IPCP™ Plus for z/OS & VSE

Inter-Program Command Processor

Let Batch Jobs Open and Close CICS Files, Write to CICS Transactions

IPCP Plus initiates CICS functions from batch via simple JCL and command parameters. Batch can take control of CICS resources precisely when they are needed, then relinquish control immediately after completing the task. While batch is updating resources, CICS users can continue to query those resources online.

IPCP checks command syntax before a batch job goes into production. It sends commands from batch to multiple CICS regions simultaneously, and supports any number of regions.

IPCP can cancel or continue a job depending on the result of commands to CICS, and the same cancel-or-continue decision can apply differently to different CICS regions.

IPCP can issue CEMT-like commands. For functions that IPCP cannot perform, it will link to other programs.

IPCP commands in JCL or CALL statements can:

- Open and close, enable and disable, allocate and deallocate CICS files and datasets.
- Enable and disable CICS transactions and terminals.
- Initiate CICS transactions.
- Open, close, and switch CICS journal files and dump data.
- Queue CICS resources.
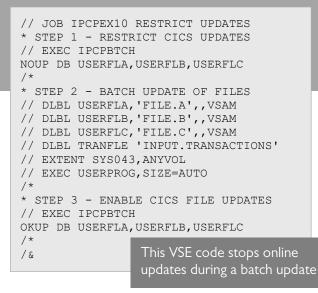
IPCP's interface with CICS allows you to:

- Issue IPCP commands.
- Ensure that resources remain closed until a batch process is complete, so that processing is not interrupted by CICS restarts.
- Maintain groups of resources to be managed with a single IPCP command.
- Customize IPCP configuration.
- Review the current status of resources and their most recent alterations by batch jobs.
- Report the history of IPCP actions: what was done, with which resources, when, and by whom.

The Premier File Control Utility

IPCP Plus provides a powerful job control mechanism which improves security, management, and throughput.

- Close online files so that a batch job can update them, then reopen the files when the update is finished.
- Deallocate CICS files, reorganize them, then reallocate them.
- Prevent CICS restarts from interrupting a batch job's access to a CICS resource.
- Shut down CICS transactions while related files are offline.
- Take specific terminals offline for the duration of a batch job.
- Invoke all CEMT features more quickly and with better feedback.
- Send messages to CICS terminals: "file *nn* is about to close," for example.
- Close, dump, and reopen CICS journal files without shutting down CICS.
- Make inquiries of files from CICS, even while the files are being updated by batch.
- Pass data from batch to CICS transactions, even eliminate entire batch update routines.
- Automatically print datasets according to a specified schedule.

Automatic Control and Rock-Solid Reliability

```
// JOB IPCPEX10 RESTRICT UPDATES
* STEP 1 - RESTRICT CICS UPDATES
// EXEC IPCPBTCH
NOUP DB USERFLA,USERFLB,USERFLC
/*
* STEP 2 - BATCH UPDATE OF FILES
// DLBL USERFLA,'FILE.A',,VSAM
// DLBL USERFLB,'FILE.B',,VSAM
// DLBL USERFLC,'FILE.C',,VSAM
// DLBL TRANFLE 'INPUT.TRANSACTIONS'
// EXTENT SYS043,ANYVOL
// EXEC USERPROG,SIZE=AUTO
/*
* STEP 3 - ENABLE CICS FILE UPDATES
// EXEC IPCPBTCH
OKUP DB USERFLA,USERFLB,USERFLC
/*
/&
```

This VSE code stops online updates during a batch update

Here's How IPCP Works

In a typical installation, initiation of a CICS region includes initiation of IPCP, and terminating CICS terminates IPCP. IPCP can also be started and stopped by keying commands at the CICS terminal, but that could possibly interrupt batch processes.

When CICS is initiated, IPCP can restore CICS resources to their last known IPCP status, thus avoiding problems in batch jobs as a result of CICS shutdowns.

As batch jobs process, the IPCP codes in the program will be validated and passed to CICS for processing. If the targeted CICS region is down or has not initiated IPCP, notification is sent to the operator.

Logs

All actions via the CICS interface can be logged to a transient data destination. If that is a SYSOUT dataset, VSE users can view IPCP logs in the VSE/POWER queue, and z/OS users can view them with IBM SDSF or a similar product.

All commands and errors as a result of IPCP code in batch jobs can be logged to the operator console. Or IPCP can log only those commands that make a CICS resource unavailable or otherwise alter its status.

Security

In addition to normal CICS security, exit points allow strict control over IPCP. Access can be restricted to all or part of the IPCP menu on CICS and to individual IPCP commands in batch. IPCP ships with sample security exit programs to be tailored to the installation.

Environment

IPCP Plus requires:
    IBM-supported version of z/OS or z/VSE

CICS facilities:
    Interval control
    Dynamic open/close
    Transient data
    Temporary storage
    Inquire/set function support in PPT

In z/OS:
    IBM-supported version of CICS
    Does not require any special supervisor options

In VSE:
    IBM-supported version of CICS
    Library space of 1500 blocks (four 3380 cylinders)

```
//IPCPEXP5  JOB    0001,'IPCP',CLASS=A…
//* STEP 1        INITIATE A CICS TRANSACTION
//IPCP01   EXEC   PGM=IPCPBTCH,REGION=120K
//STEPLIB   DD    DSN=IPCP43.LODLIB,DISP=SHR
//IPCPCDS   DD    DSN=IPCP.COMMAND.DATASET,DISP=SHR
//AUDIT     DD    SYSOUT=X
//SYSIN     DD    *
INIT KC TRNA,DATA FOR TRNA VIA EXEC CICS RETRIEVE COMMAND
INIT KC TRNB(TERM)   TERMINAL ORIENTED TRANSACTION
//
```

This z/OS code initiates a CICS transaction

For more information about IPCP Plus, please visit www.sdsusa.com/ipcp-plus/.

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