile

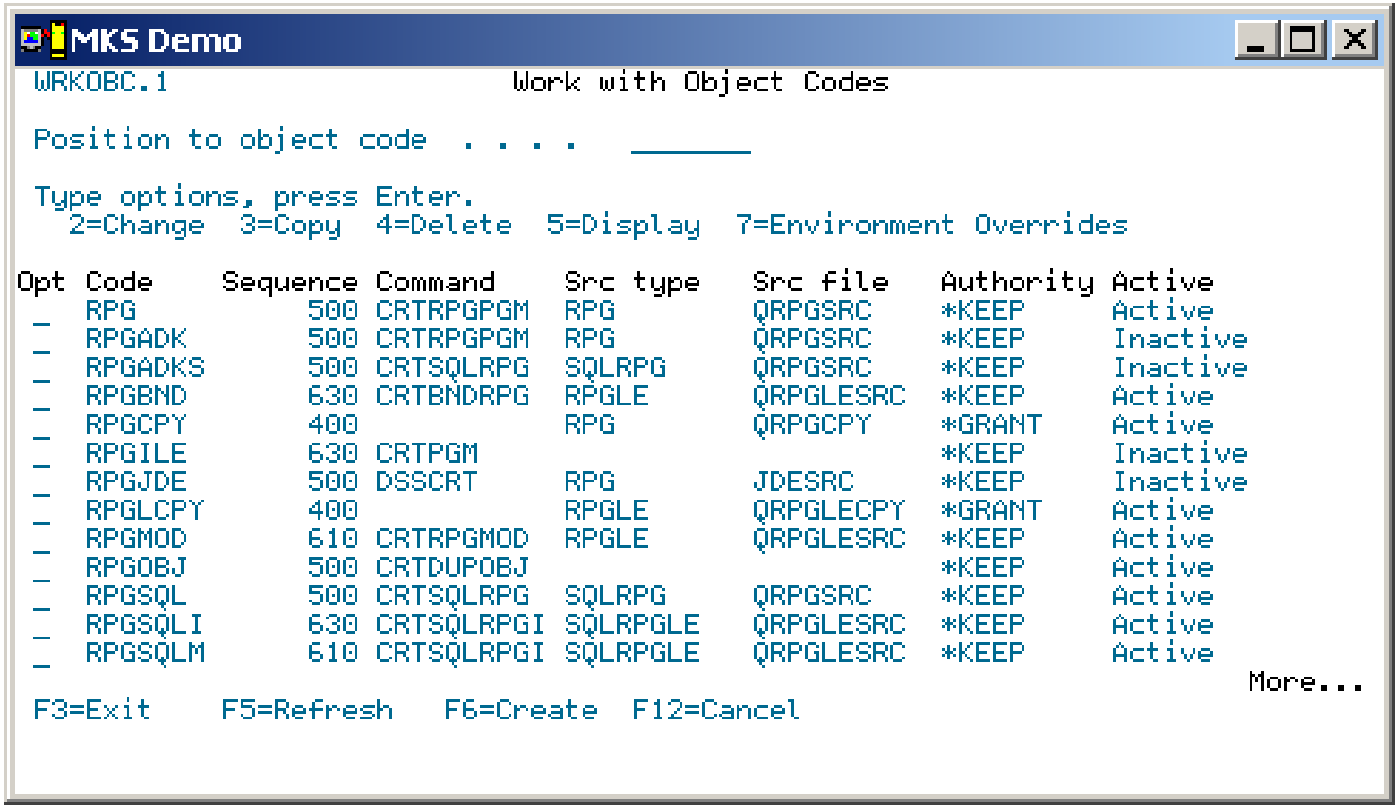
# Work with User Profiles Panel



# Object Codes

- An Object Code defines …
  - The relationship between a source type, object type, and attribute.
  - The command used to create, move, or change an object.
  - When to execute the command.
- Implementer includes predefined object codes …
  - Review existing object codes and make any necessary changes.
  - Deactivate object codes that are not required by changing the activity flag to 0.
  - Create new object codes, if required.

# Work with Object Codes Panel



# Environments

- An environment is a collection of libraries and IFS directories, and the change management rules associated with those libraries and directories.
- An environment can have any number of libraries, but usually consists of three:
  - Programs, device files, and other objects library
  - Files library (PFs, LFs, DTAARAs)
  - Source library
- Implementer has three environment types:
  - *PRD
  - *QAC
  - *TST

# Environment Types

- *PRD is the Production environment
  - Most tightly controlled of the environment types
  - Implementer assumes IBM i security to prevent manual changes
  - Can check out from and promote to a *PRD environment
  - Promotion to *PRD environment checks-in (removes the lock)

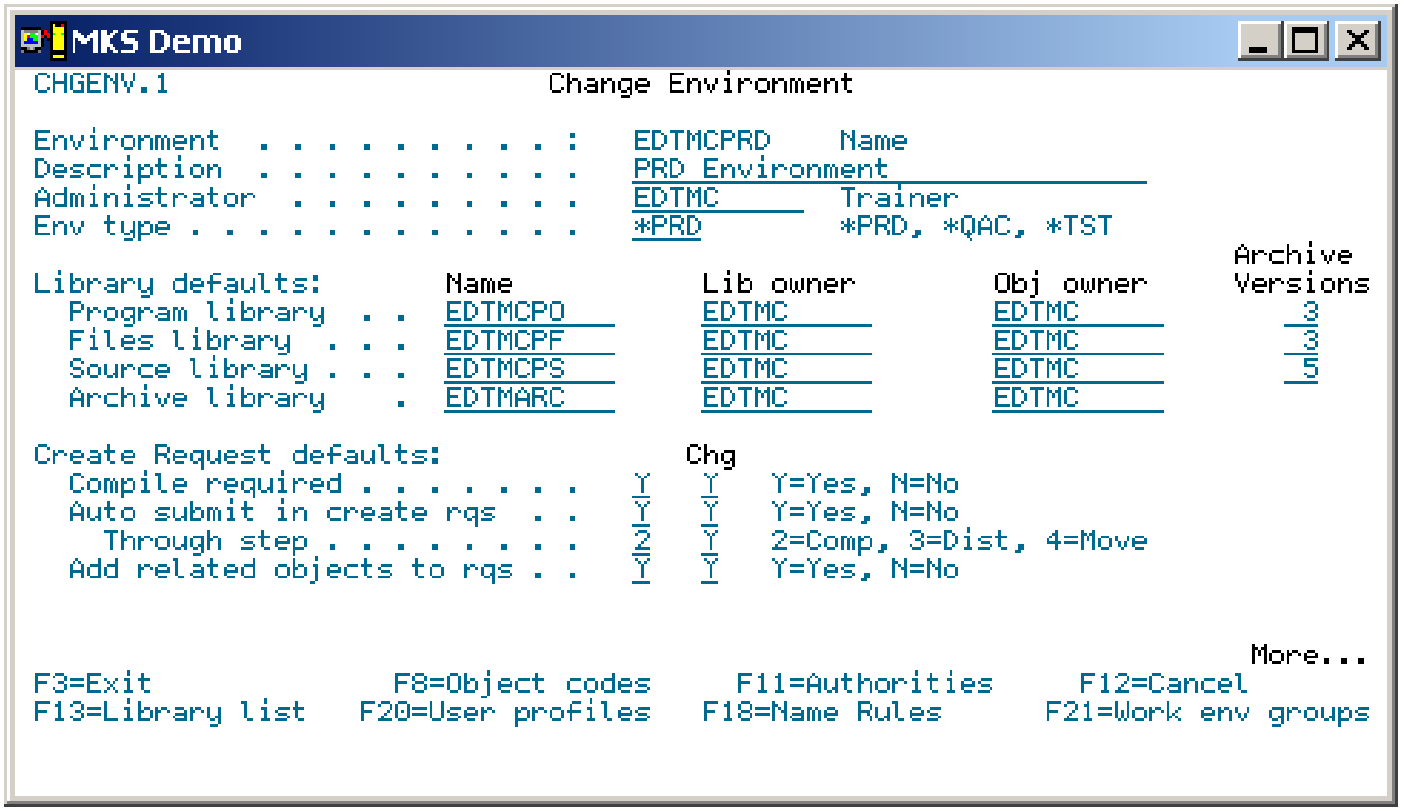
- *QAC is the Quality Assurance/Control environment
  - Used for testing software changes
  - Can be controlled tightly like *PRD or open access like *TST
  - Can promote to and from *QAC environment
  - Can reject from *QAC environment (only environment type that allows rejecting source back to development)
  - Promotion to *QAC environment does not remove the lock

- *TST is the Development/Unit Testing environment
  - Environment where all development is performed
  - Least controlled of the environment types
  - Implementer assumes that developers have “free reign”
  - Check out to and promote from *TST environment

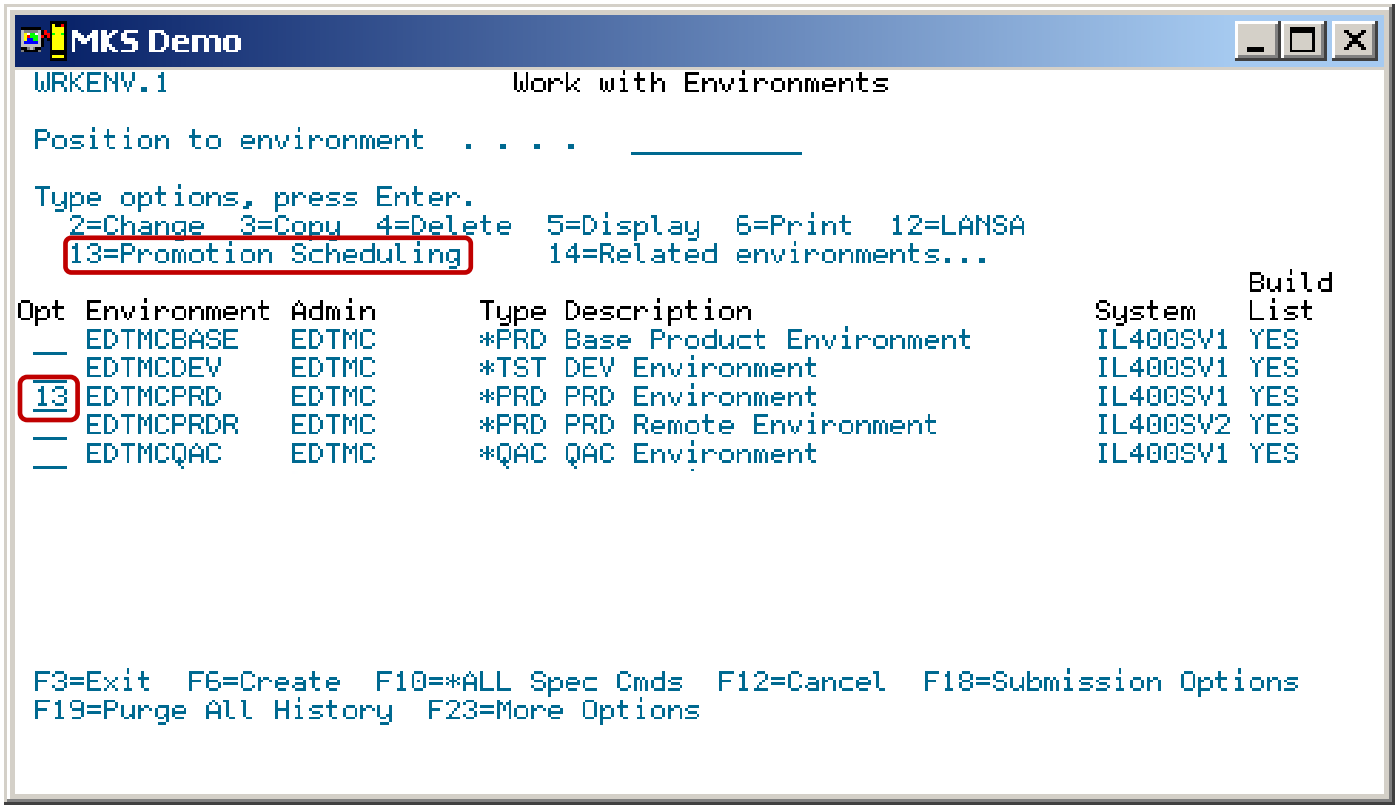
To define an environment, you specify:

- Libraries that contain source, objects, and files
- Compile library list
- IBM i authorities
- Rules, for example, check out required, compile required, and more

