



# Licensed Program Specifications

## IBM Check Processing Control System Enhanced System Manager Program Number 5799-ESM

The Check Processing Control System (CPCS) Enhanced System Manager Feature\* (ESM) is a workflow management subsystem that manages and controls the flow of CPCS application tasks in the check processing environments. ESM uses a combination of on-line functions and event-driven tasks to schedule, initiate, and track CPCS application task execution.

Functions and features of ESM, Release 1, Modification 0 follow:

- Automatic Workflow Generation
  - Dynamically reads the CPCS Sort Pattern Type dataset (DKNSPDEF) to automatically generate workflow records using individual sort type members combined with ESM model workflow records.
- Workflow Management Functions
  - Provide on-line menu driven facilities to manipulate model workflow, task profile, and generated workflow record information.
  - Provide up to eight different levels of model workflow styles (Conventional Proof of Deposit, Image Proof of Deposit, Inclearings, Statement Sort, etc).
  - Provide ability to integrate vendor or customer tasks into workflow processing
  - Allows customers to define static parameters to pass to each "ESM Started" task such as option numbers, profile names, etc.
- Automatic Task Initiation
  - Provide a standard, open ended architecture for the automation of IBM, vendor, and customer application tasks
  - Provide ability to start tasks based on workflow position, time of day, time interval (ex. every 10 minutes), after a CPCS end cycle, after the previous task in the workflow completed successfully, after a CPCS Cold Start, after a CPCS Warm Start, after a specific string is created, etc.
- Task Management Functions
  - Provide on-line menus to allow operations personnel to monitor the progress of work through the system. This facility employs various filtering capabilities such as filter on CPCS cycle, tracer number, bank number, task name, task priority, system and user completion codes, etc.
  - Allow operations personnel to manipulate the status of a task such as force starting a task, preventing the immediate execution of a task by holding that task, restarting tasks, etc.
- Restart/Recovery
  - Provide a method of quickly restarting tasks that were active during a system crash/restart with the use of a single menu.
- Unit of Work (UOW) Management Functions
  - Provide on-line menus to allow operations personnel to monitor the progress of UOWs through the system. This facility employs various filtering capabilities such as filter on CPCS cycle, tracer number, string name, sort type, bank number, etc.
  - Allow authorized operators to start a task for a UOW by simply entering the task name beside the UOW on a list menu.
  - Provide the ability to display the list of tasks to be performed on a specific UOW and their start and end times as well as their completion codes.
- Multiple Site Compatibility
  - Provides the ability to separate work via CPCS owning and processing site names.
  - Allows on-line task and UOW queries using the owning and processing site names as filter criteria.
- MIS Statistics
  - Provide various statistics such as task start/end times, etc to an MIS database.

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- Application Programming Interfaces (APIs)
  - Provides the ability for vendor and customer written applications to transfer information into and from ESM databases.
  - Provides a high level CPCS Mass Dataset Access facility which returns an entire CPCS string in a MVS dataspace for vendor and customer applications to manipulate. This facility may also be used to create a new CPCS mass dataset string from information contained in the MVS dataspace.
- User Exits
  - Provide a user level grouping exit to allow customers to group work based on specific customer information (Group by shift based on time of day, etc)
  - Provide a Management Information Statistics (MIS) exit to allow the customer to filter records sent to the MIS database.
  - Provide a Codeline Manipulation exit to allow the customer to manipulate codeline records before insertion into a MVS dataspace and provided to a calling application such as HPTS Key Entry or HPTS Balancing.
  - Provide an "item by item" exit to allow customers to include or exclude individual codeline records when building a MVS dataspace provided to a calling application such as HPTS Key Entry or HPTS Balancing.
- Online Trace Facility
  - Provides the ability to toggle on/off various trace points within ESM to provide valuable diagnostic information for problem resolution.
  - This facility may also be used by the customer programming staff to integrate trace points into their own CPCS programs.
- Online Diagnostic Facility
  - Provides the ability to examine many ESM internal processing points to provide valuable diagnostic information for problem resolution.

## Specified Operating Environment

### Machine Requirements

ESM requires, as a minimum, a System/370<sup>\*</sup> Processor with 6 megabytes of main storage available to the ESM region and expanded storage configured. In addition to the requirements for MVS, the following features and hardware devices are necessary:

- A disk-storage device
- One display terminal

### Programming Requirements

You need the following IBM programs (and release levels) to use ESM:

- IBM Check Processing Control System licensed program (Program No. 5734-F11) Version 1 Release 11 or IBM Check Processing Control System International licensed program (Program No. 5799-FKT) Version 1 Release 1
- IBM MVS/ESA<sup>\*</sup> SP JES2 licensed program (Program No. 5695-047) Version 5 Release 1, generated to permit the use of Data Space and Hipspace<sup>\*</sup> facilities.
- IBM Data Facility Storage Management Subsystem (MVS/DFSMS<sup>\*</sup>) licensed program (Program No. 5695-DF1) Version 1 Release 2 including:
  - Basic sequential access method (BSAM)
  - Basic direct access method (BDAM)
  - Queued sequential access method (QSAM)
  - Virtual sequential access method (VSAM)
- IBM High Level Assembler Version 1 Release 1 licensed program (Program No. 5696-234)
- IBM SAA<sup>\*</sup> AD/Cycle<sup>\*</sup> COBOL/370<sup>\*</sup> licensed program (Program No. 5688-197) Version 1 Release 3
- IBM SAA AD/Cycle language Environment/370 (LE/370) licensed program ( Program No. 5688-198) Version 1 Release 5
- IBM DFSORT licensed program (Program No. 5740-SM1) Release 12 or an equivalent product
- IBM System Modification Program Extended (SMP/E<sup>\*</sup>) licensed program (Program No. 5668-949) Release 6 or an equivalent product
- IBM ACF/VTAM<sup>\*</sup> licensed program (Program No. 5685-085) Version 3 Release 4.1

For transaction and resource security, you need:

- IBM Resource Access Control Facility (RACF<sup>\*</sup>) licensed program (Program No. 5740-XXH) Version 1 Release 9 or an equivalent product

**Licensed Program Materials Availability**

Restricted materials - No. This licensed program is available without source licensed materials for some modules. These modules are available in object code. The remaining modules are available with source licensed program materials.

**Supplemental Terms****Designated Machine Identification**

Designated Machine Identification Required: Yes

**Testing Period**

Two months.

**Installation/Location License**

Yes. Installation License applies.

**Usage Restriction**

Yes. Usage features must be acquired to a quantity level equal to the number of document processors for which CPCS processes code-line data. This number includes all document processors (IBM and non-IBM) that cause the writing of an I-string or an M-string (without an associated I-string) to the CPCS Mass Data Set.

**Note:** In order to activate all of the ESM functions, you must contact the IBM Payment Solutions Support Center in order to receive a unique password for your installation.

**Type/Duration of Program Services**

Central Service, including a support center, will be available until discontinued by IBM upon six-months written notice. This program is supported by the IBM Payment Solutions Support Center, Charlotte, N.C. Access to this support center is provided through the IBM Support Center.

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