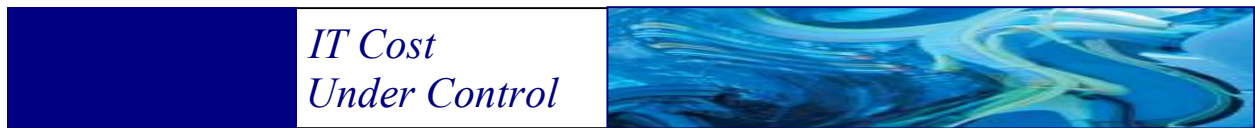




# EPV for CICS Preparing Input for a Demo



Supporting  
**EPV for CICS V15**

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## About this manual

This manual is intended to help anyone who wants to provide the data needed to prepare an EPV for CICS demo.

## Changes

Technical changes or additions to the text are indicated by a vertical line to the left of the change.

## Terminology

A “view” is an EPV report presented in an HTML page.



## 1 Introduction

The best way to evaluate the benefits provided by EPV for CICS for customers is to have a demo based on their data in their own environment.

Providing the data, needed to prepare a demo, is a quick and easy task to perform.

In this manual, after a short description of EPV for CICS input data, a simple four step process to do that is presented.

Sample JCLs are also provided.



## 2 Mandatory input data

Some SMF records data are mandatory in order to run EPV for CICS. If you don't provide them EPV will not produce any usable output.

They are:

- Record 30 subtype 2,3 (Address Space Interval activity);
- Record 70 (RMF CPU activity);
- Record 88 (System Logger activity);
- Record 110 subtype 1 (CICS Monitor);
- Record 110 subtype 2 (CICS Statistics).

### 2.1 SMF 30 subtype 2, 3 records

SMF 30 subtype 2 and 3 records are not produced by default.

To activate SMF interval accounting using the global recording interval the following parameters have to be set in the SMFPRMxx member of the SYS1.PARMLIB library:

- INTVAL(mm) where mm is the interval duration; suggested values are 10 or 15 minutes;
- SYNCVAL(nn) where nn is the minute in the hour that starts the interval; suggested value is 00;

In addition the following parameter have to be set under SYS and SUBSYS sections:

- INTERVAL(SMF,SYNC).

Writing of these records has to be allowed in SMFPRMxx (under the TYPE sub parameter).

It's very important you synchronise SMF and RMF data; to do that you must set the following parameter in the ERBRMFxx member, used by RMF Monitor I, of your SYS1.PARMLIB library:

- SYNC(SMF).

### 2.2 SMF 70 records

SMF 70 records are produced by default.

However the following parameters are normally explicitly specified in RMF monitor I (ERBRMFxx member of the SYS1.PARMLIB library):

- CPU, to produce CPU activity information.

Writing of these records also has to be allowed in SMFPRMxx (under the TYPE sub parameter).



## 2.3 SMF 110 subtype 1 records

EPV needs to know the correct layout of SMF 110 subtype 1 records in order to parse them. This information is provided in the dictionary records written to SMF at each CICS subsystem start up. If you have modified the default SMF 110 subtype 1 records layout and the data collected to produce a demo doesn't contain the time period when the CICS subsystems have started, it is necessary to create one or more files including the dictionary records by running the DFHMNDUP IBM utility. For more details see chapter 4.1.2

## 2.4 SMF 110 subtype 2 records

To produce the needed SMF 110 subtype 2 records the following parameters have to be set in DFHSIT:

- STATRCD=ON, to produce interval statistics; default is OFF;
- STATINT=010000, to set the interval to 1 hour; lower values are accepted; higher values will produce interval records which will be discarded by EPV; default is 010000.



### 3 Other suggested input data

If you are using the CICS Transaction Gateway you are strongly advised to also provide the additional SMF 111 records.

To produce them, the following parameters have to be set in the GATEWAY section of the Gateway daemon configuration file (ctg.ini):

- statsrecording=on, to produce interval statistics; default is off;
- statint=010000, to set the interval to 1 hour; lower values are accepted; higher values will produce interval records which will be discarded by EPV; default is 030000.





## 4 Preparing data for a demo

To have a good demo, a few hours worth of data are enough. If you have more systems sharing resources the result will be better. If you had a bad day, with lot of problems, the EPV demo will probably help you understand what happened.

The following steps need to be performed in order to prepare input data for an EPV demo.

### 4.1 Collecting data – Standard JCL

When transferring variable data (VB or VBS) from the mainframe to other platforms it is obviously important to do that without corrupting the logical structure of the records.

In this chapter the standard JCL to be used is provided. An alternative JCL to collect SMF data is provided in Chapter 5.