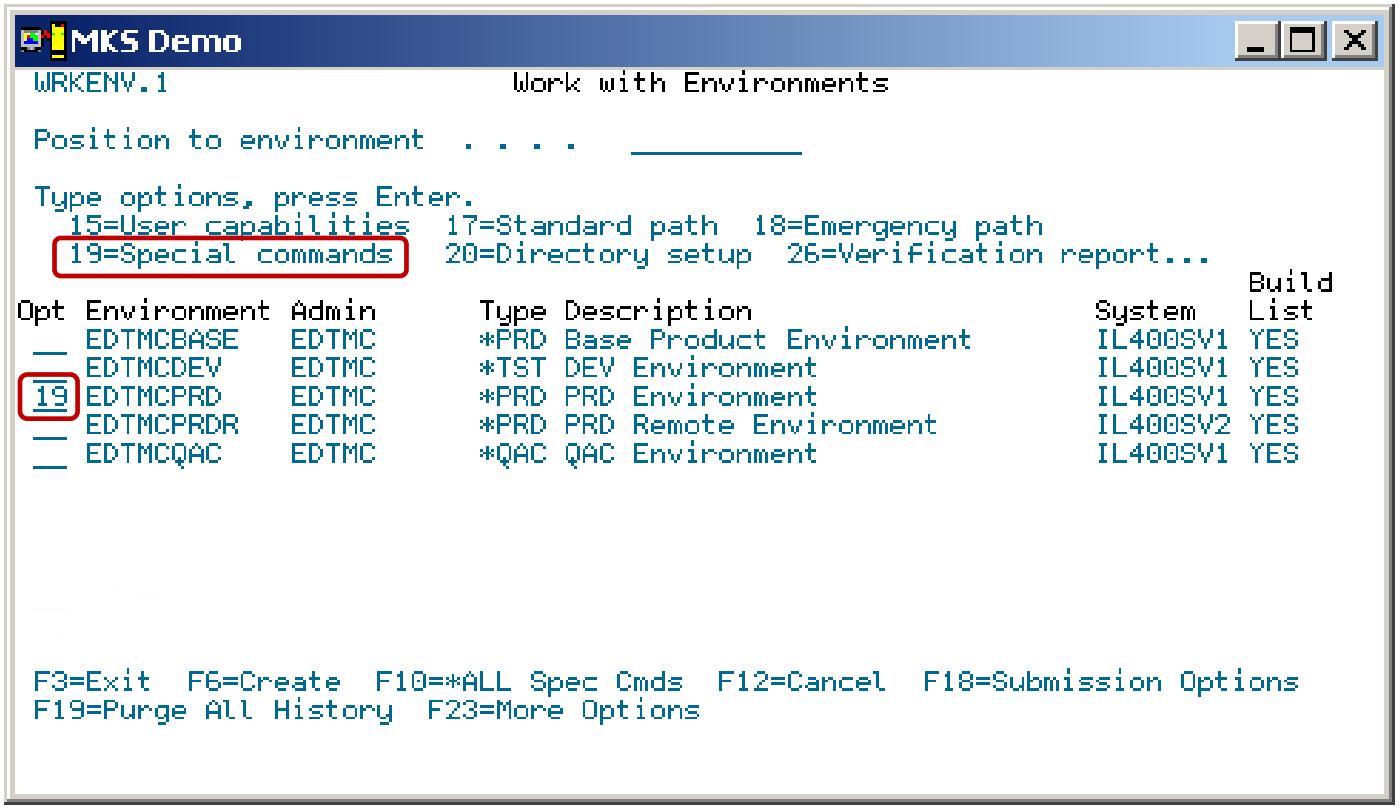
# Change Environment, panel 1 of 3



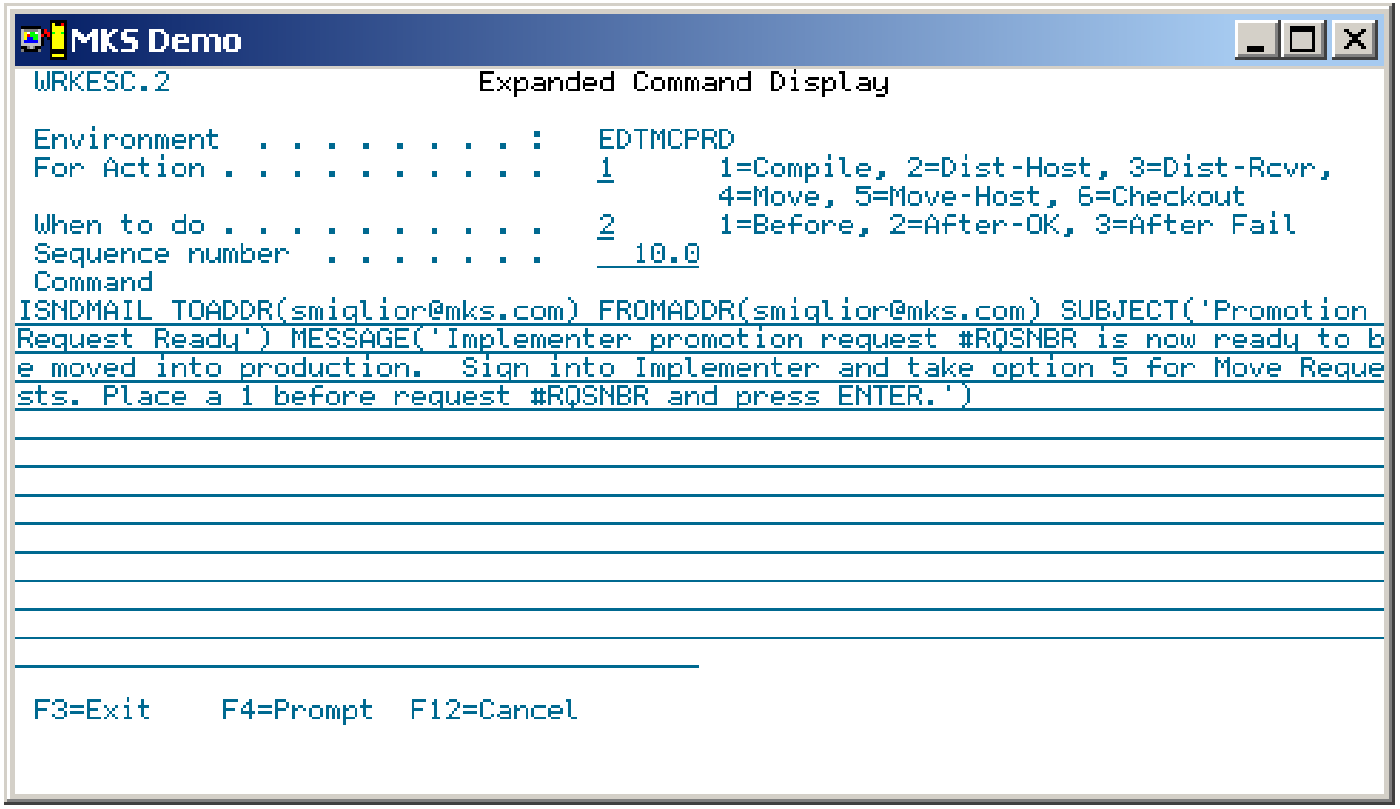
# Promotion Scheduling



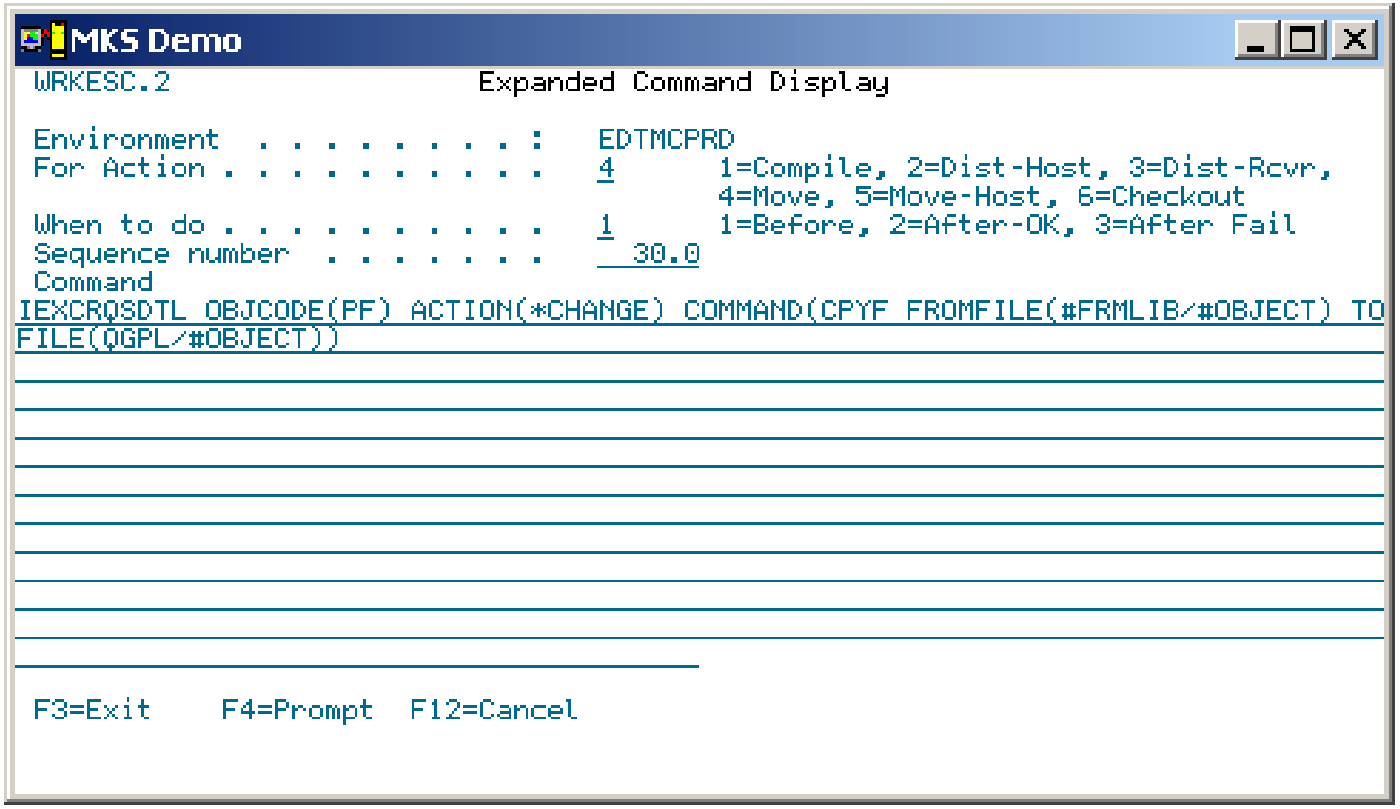
# Special Commands by Environment



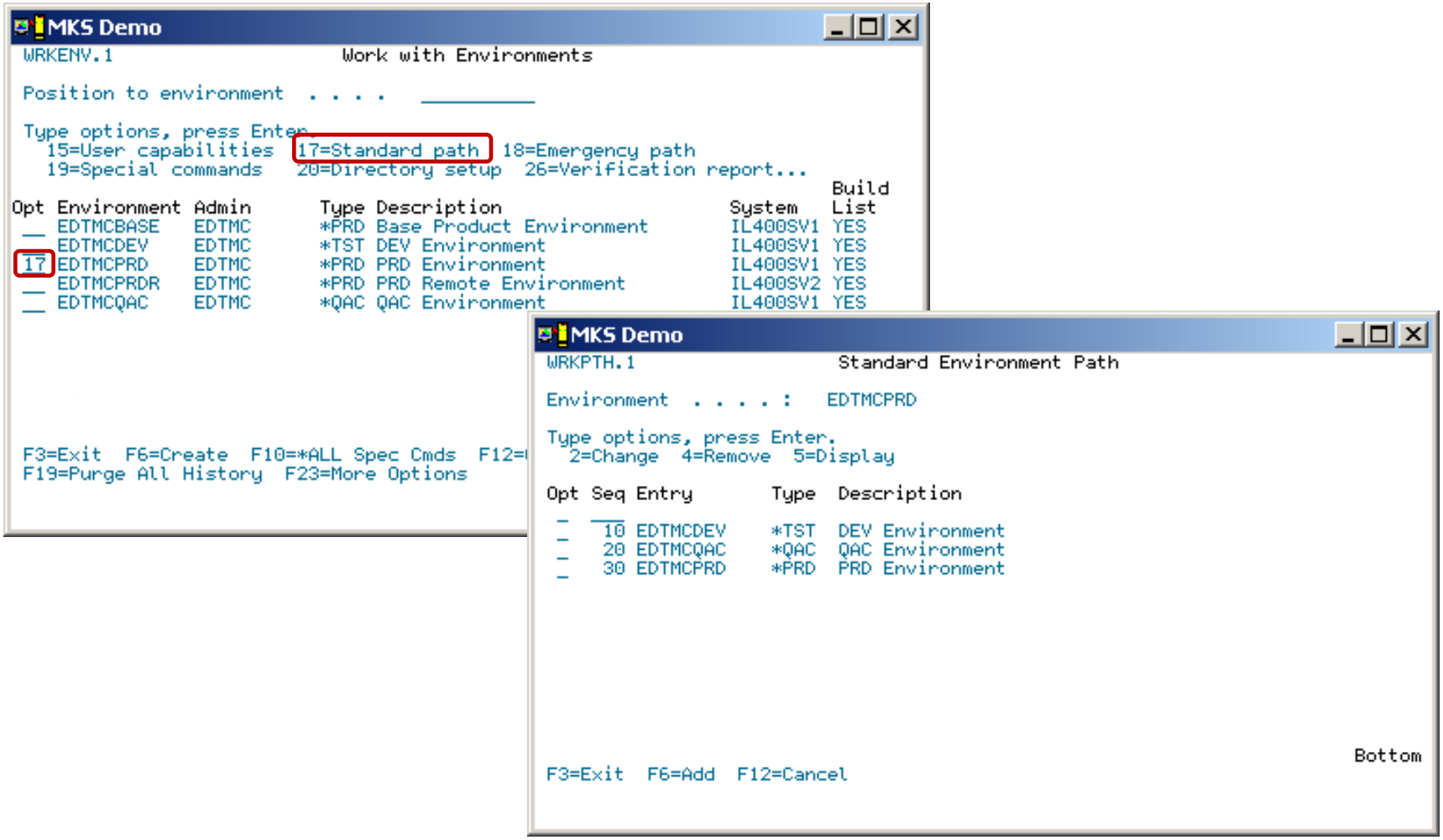
# Promotion Special Command



# Execute Request Detail

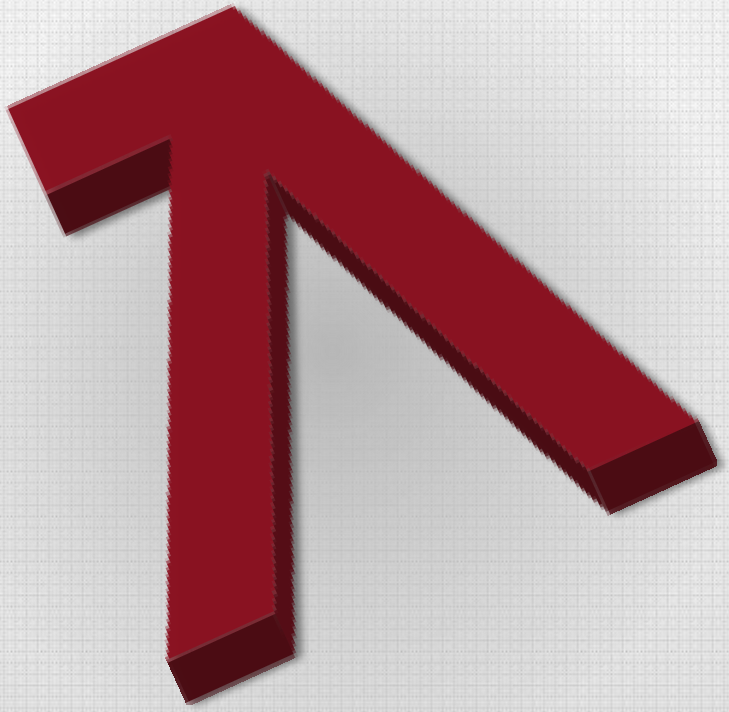


# Standard Path



# Exercise 1

- Open CM by using command STRCM
- Locate you User Profile
  - Review your user capabilities for CM
  - Review your user capabilities for environment:
    - CACNFDEV
    - CACNFQAC
    - CACNFPRD
- Find the object codes for 2E
- Got to Environments
  - Review the libraries for Source, Files and Programs.
- Review the Standard Path for the environment CACNFPRD.



