# Requirements for PSMGR-RUNTIME-TYPE Project

## Population of PSMGR-RUNTIME-TYPE field in GLOBDATA structure on Mainframe

The CA Gen global data (GLOBDATA) structure is used to exchange system information. The COBOL GLOBDATA structure appears in the LINKAGE SECTION of every generated COBOL action block and procedure step. It also appears in the LINKAGE SECTION in the COBOL runtime and user exit routines.

The PSMGR-RUNTIME-TYPE field in the GLOBDATA structure will be populated at runtime to indicate where the application is executing (CICS, IMS, Batch, TSOAE ) plus provide details about the application type (Blockmode, Server Manager, Batch Manager), protocol for Cooperative, screen type for Blockmode, and attach type for Batch. The PSMGR-RUNTIME-TYPE field is currently not populated on the mainframe.

The field will be populated in the runtime as soon as the information is available. It will then be passed to the procedure steps / action blocks via the GLOBDATA structure. The customer can then interrogate the value either in COBOL external action blocks, user exits, or action blocks via Inline Code statements.

The PSMGR-RUNTIME-TYPE field consists of 4 characters. Each character will represent a different property (Target/Application Type/Protocol/Attach Type)

* Character 1 for Target
	+ B=Batch (JES)
	+ C=CICS
	+ I=IMS
	+ T=TSOAE
* Character 2 for Application Type for CICS
	+ B=Blockmode
	+ S=Server Manager
* Character 2 for Application Type for Batch (JES)
	+ M=Batch Manager
* Character 2 for Application Type for TSOAE
	+ B=Blockmode
	+ M=Batch Manager
* Character 2 for Application Type for IMS
	+ B=Blockmode
	+ S=Server Manager
	+ M=Batch Manager
* Characters 3-4 for CICS Blockmode Screen Type
	+ B=Bypass
* Characters 3-4 for IMS Blockmode Screen Type
	+ B=Bypass
	+ M=MFS
	+ H=Host Facility
* Characters 3-4 for Protocol for CICS Server
	+ EO=ECI Commarea
	+ EH=ECI Channel
	+ LU=LU62 (SNA)
	+ MQ=MQ
	+ TP=TCP/IP
* Characters 3-4 for Protocol for IMS Server
	+ LU=LU62 (SNA)
	+ MQ=MQ
	+ TP=TCP/IP
* Characters 3-4 Attach Type for Batch JES
	+ DB=DB2\_DSN
	+ DL=DLIBATCH
	+ IB=IMS\_BMP
	+ NN=NONE

Examples:

* 'CSTP ' = CICS Server TCP/IP
* 'CSEO' = CICS Server ECI Commarea
* 'CSEH'= CICS Server ECI Channel
* ‘CBBP’= CICS Blockmode Bypass Screen Type
* 'ISTP' = IMS Server TCIP/IP
* 'ISMQ' = IMS Server MQ
* ‘IBMF’= IMS Blockmode MFS Screen Type
* ‘BMDB’ = Batch Manager DB2\_DSN
* ‘BMIB’ = Batch Manager IMS\_BMP

## COBOL Copybook for GLOBDATA

The following displays the current definition of PSMGR-RUNTIME-TYPE in GLOBDATA for COBOL generated code, runtimes, and user exits:

 03 PSMGR-RUNTIME-TYPE PIC X(4). \* CICS, IMS, BATC..ETC

For this project, the size of the GLOBDATA structure will not change but we will add 88-level definitions for each character/value of the PSMGR-RUNTIME-TYPE field in order to make it easier to query specific conditions. The following displays the new definition of PSMGR-RUNTIME-TYPE with 88 levels:

 03 PSMGR-RUNTIME-TYPE.

\* COL 1 = TARGET

\* COL 2 = APPLICATION TYPE

\* COL 3-4 = PROTOCOL, SCREEN TYPE OR ATTACH TYPE

 05 PSMGR-RUNTIME-TYPE-TARGET PIC X.

 88 TARGET-IS-BATCH VALUE 'B'.

 88 TARGET-IS-CICS VALUE 'C'.

 88 TARGET-IS-IMS VALUE 'I'.

 88 TARGET-IS-TSO VALUE 'T'.

 88 TARGET-IS-NOT-SET VALUE SPACE.

 05 PSMGR-RUNTIME-TYPE-APPTYPE PIC X.

 88 APPTYPE-IS-BATCH-MANAGER VALUE 'M'.

 88 APPTYPE-IS-BLOCKMODE VALUE 'B'.

 88 APPTYPE-IS-SERVER VALUE 'S'.

 88 APPTYPE-IS-NOT-SET VALUE SPACE.

 05 PSMGR-RUNTIME-TYPE-OTHER PIC XX.

 88 PROTOCOL-IS-ECI-COMMAREA VALUE 'EO'.

 88 PROTOCOL-IS-ECI-CHANNEL VALUE 'EH'.

 88 PROTOCOL-IS-LU62 VALUE 'LU'.

 88 PROTOCOL-IS-MQ VALUE 'MQ'.

 88 PROTOCOL-IS-TCPIP VALUE 'TP'.

 88 SCREEN-TYPE-IS-BYPASS VALUE 'BP'.

 88 SCREEN-TYPE-IS-HOSTFAC VALUE 'HF'.

 88 SCREEN-TYPE-IS-MFS VALUE 'MF'.

 88 ATTACH-TYPE-IS-DB2-DSN VALUE 'DB'.

 88 ATTACH-TYPE-IS-DLI VALUE 'DL'.

 88 ATTACH-TYPE-IS-IMS-BMP VALUE 'IB'.

 88 ATTACH-TYPE-IS-NONE VALUE 'NN'.

 88 OTHER-IS-NOT-SET VALUE SPACES.

This new definition will allow the user to add code like this in the COBOL external action block, user exit, or action block (via Inline Code statements).

Examples for user code:

* To determine if the target is CICS:
	+ IF TARGET-IS-CICS ...
* To determine if the application type is Blockmode:

IF APPTYPE-IS-BLOCKMODE …

* To determine if the protocol is TCPIP:
	+ IF PROTOCOL-IS-TCPIP ...

Otherwise, the user would have to interrogate the characters of PSMGR-RUNTIME-TYPE and look for specific values. For Example, character 1 would have the value of 'C‘ for CICS, etc…