#### 4.1.1 Collecting SMF records

The following JCL will collect all the necessary SMF records.

It will also convert the SMF file to undefined format to avoid data corruption during the file transfer.

Cut and paste it in your JCL library, and do the following customizations:

- CHANGE *smfinput* TO YOUR SMF INPUT FILE NAME
- CHANGE *smfpref* TO OUTPUT FILE PREFIX
- CHANGE *yyyyxxx* to the starting and ending Julian date you want to select
- CHANGE *hhmm* to the starting and ending hours you want to select
- CHANGE FTP parameters (*your.ftp.address, user and password*) to appropriate values

```
//SELSMF EXEC PGM=IFASMFDP
//SYSPRINT DD SYSOUT=*
//INDD1 DD DSN=smfinput,DISP=SHR
//OUTDD1 DD DSN=smfpref.VBS,DISP=(,CATLG),
// UNIT=SYSDA, SPACE=(CYL,(100,100),RLSE),
// DCB=(LRECL=32760,BLKSIZE=27998,RECFM=VBS)
//SYSIN DD *
INDD(INDD1,OPTIONS(DUMP))
OUTDD(OUTDD1,TYPE(30(2,3),70,88,110,111))
DATE(yyyyxxx,yyyyxxx)
START(hhmm)
END(hhmm)
/*
/* DO NOT CHANGE RECFM=U ON BOTH DD
//UNDSMF EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD DSN=smfpref.VBS,DISP=SHR,
// DCB=(RECFM=U)
//SYSUT2 DD DSN=smfpref.UND,DISP=(,CATLG),
// DCB=(RECFM=U),
```



---

```
//          UNIT=SYSDA,SPACE=(CYL,(100,100),RLSE)
//SYSIN    DD DUMMY
/*
//FTPSMF   EXEC PGM=FTP,PARM='(EXIT'
//SYSPRINT DD SYSOUT=*
//OUTPUT   DD SYSOUT=*
//INPUT DD *
your.ftp.address
user password
quote PASV
bin
put `smfpref.UND' /smfpref.smf
close
quit
/*
```

### 4.1.2 Collecting Dictionary records

The following JCL will collect the necessary dictionary records. It will also convert the file to undefined format to avoid data corruption during the file transfer.

Cut and paste it in your JCL library, and do the following customizations:

- CHANGE *prefload* TO YOUR CICS SDFHLOAD FILE NAME
- CHANGE *dictpref* TO OUTPUT FILE PREFIX
- CHANGE *MCT\_suffix* to the suffix of monitoring control table (MCT)
- CHANGE *sysid* to the system identifier where the CICS is installed
- CHANGE *applid* to the CICS applid
- CHANGE *specific\_applid* to the CICS specific applid
- CHANGE FTP parameters (*your.ftp.address*, *user* and *password*) to appropriate values

```
//SELDICT  EXEC PGM=DFHMNDUP
//STEPLIB DD DSN=prefload.SDFHLOAD,DISP=SHR
//          DD DSN=prefload.CAT.LOADLIB,DISP=SHR
//SYSUT4   DD DSN=dictpref.DICT,DISP=(,CATLG),
//          UNIT=SYSDA,SPACE=(CYL,(1,1),RLSE)
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *
MCT=MCT_suffix
SYSID=sysid
GAPPLID=applid
SAPPLID=specific_applid
/*
/* DO NOT CHANGE RECFM=U ON BOTH DD
//UNDSMF   EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=*
//SYSUT1   DD DSN=dictpref.DICT,DISP=SHR,
//          DCB=(RECFM=U)
//SYSUT2   DD DSN=dictpref.UND,DISP=(,CATLG),
//          DCB=(RECFM=U),
//          UNIT=SYSDA,SPACE=(CYL,(1,1),RLSE)
//SYSIN    DD DUMMY
/*
```



```
//FTPDICT EXEC PGM=FTP, PARM='(EXIT'  
//SYSPRINT DD SYSOUT=*  
//OUTPUT DD SYSOUT=*  
//INPUT DD *  
your.ftp.address  
user password  
quote PASV  
bin  
put 'smfdict.UND' /smfdict.dict  
close  
quit  
/*
```

## 4.2 Compressing the data

When the data is on PC you should compress it (the compression factor is usually very high). Please be aware that compression tools may have limitations on the size of the file they can compress.

## 4.3 Sending the data

You can send data to EPV Technologies in two main ways:

- Uploading the data to the EPV FTP server;
- Creating a CD/DVD and sending it to our local distributor or directly to EPV Technologies via a courier service.

It's always better before sending the data to send a small file with only one SMF record type (e.g. SMF 70) by FTP or e-Mail, so we can confirm everything is correct before spending time sending large amounts of data.