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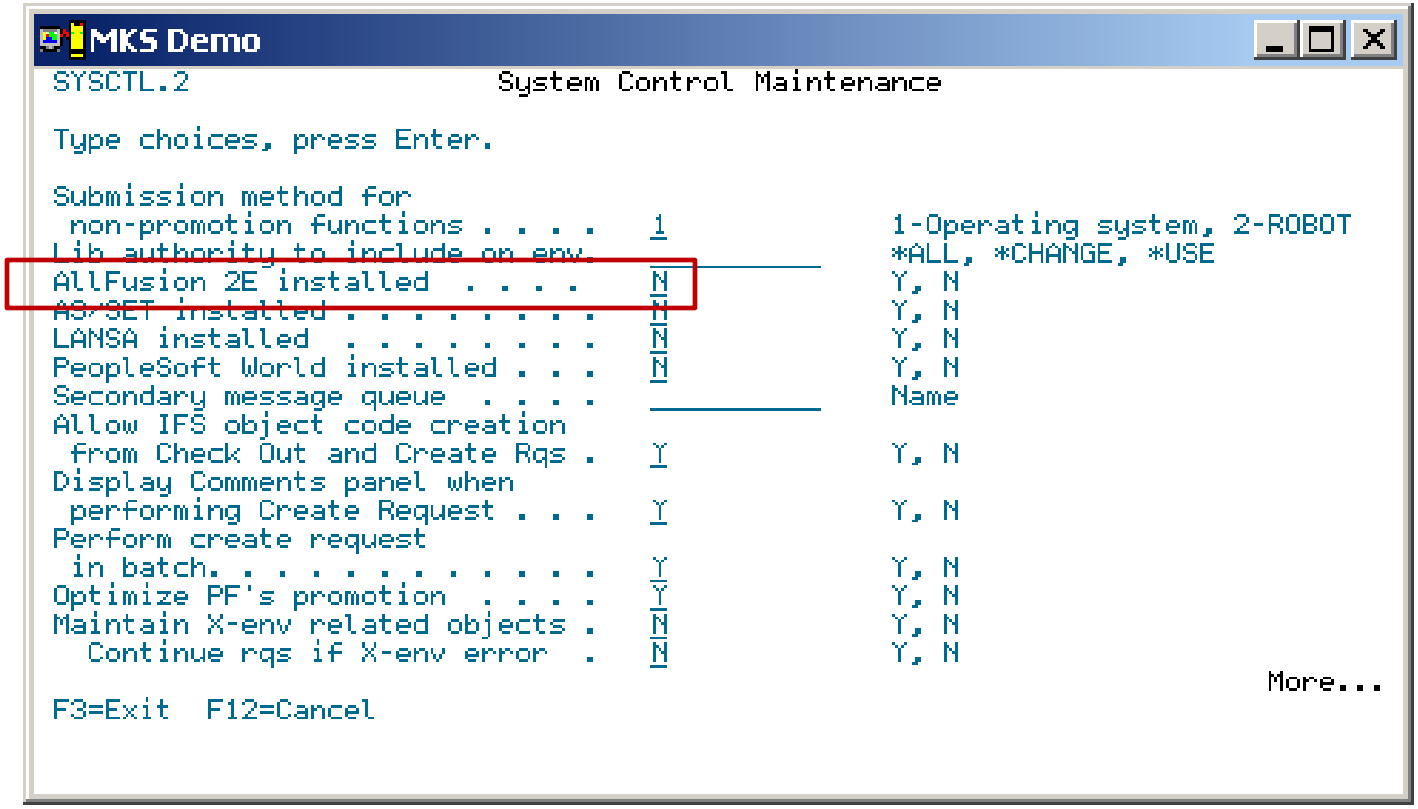
# CA 2E CM Setup

# 2E CM Setup Tasks

- Add the following CA 2E product libraries to your interactive library list:
  - Y1SY
  - Y2SY
- Change the Implementer job description MWIJOBD to add the two CA 2E product libraries.
- In System Control Maintenance, activate the integration by setting the **CA 2E installed** field to Y.
- Set up standard environments to manage CA 2E applications.

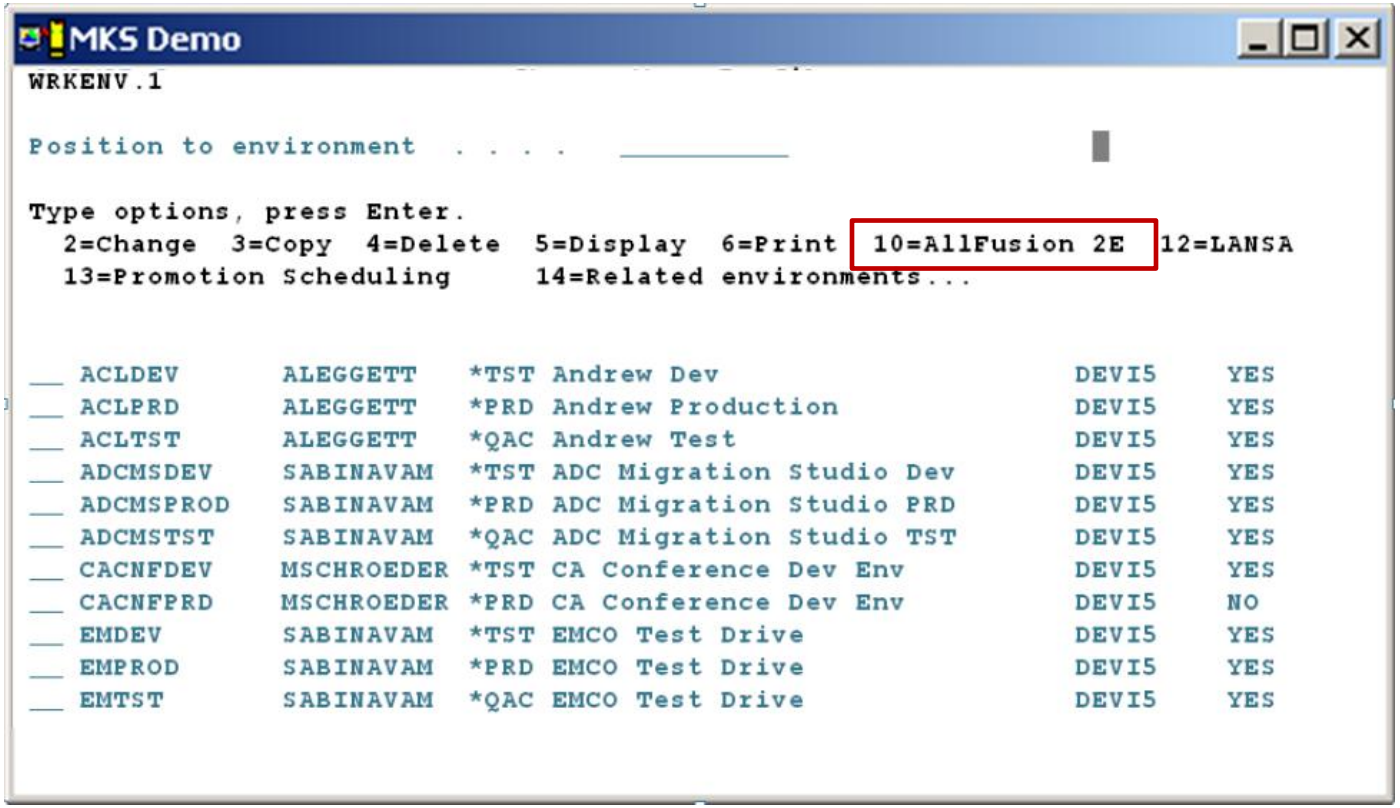
# System Control Maintenance

## System Control Maintenance, panel 2



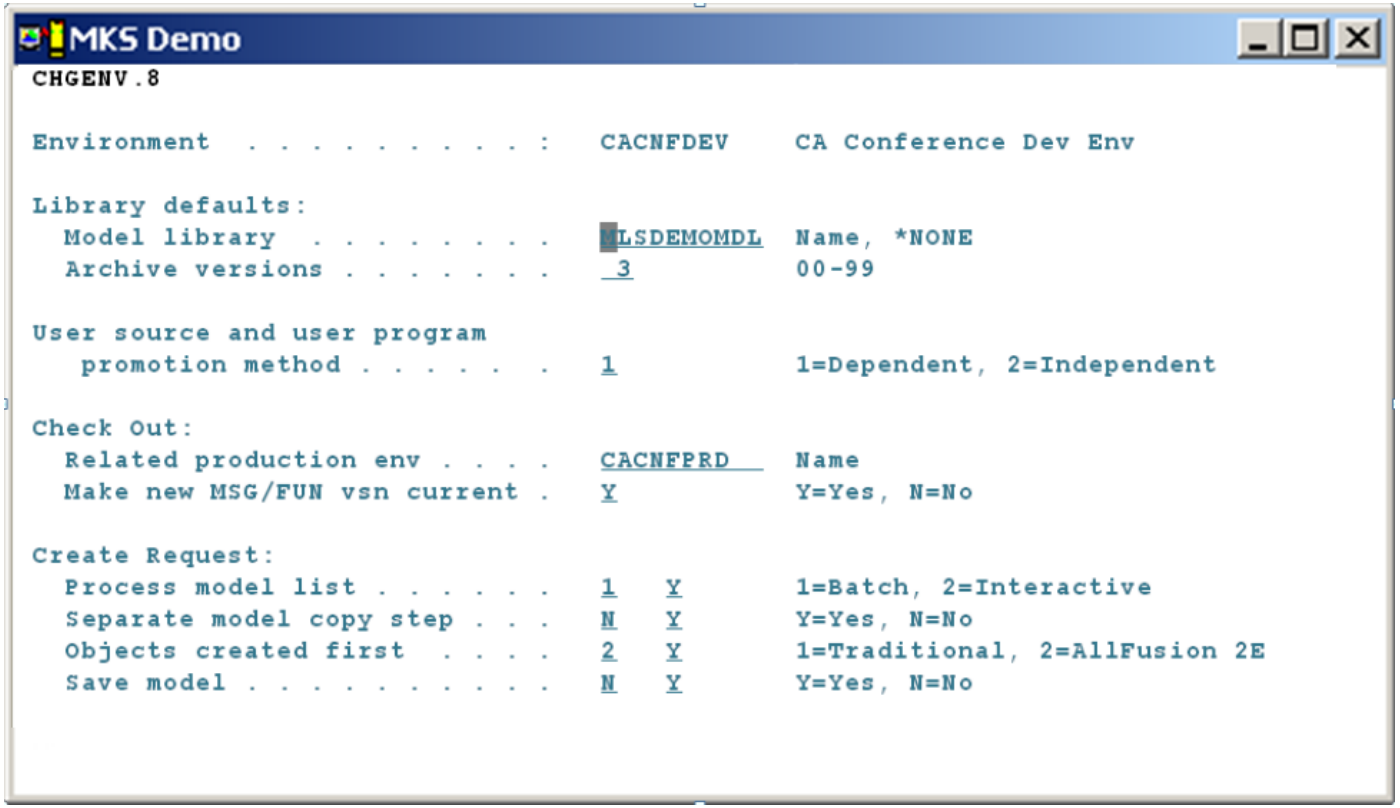
# CM Environment

Set up standard environments



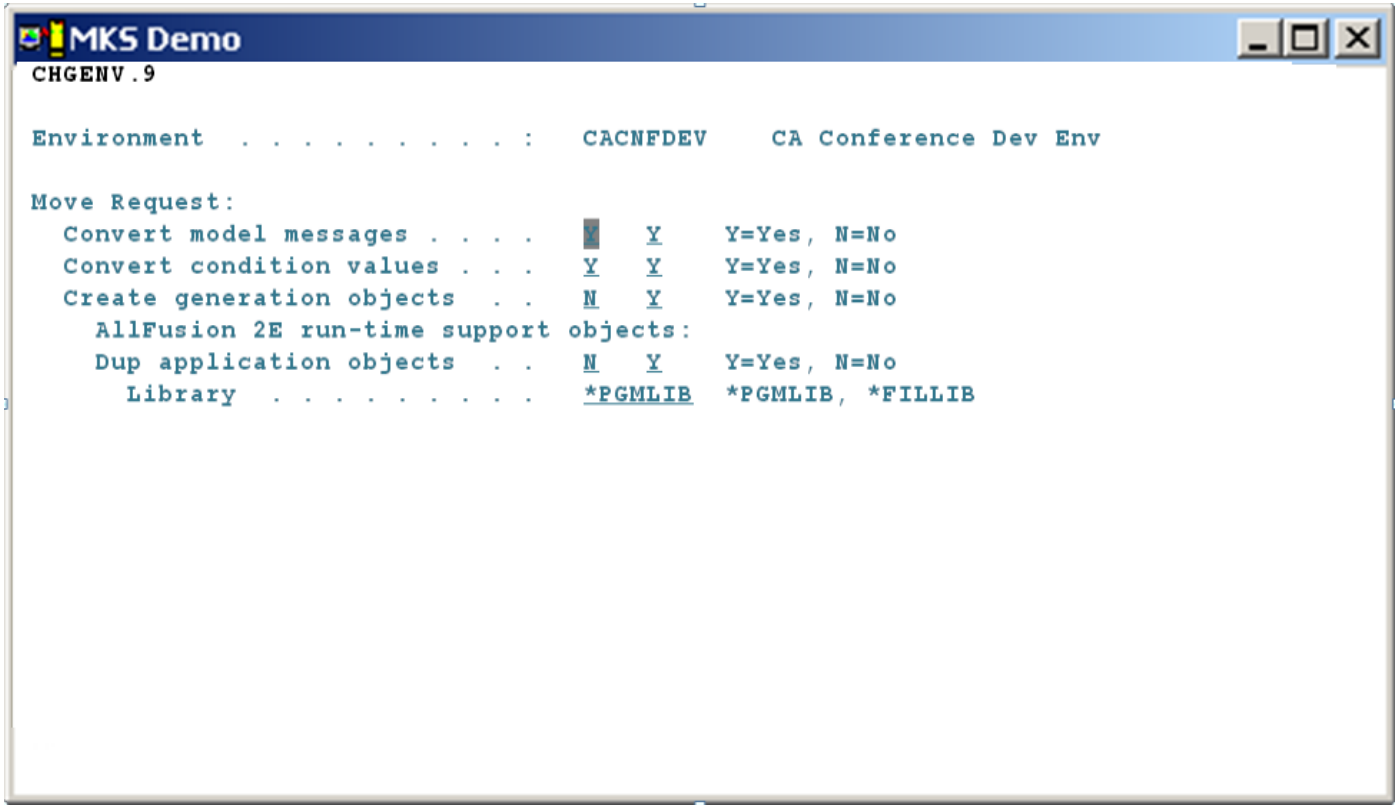
# CM Environment

Set up standard environments

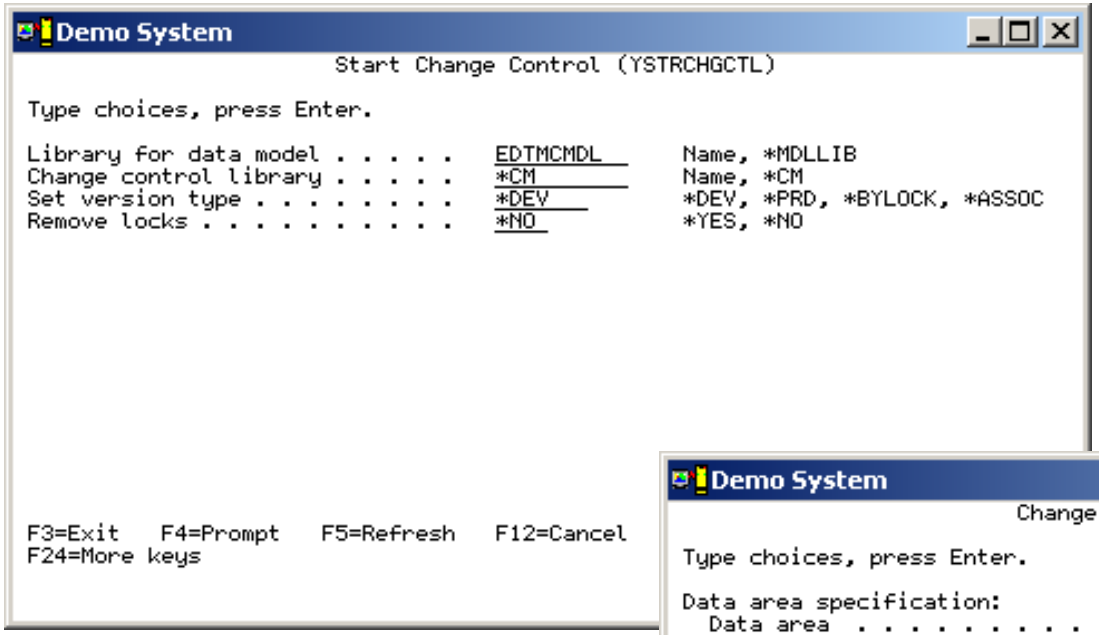


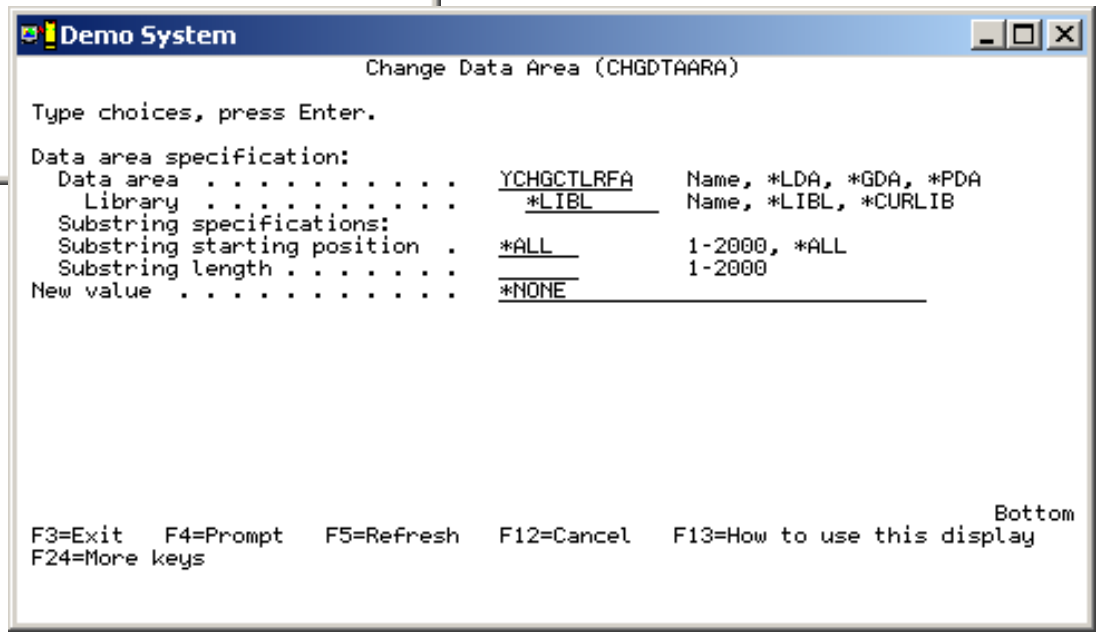
# CM Environment

Set up standard environments



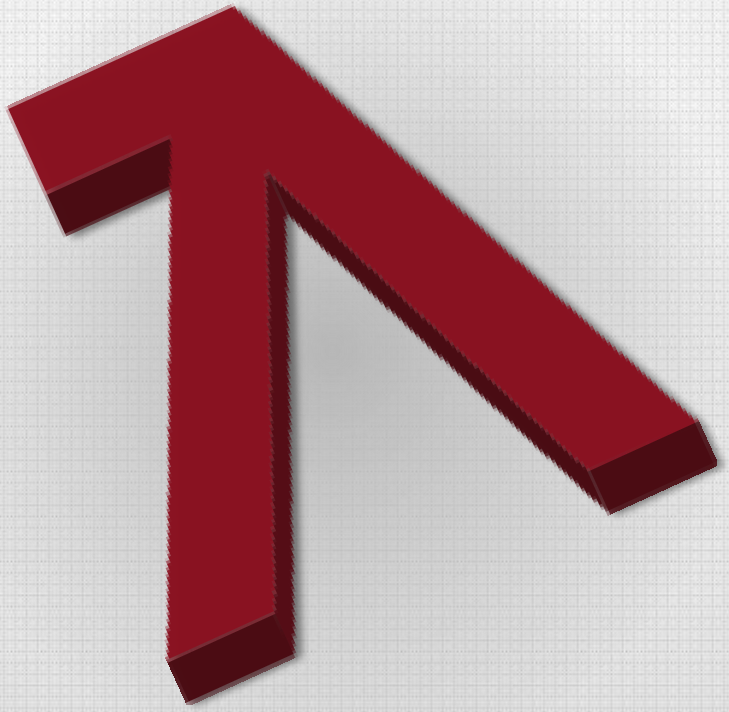
# Start CA 2E Change Control



# Exercise 2

- Basic Setup Tasks for CM 2E
  - System Control Maintenance
  - CM Environment
    - CACNFDEV
    - CACNFQAC
    - CACNFPRD
  - Starting CM 2E on a Model
    - Verify model CACNFMDL is connected to CM 2E



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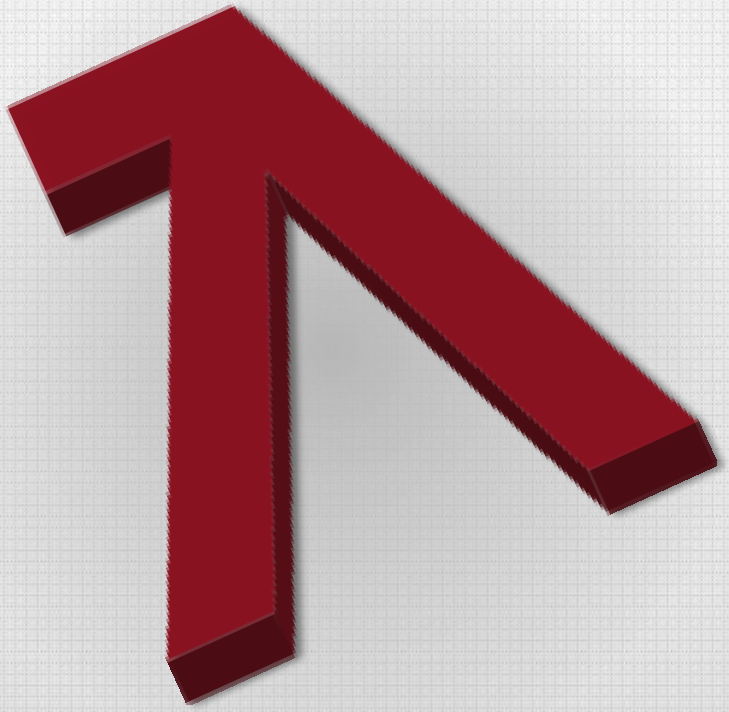
# CA 2E CM Workflow

# CA 2E Workflow

- 2E CM Check out Process
  - Initiating Check Out from 2E
  - Checkout Model Object Panel
  - Edit Function After Check Out
- 2E CM Promotion Process
  - Accessing 2E CM from 2E
  - CM 2E Workbench
  - Create Promotion Request
  - Request Inquiry
  - Move Requests
  - Request Messages