## 5 Alternative JCL to collect data

If you use the standard IBM FTP you can improve processing performance by eliminating the step performing the conversion to undefined by using the JCL provided in this chapter.

### 5.1.1 Collecting SMF records

In the FTP step, records are read as if in undefined format in order to avoid FTP eliminating the VB and VBS headers and so corrupting the records. As stated in the comments it is essential not to change the RECFM parameter. It's also required that the transfer is done in binary mode.

Cut and paste it in your JCL library, and do the following customizations:

- CHANGE *smfinput* TO YOUR SMF INPUT FILE NAME
- CHANGE *smfpref* TO OUTPUT FILE PREFIX
- CHANGE *yyyyxxx* to the starting and ending Julian date you want to select
- CHANGE *hhmm* to the starting and ending hours you want to select
- CHANGE FTP parameters (*your.ftp.address*, *user* and *password*) to appropriate values

```
//SELSMF EXEC PGM=IFASMFDP
//SYSPRINT DD SYSOUT=*
//INDD1 DD DSN=smfinput,DISP=SHR
//OUTDD1 DD DSN=smfpref.VBS,DISP=(,CATLG),
// UNIT=SYSDA, SPACE=(CYL,(100,100),RLSE),
// DCB=(LRECL=32760,BLKSIZE=27998,RECFM=VBS)
//SYSIN DD *
INDD(INDD1,OPTIONS(DUMP))
OUTDD(OUTDD1,TYPE(30(2,3),70,88,110,111))
DATE(yyyyxxx,yyyyxxx)
START(hhmm)
END(hhmm)
/*
/* DO NOT CHANGE RECFM=U ON //DDSMF
//FTPSMF EXEC PGM=FTP,PARM='(EXIT'
//SYSPRINT DD SYSOUT=*
//OUTPUT DD SYSOUT=*
//DDSMF DD DSN=smfpref.VBS,RECFM=U,BLKSIZE=32760,DISP=SHR
//INPUT DD *
your.ftp.address
user password
quote PASV
bin
put //DD:DDSMF /smfpref.smf
close
quit
/*
```



---

## 5.1.2 Collecting Dictionary records

In the FTP step, records are read as if in undefined format in order to avoid FTP eliminating the VB and VBS headers and so corrupting the records. As stated in the comments it is essential not to change the RECFM parameter. It's also required that the transfer is done in binary mode.

Cut and paste it in your JCL library, and do the following customizations:

- CHANGE *prefload* TO YOUR CICS SDFHLOAD FILE NAME
- CHANGE *dictpref* TO OUTPUT FILE PREFIX
- CHANGE *MCT\_suffix* to the suffix of monitoring control table (MCT)
- CHANGE *sysid* to the system identifier where the CICS is installed
- CHANGE *applid* to the CICS applid
- CHANGE specific *applid* to the CICS specific applid
- CHANGE FTP parameters (*your.ftp.address*, *user* and *password*) to appropriate values

```
//SELDDICT EXEC PGM=DFHMNDUP
//STEPLIB DD DSN=prefload.SDFHLOAD,DISP=SHR
// DD DSN=prefload.CAT.LOADLIB,DISP=SHR
//SYSUT4 DD DSN=dictpref.DICT,DISP=(,CATLG),
// UNIT=SYSDA, SPACE=(CYL,(1,1),RLSE)
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
MCT=MCT_suffix
SYSID=sysid
GAPPLID=applid
SAPPLID=specific_applid
/*
/* DO NOT CHANGE RECFM=U ON //DDSMF
//FTPDICT EXEC PGM=FTP,PARM='(EXIT'
//SYSPRINT DD SYSOUT=*
//OUTPUT DD SYSOUT=*
//DDDICT DD DSN=dictref.DICT,RECFM=U,BLKSIZE=32760,DISP=SHR
//INPUT DD *
your.ftp.address
user password
quote PASV
bin
put //DD:DDDICT /dictpref.dict
close
quit
/*
```



## **6 Customer support**

For any technical problem with or question about EPV for CICS please write an email to:

[epv.support@epvtech.com](mailto:epv.support@epvtech.com)

For any other issue about EPV for CICS please write an email to:

[epv.info@epvtech.com](mailto:epv.info@epvtech.com)



## Related documentation

The following manuals complement the information provided in this manual:

- *EPV for CICS V15 (SAS based) Installation and Customization Guide*
- *EPV for CICS V15 Installation and Customization Guide*
- *EPV for CICS V15 List of Views*
- *EPV for CICS V15 DataBase Layout*
- *EPV V15 User Interface*