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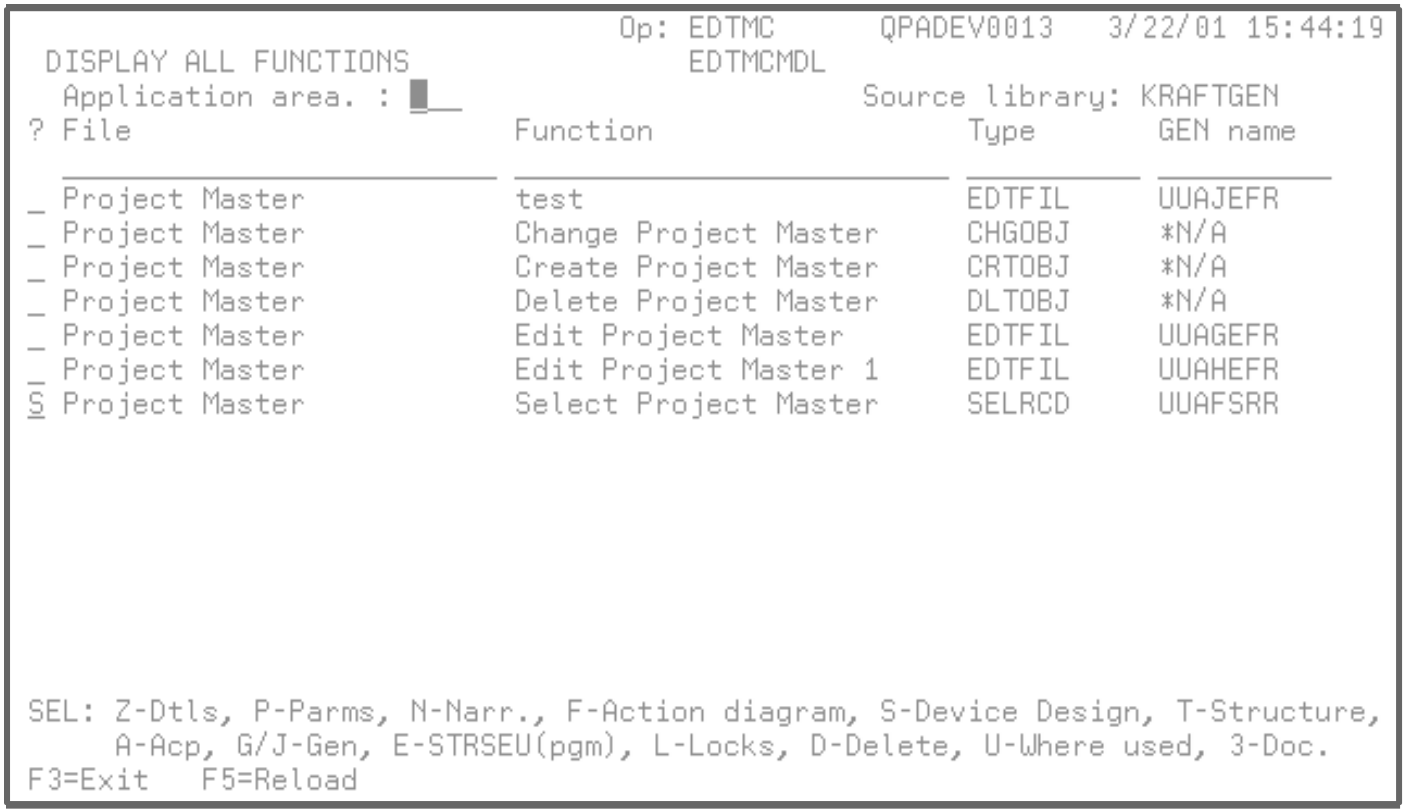
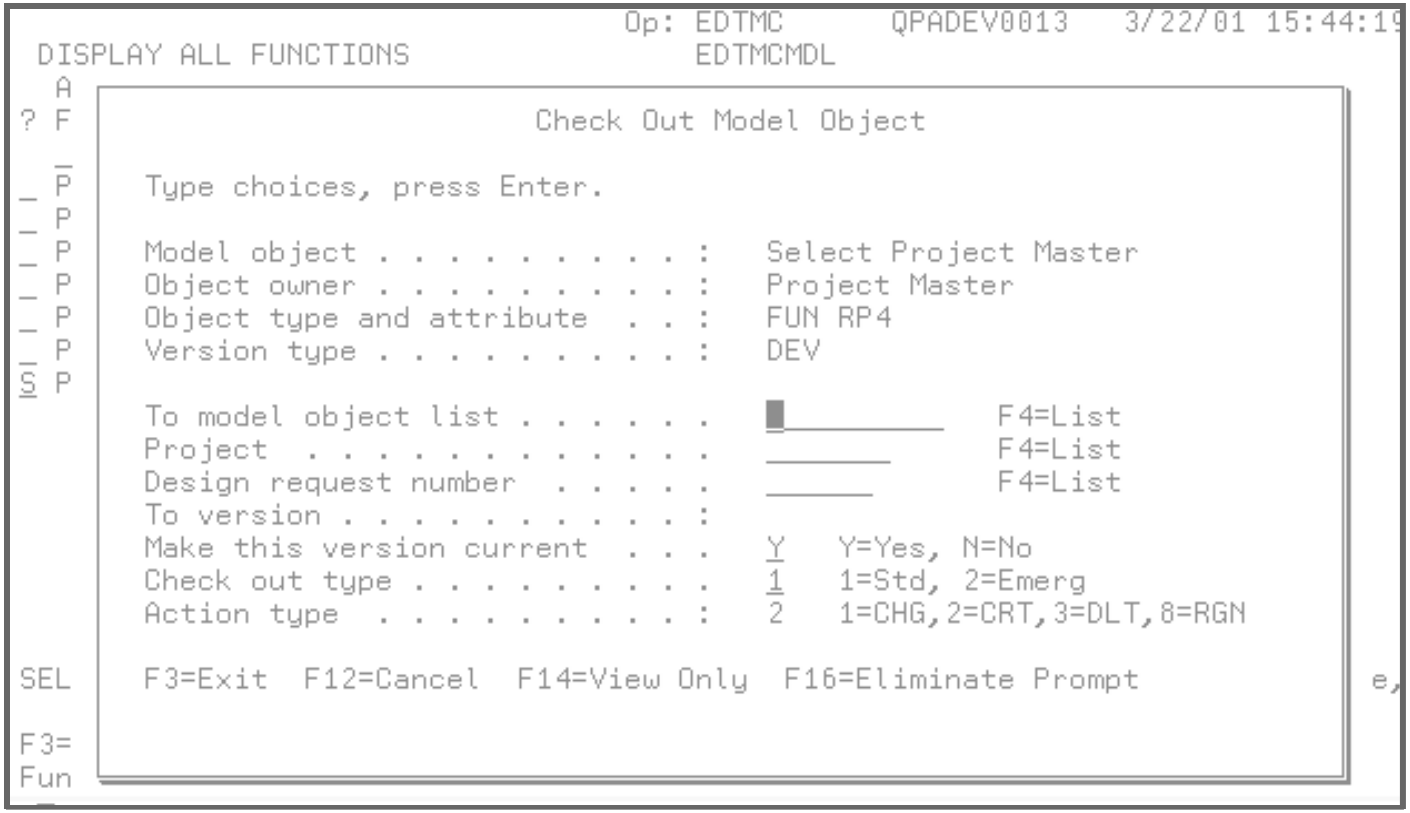
# CA 2E CM Check Out Process

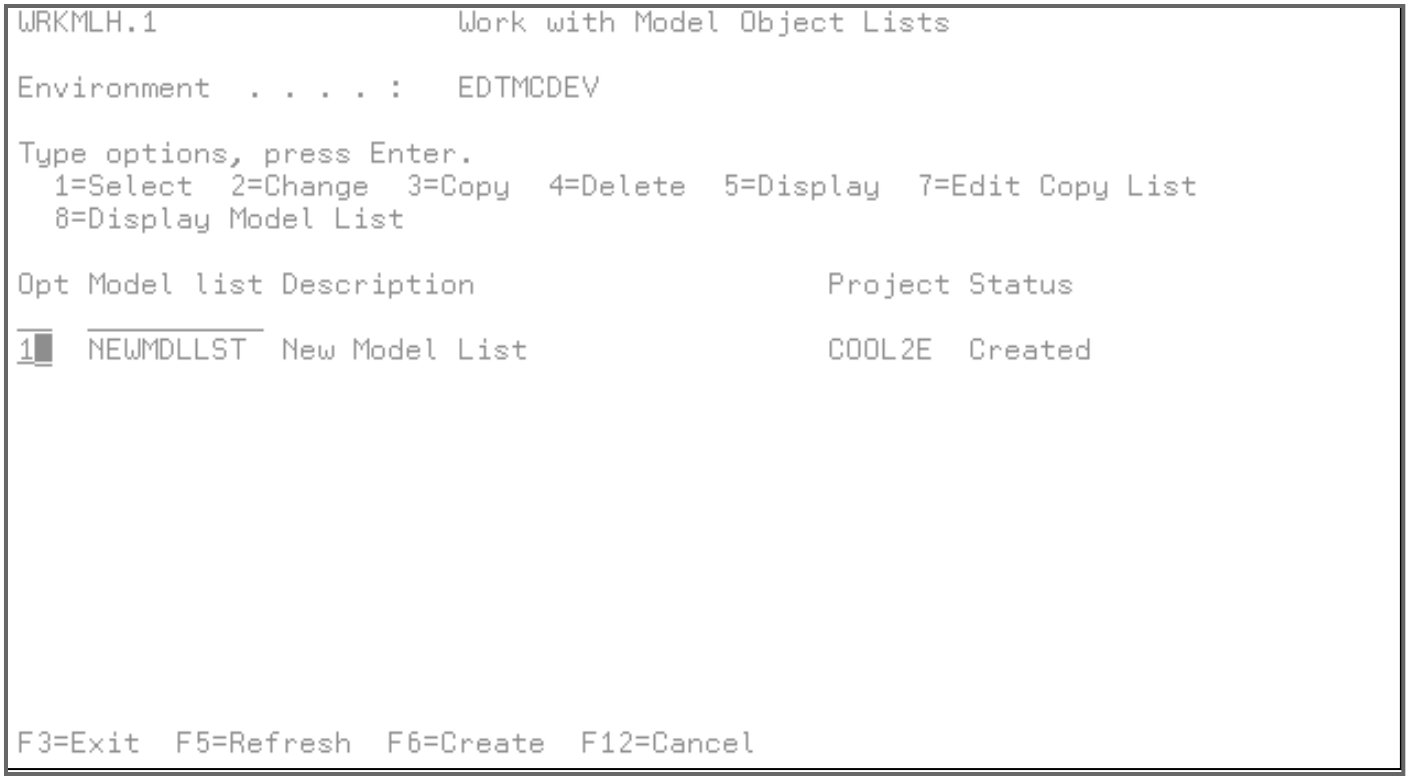
# Initiate Check Out From CA 2E



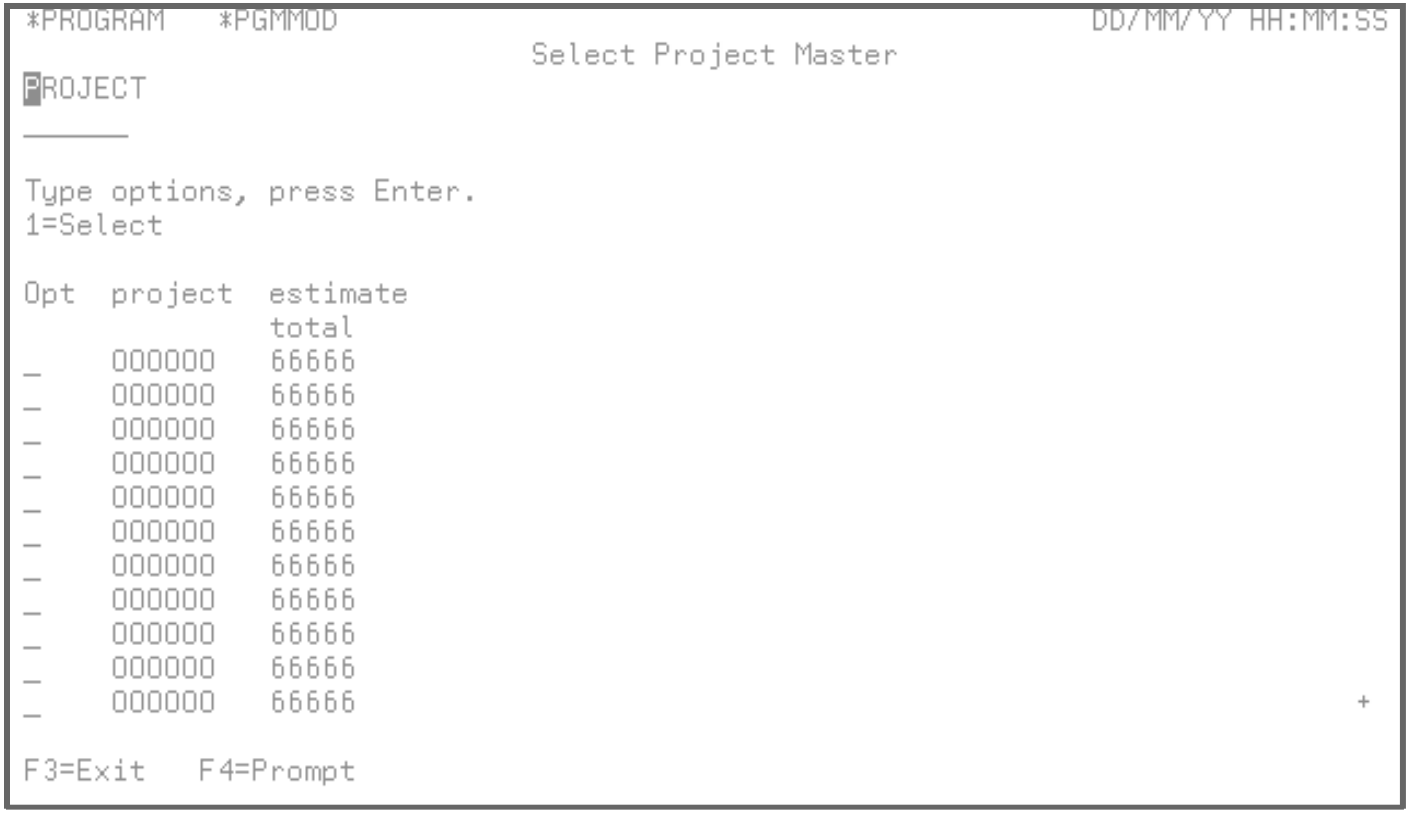
# Check Out Model Object Panel



# Selecting a Model Object List



# Edit Function After Check Out



# Exercise 3

- Checking Out an Object from 2E
  - Log in to 2E Model CACNFMDL
  - Go to the Function screen for Dogs
  - Create a Display File over Dogs
    - Name your program based on your ID
      - Example: *01 DSF Dogs*
    - Create a Model Object List based on your ID
      - Example: *CACM01a*
    - Create a Project based on your ID
      - Example: CACM01a
  - Complete the check out of your object.
  - Edit your display file so it can be compiled.

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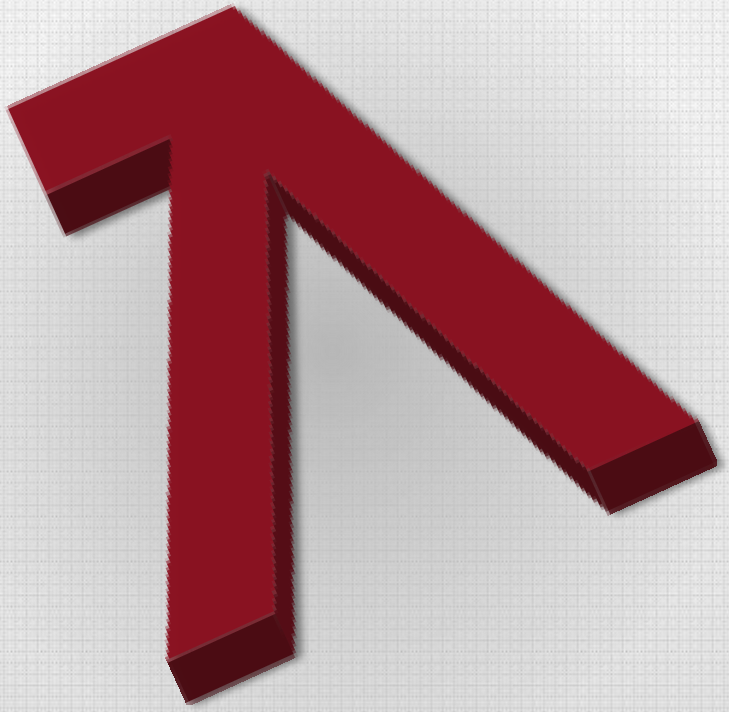
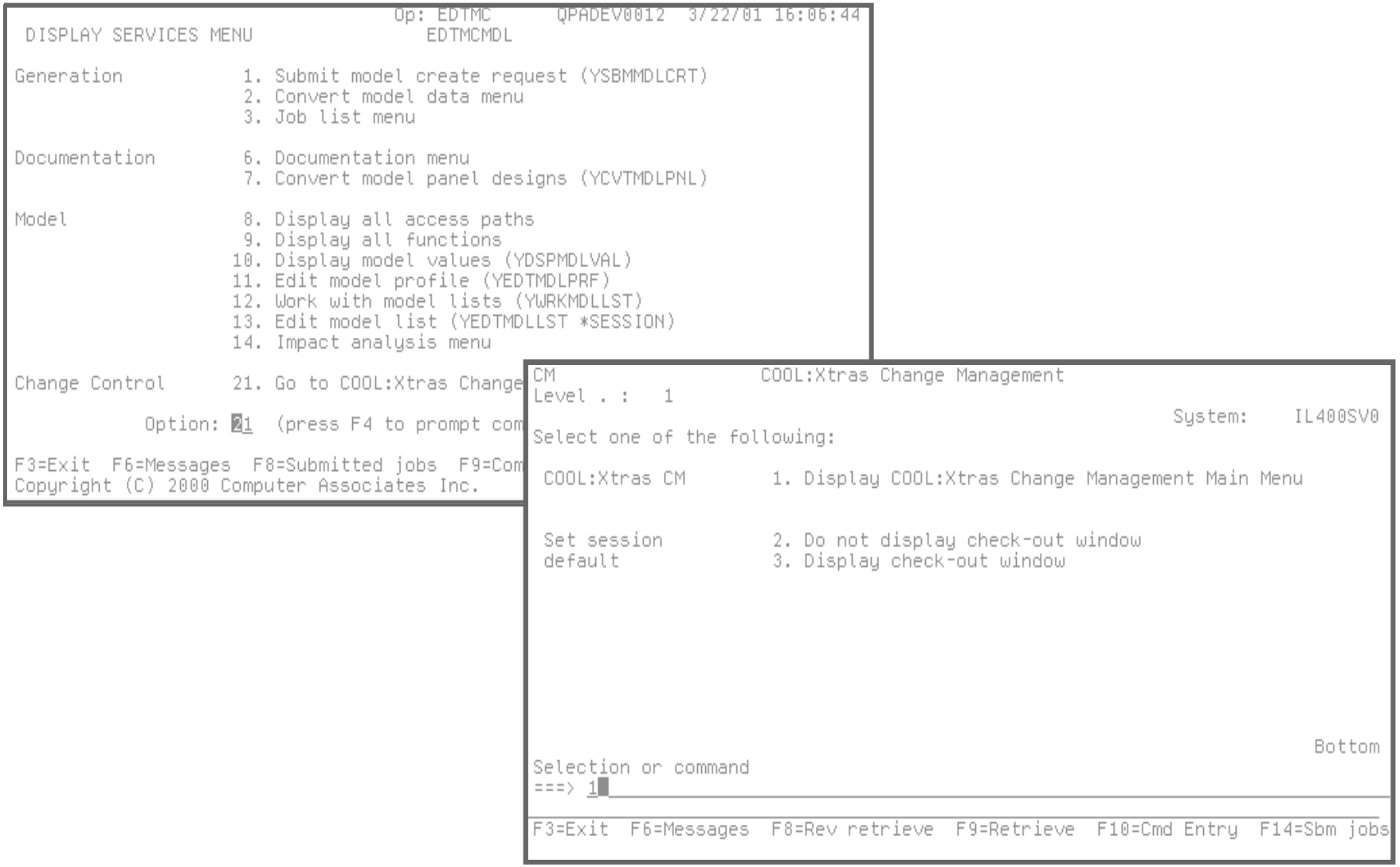
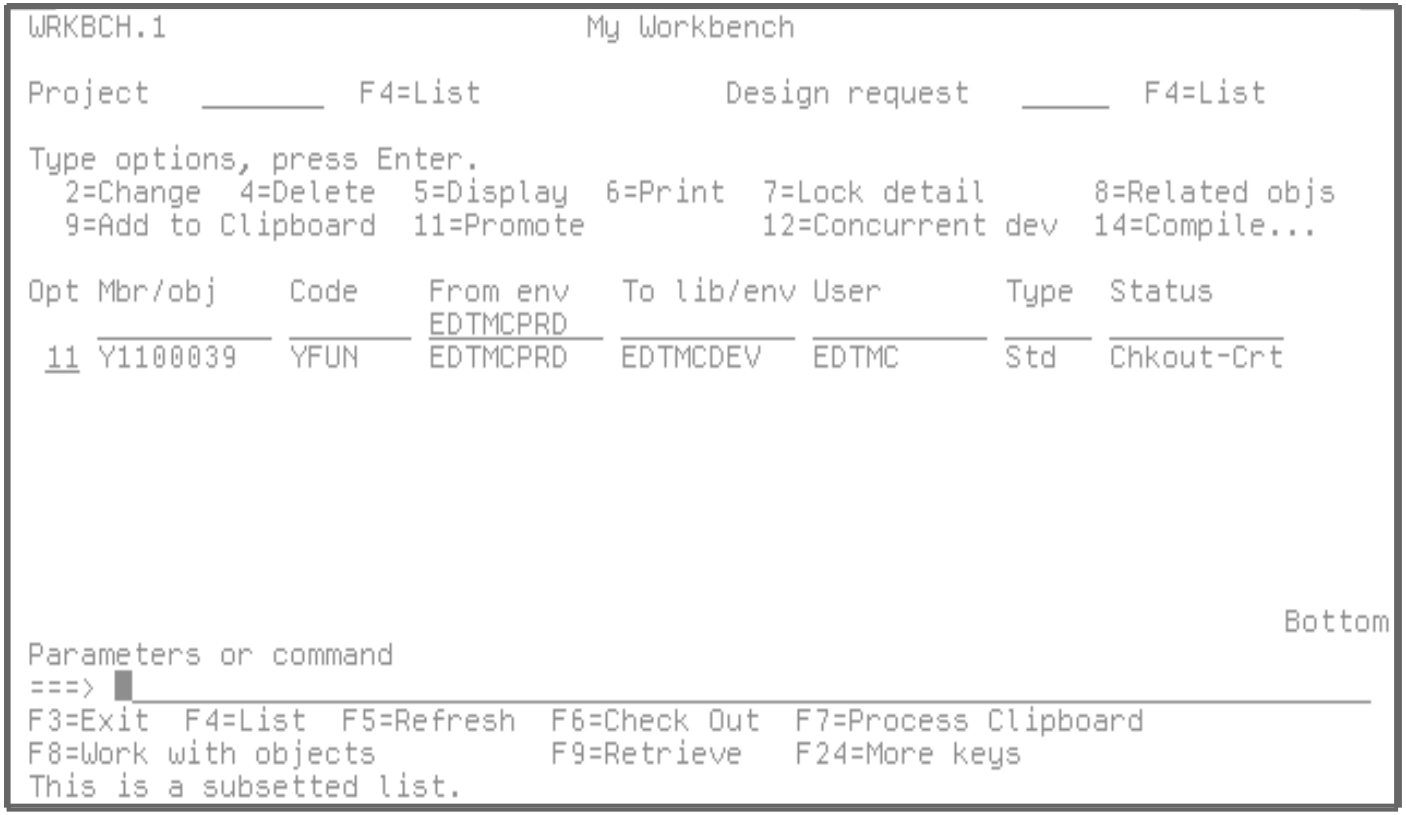


# CA 2E CM Promotion Process

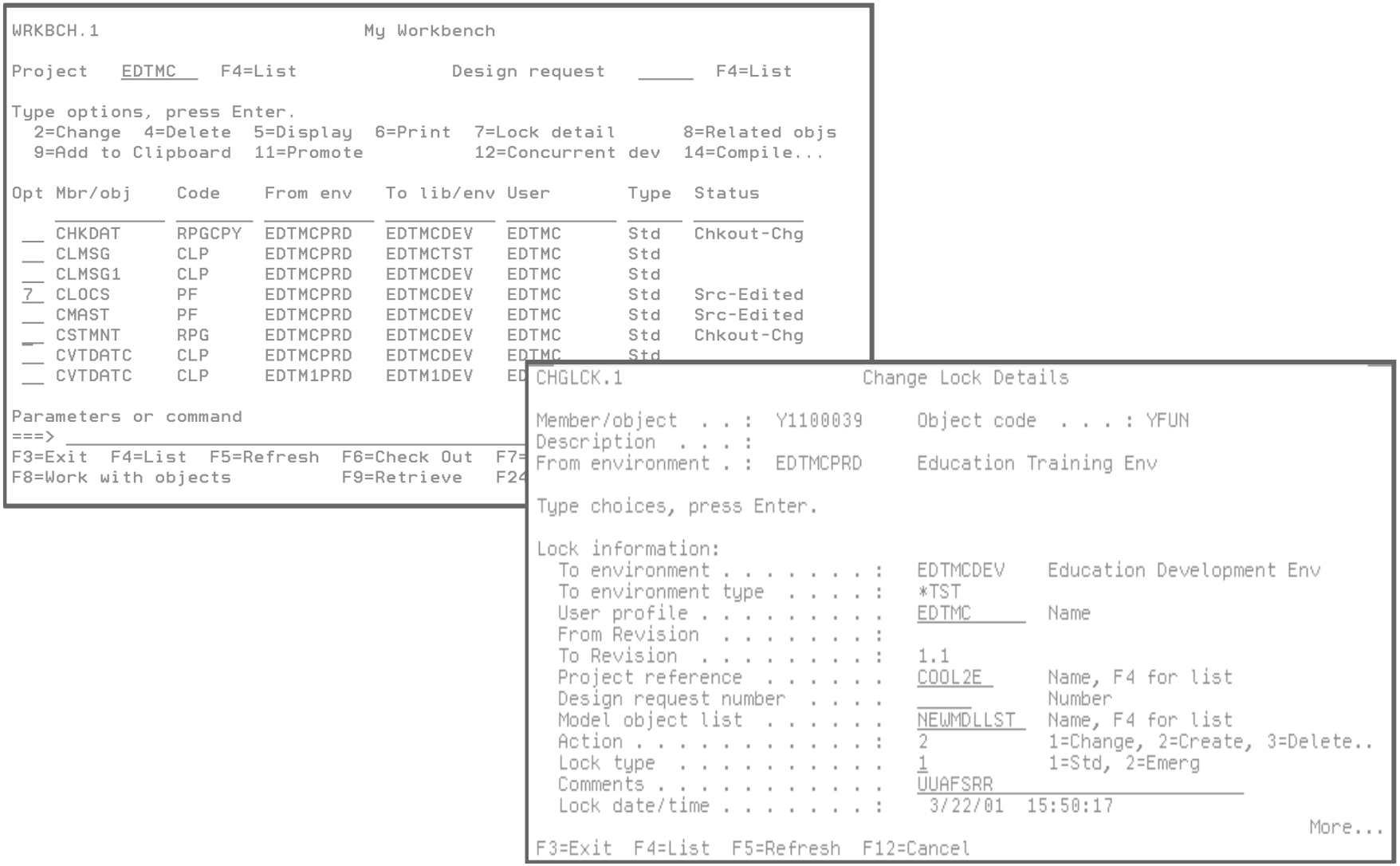
# Accessing CA 2E CM From CA 2E



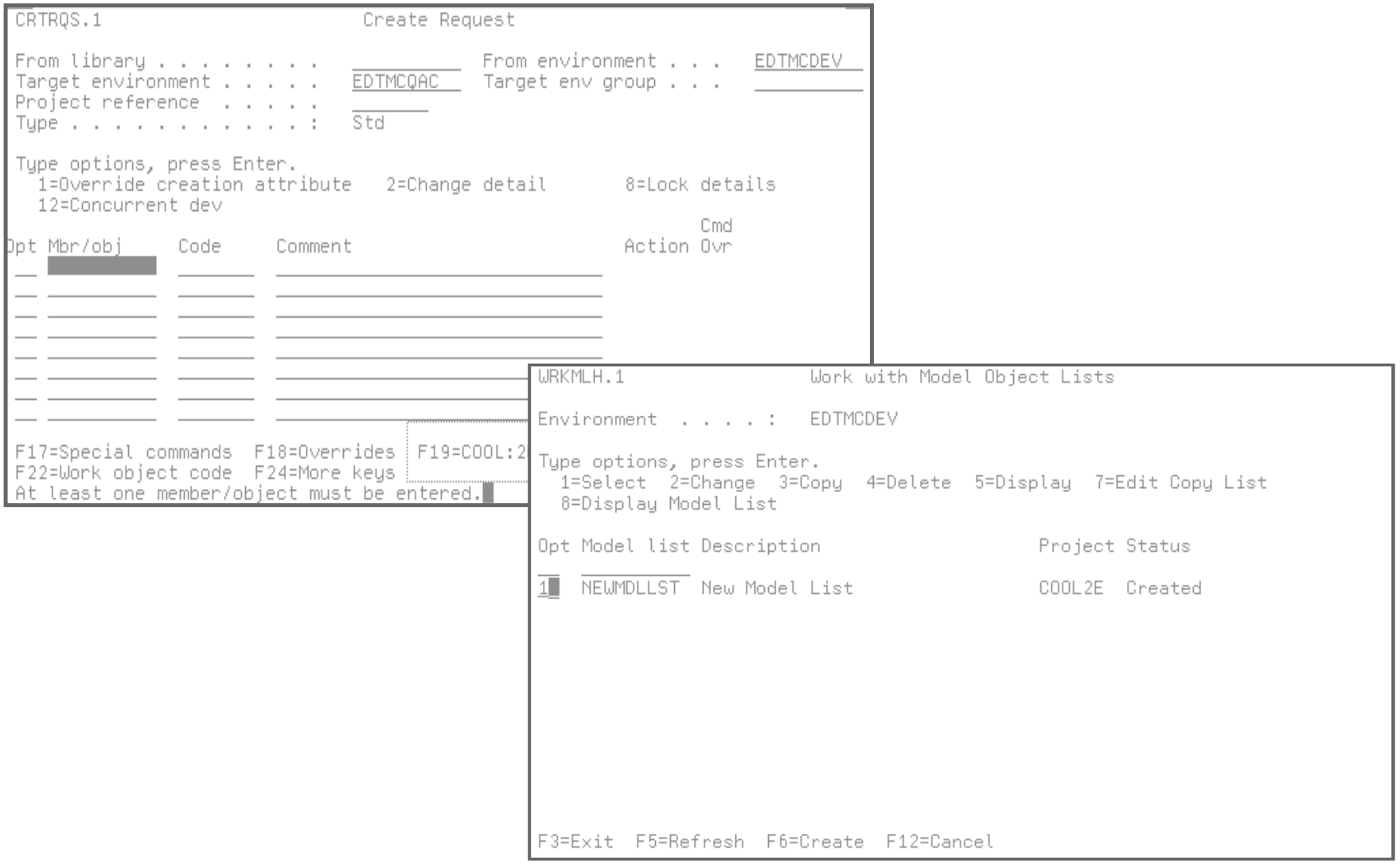
# My Workbench



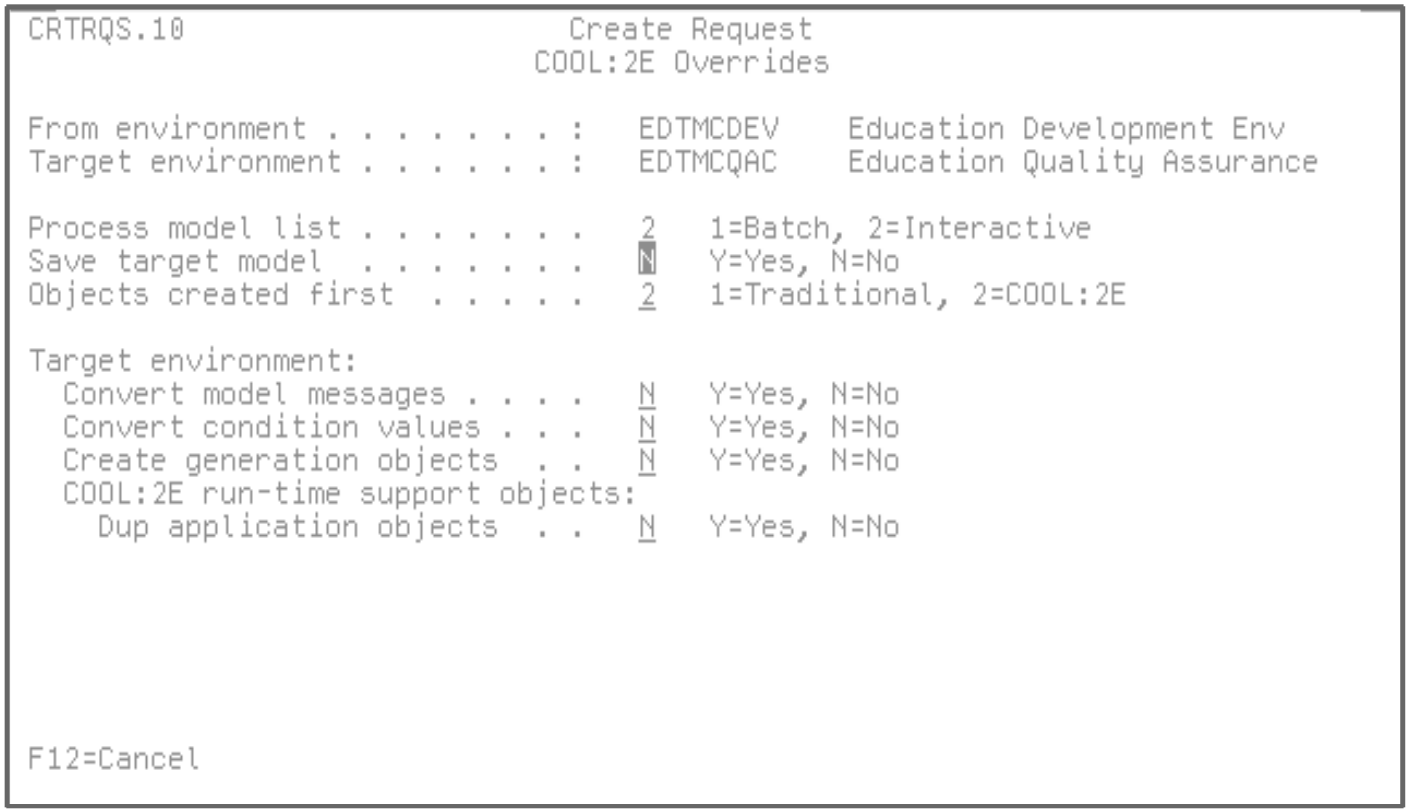
# Lock Details



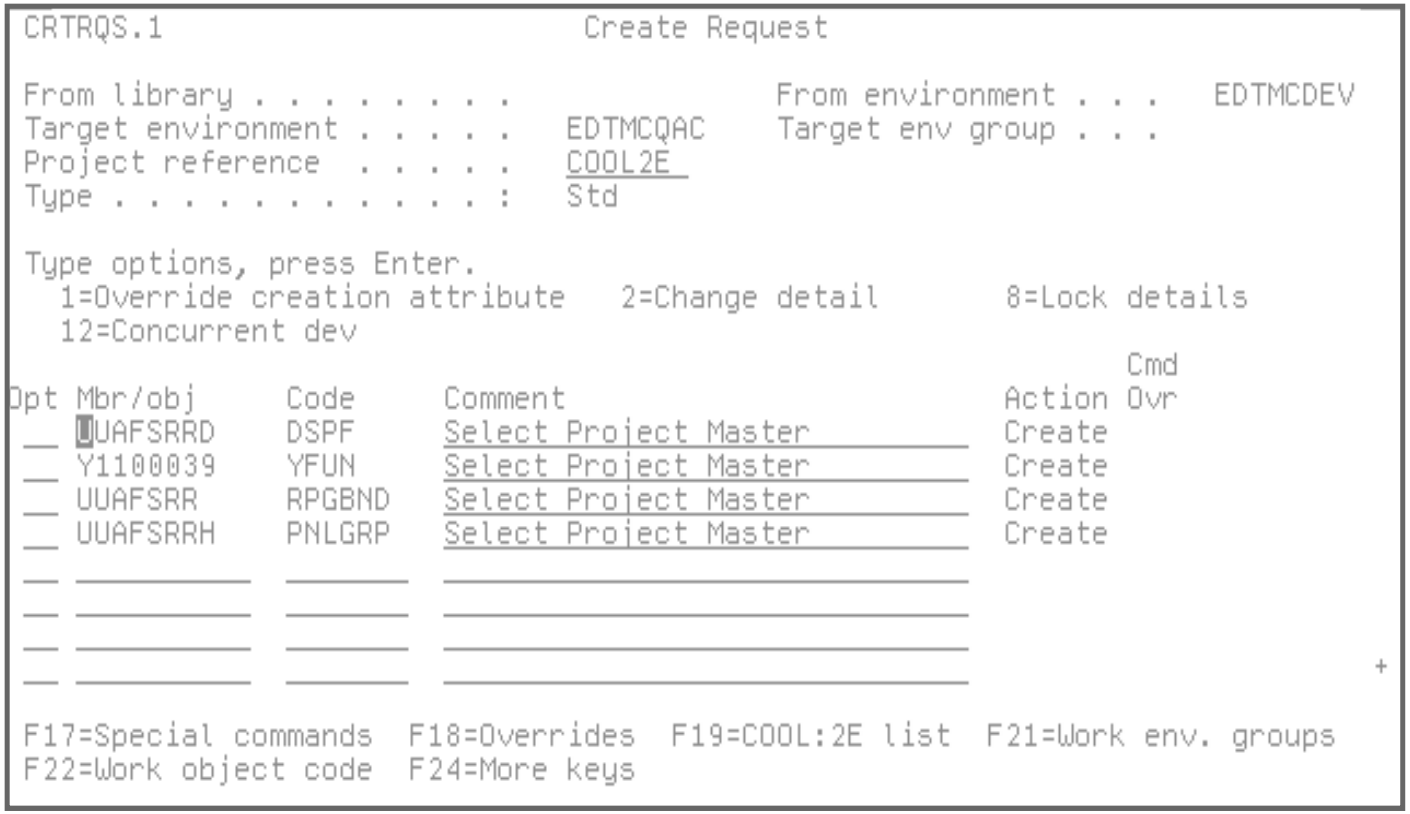
# Creating a Promotion Request



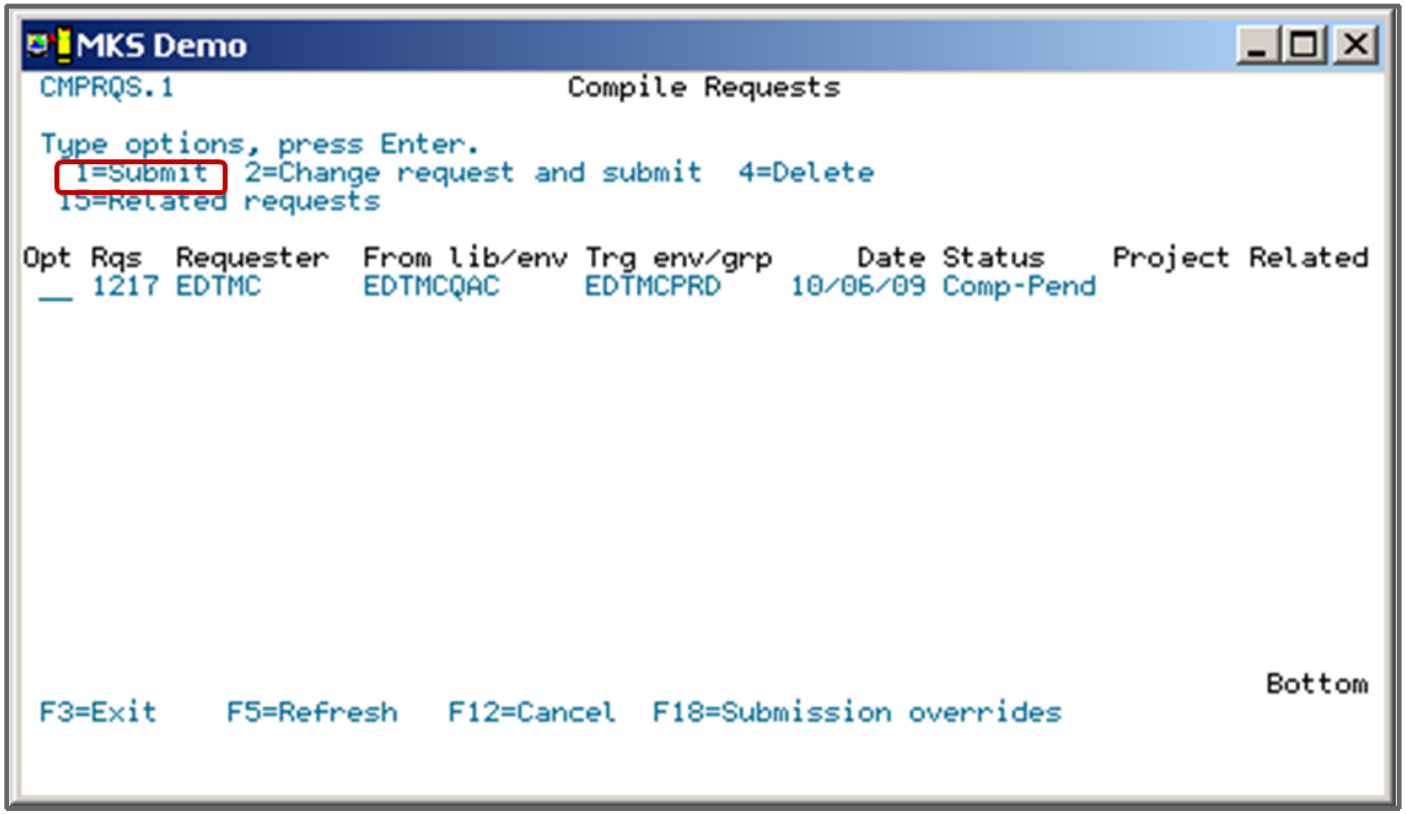
# Create Request Overrides



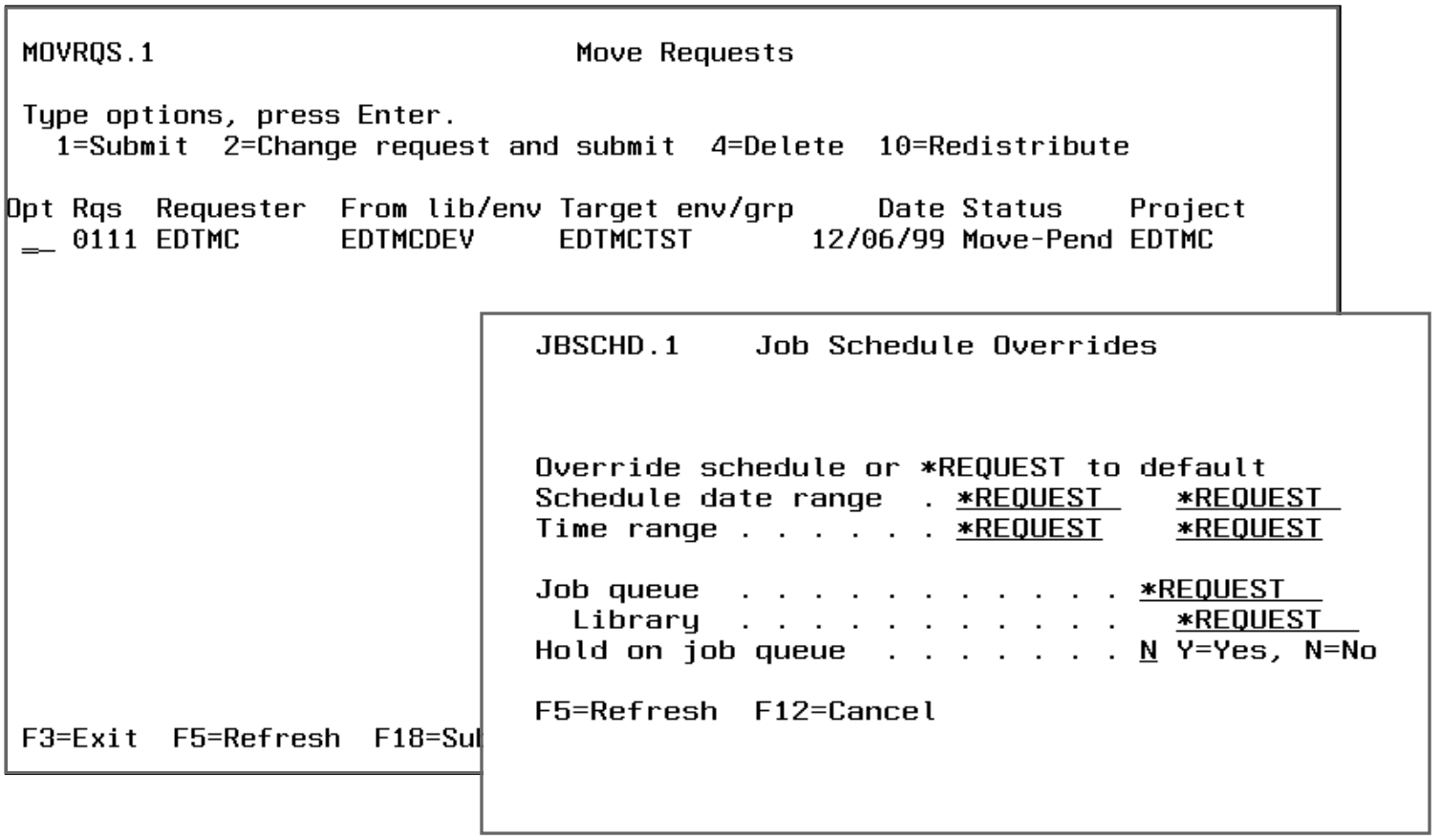
# Expanded Create Request Panel



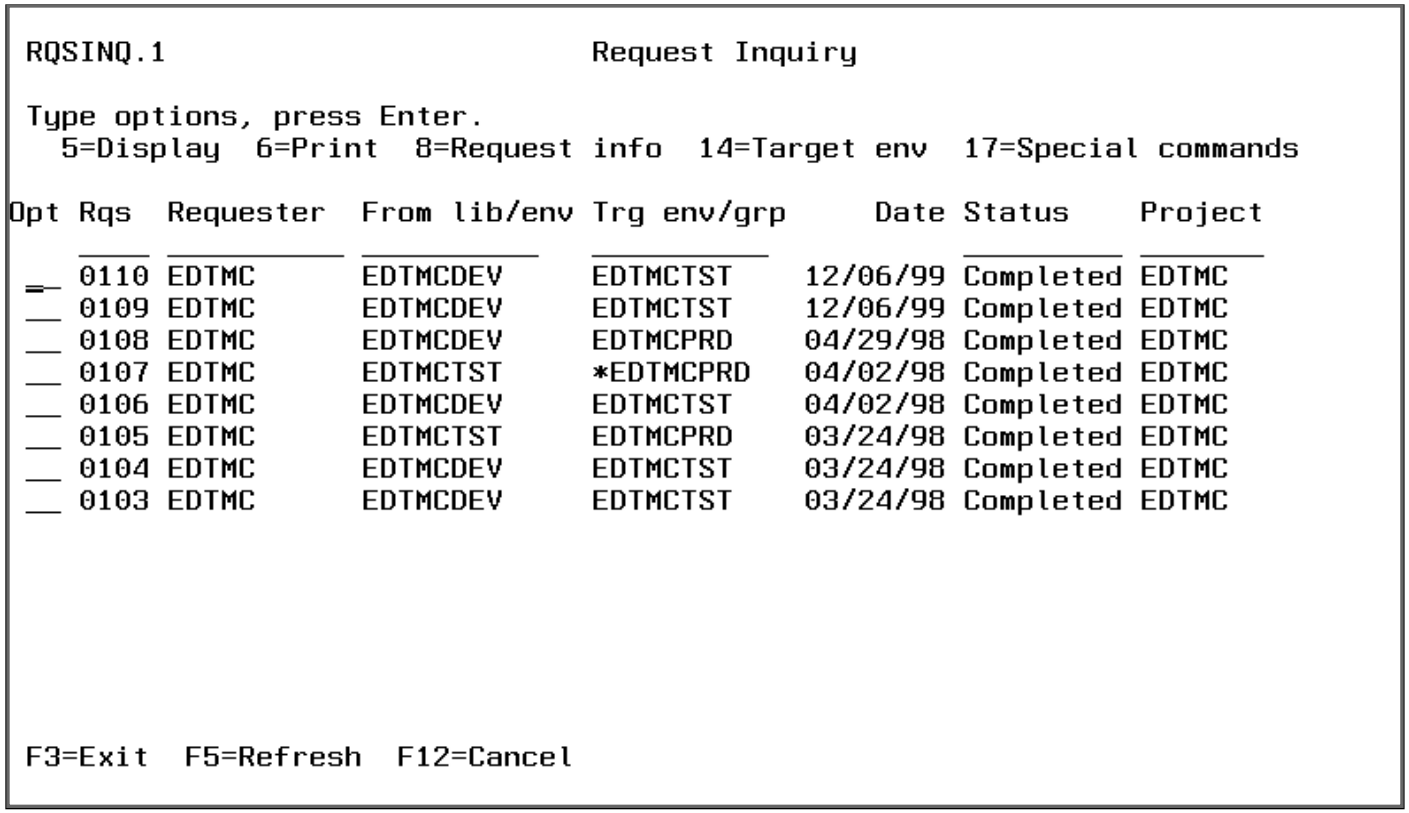
# Compile Request Panel



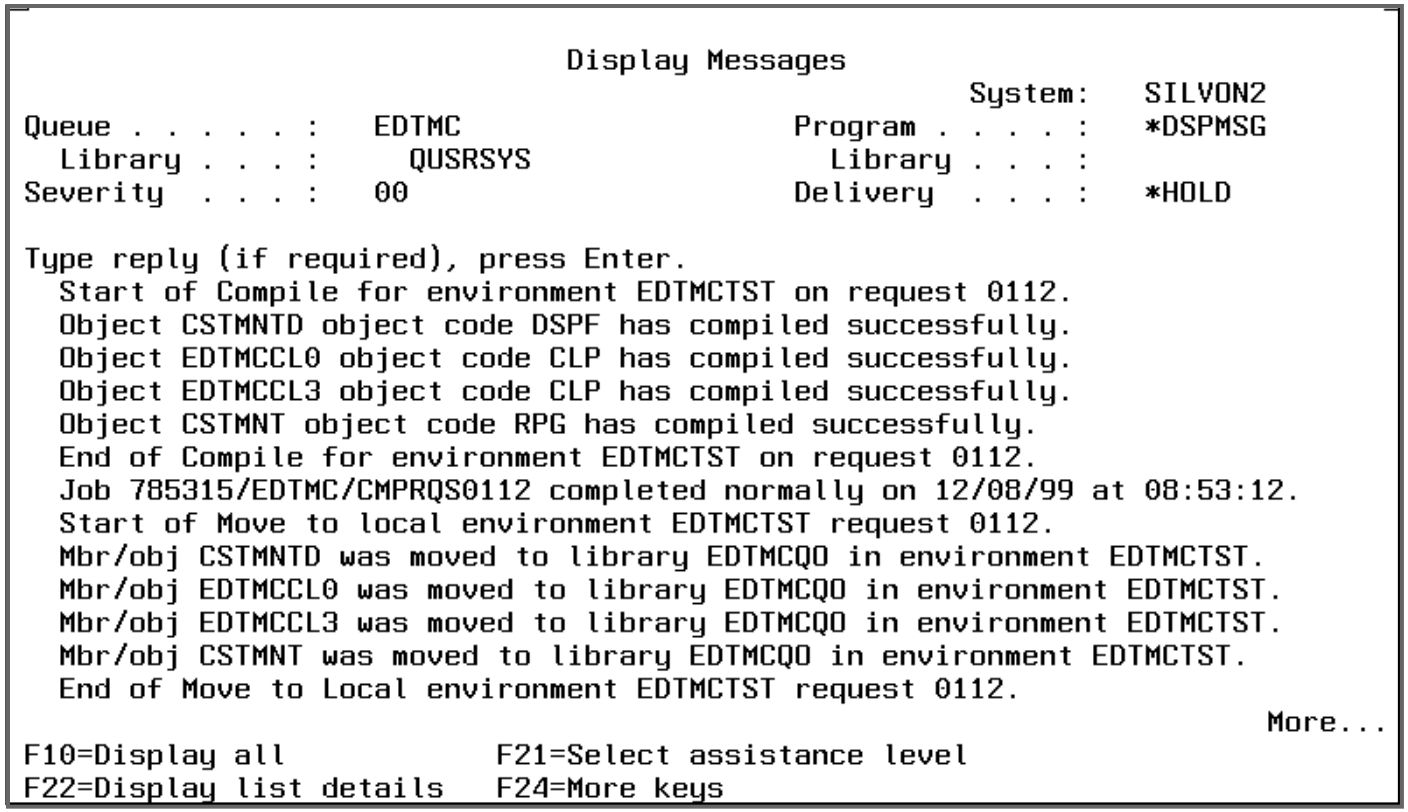
# Move Requests Panel



# Request Inquiry



# Processing Messages



# Exercise 4

- Promote Object from Development to QA
- Get to CM from within 2E
  - Log in to 2E Model CACNFMDL
  - Go to the 2E Services Menu
  - Select Option 21
  - Select 1. Display Change Management Main Menu
- Go to My Workbench and verify your Object has been checked out.
- Create a Request to move your Display File from Dev to QA.
- Compile your request and check the status of your request.
- Move your request to QA.
- Verify your request has been moved to QA.

# Conclusion

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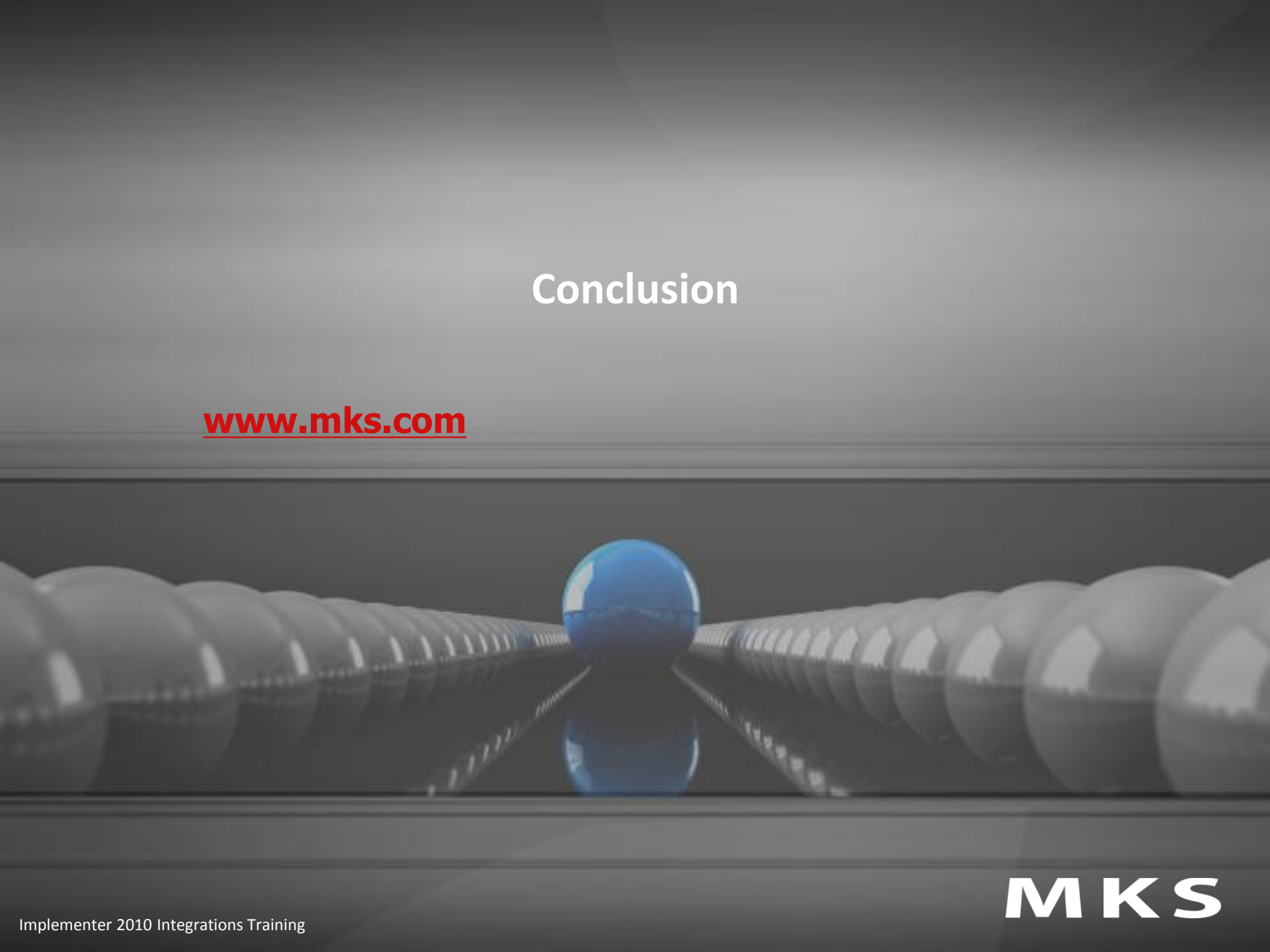



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