CICS 字段说明

大连理工大学 姚晗 杨发雪 龙梦颖

1 全局变量

def StringToInt(input_string)　　　　将字符串转化成数字，去除，KMG 单位等符号

def ConvertGMK(input_string)　　　将数字转化成 KMG 单位

def copyFiles(sourceDir, targetDir) 复制 sourceDir 文件到 targetDir

def ApplidMatch(ApplidPattern, currentApplid)　识别 APPLID 符合正则表达式

global CICSVERSION
global TCLASSNAME
global DSARATIOTHRES
global EDSARATIOTHRES
global QRDISPRATIOTHRES
global ENQIMMESUCCESSTHRESHOLD
global APPLIDPATTERN
global STATISTICS_DATE
global PEAK_INTERVAL
global TMFlag
global DSFlag
global LGFlag
global DBFlag
global NQFlag
global TSQFlag
global TDQFlag
global SMFlag
global CONFlag
global DUFlag

```
    TCLASSNAME = "*TOTALS*"                    #Change the TClass name per your
request, by default TOTALS is used
    ENQNAME = "*TOTALS*"                       #Change the ENQ name per your
request, by default TOTALS is used
    CICSVERSION = "6.8.0"
    DSARATIOTHRES = 90.00
    EDSARATIOTHRES = 90.00
    QRDISPRATIOTHRES = 50.00
    ENQIMMESUCCESSTHRESHOLD = 90.00
    STATISTICS_DATE = "
    PEAK_INTERVAL = "
    TMFlag = 0
    TCFlag = 0
    DSFlag = 0
    LGFlag = 0
    DBFlag = 0
    NQFlag = 0
    TSQFlag = 0
    TDQFlag = 0
    SMFlag = 0
    CONFlag = 0
    DUFlag = 0

    TCLASSNAME = config["TClassName"]
    ENQNAME = config["ENQName"]
    DSARATIOTHRES = float(config["DSARatioThreshold"])
    EDSARATIOTHRES = float(config["EDSARatioThreshold"])
    QRDISPRATIOTHRES = float(config["QRDispRatioThreshold"])
    ENQIMMESUCCESSTHRESHOLD = float(config["ENQImmeSuccessThreshold"])
    APPLIDPATTERN = config["ApplidPattern"]
```

IntItem = IntervalItem()

IntRep = IntervalReport()

IntRep.AppendItem(IntItem)

TMRep = TransactionManagerReport()

DSRep = DispatcherReport()

NQRep = EnqueueReport()

SMRep = StorageManagerReport()

LGRep = LogManagerReport()

DBRep = DB2Report()

DURep = DumpReport()

TSQRep = TSQReport()

TDQRep = TDQReport()

CONRep = ConnectionReport()

2 TClassItem

__CSVString = ''	#CSV string
Applid = ''	#CICS Application ID
Date = ''	#Data collection data
ResTime = ''	#Last rest time
ColTime = ''	#Data collection time
TClassName = ''	#Transaction Class name
TClassDef = 0	#Transactions in this class
MaxAct = 0	# maximum number of transactions
PrgThrs = 0	#Purge threshold
Attaches = 0	#attach requests
AcptImm = 0	#transactions which are accepted immediately
PrgImm = 0	#transactions which are purged immediately
Queued = 0	#transactions which are queued
PrgQd = 0	#Purged while queuing
QuedTime =''	#Queued time
PckAct = 0	#Peak Active
PckQued = 0	#Peak Queued
MaxActTimes = 0	#MXT Active times
PrgThrsTimes = 0	#times at purge threshold

def TClassItemCSV(self)

```
+_____
0
0  Tclass   Number Max  Purge  <---------------- T O T A L ------------------>  Peak   Peak   Times Times  <-- C U R R E N T -->
|  Name     Trandfs Act Thresh Attaches  AcptImm PrgImm Queued PrgQ'd   Q-Time    Act  Queued MaxAct PrgThr  Act  Queued QueueTime
+
   TCLBCSN       0  10     1       0         0      0      0      0   00:00:00    0      0       0      1    0      0   00:00:00
   TCL0001       0   1     0       0         0      0      0      0   00:00:00    0      0       0      0    0      0   00:00:00
   TCL0002       0   1     0       0         0      0      0      0   00:00:00    0      0       0      0    0      0   00:00:00
   TCL0003       0   1     0       0         0      0      0      0   00:00:00    0      0       0      0    0      0   00:00:00
   TCL0004       0   1     0       0         0      0      0      0   00:00:00    0      0       0      0    0      0   00:00:00

   *TOTALS*      3                 0         0      0      0      0   00:00:00           0       1      0    0      0   00:00:00
```

获得 every, Totals：TClassName、TClassDef、MaxAct、PrgThrs、Attaches、AcptImm、PrgImm、Queued、PrgQd、QuedTime、PckAct、PckQued、MaxActTimes、PrgThrsTimes

3 TransactionManagerItem

__CSVString = ''   #CSV string
Applid = ''   #CICS Application ID
Date = ''   #Data collection data
ResTime = ''   #Last rest time
ColTime = ''   #Data collection time
TotTran = 0   #Total transaction numer (User + System)
MXT = 0   #MXT setting
MXTTimeRch = 0   #MXT reach time
PkQued = 0   #Peak queued task number
PkActv = 0   #Peak active task number
TotlActUsr = 0   #Total active user transaction number
TotlDly = 0   #Total Delayed transactin number
MXTRatio = 0.0   #Peak active/MXT
IntervalValue = 0.0   #Interval in seconds
TClassItemList = list() #TClass list

global TCLASSNAME

def __init__(self)
def AppendTClassItem(self,TCItem)
def PickedTClassItem(self)
def TMItemCSV(self)

```
+_____
0TRANSACTION MANAGER STATISTICS
+_____
   Total number of transactions (user + system)                  :          14,018
0  Current MAXTASKS limit                                        :             250
   Current number of active user transactions                    :              19
   Current number of MAXTASK queued user transactions            :               0
0  Times the MAXTASKS limit reached                              :               0
0  Peak number of MAXTASK queued user transactions               :               0
   Peak number of active user transactions                       :              31
   Total number of active user transactions                      :           14008
   Total number of MAXTASK delayed user transactions             :               0
0  Total MAXTASK queuing time                                    :     000-00:00:00
   Total MAXTASK queuing time of currently queued user transactions :    00:00:00
```

获得 TolTran、MXT、MXTimeRch、PkQued、PkActv、TotlActUsr、TotlDly

MXTRatio = PkActv/MXT

4 TransactionManagerReport

__Title_TM =
"Applid,Date,ResTime,ColTime,TotTran,MXT,MXTTimeRch,PkQued,PkActv,TotlActUsr,TotlDly,MXTRatio%"
__Title_TC =
"Applid,Date,ResTime,ColTime,TClassName,Trandfs,NaxAct,PrgThrs,Attaches,AcptImm,PrgImm,Queued,PrgQd,QuedTime,PckAct,PckQued,MaxActTimes,PrgThrsTimes"

```
TMItemList = list()            #Transaction item list

def __init__(self)
def AppendItem(self, TMItem)
def PrintInCSV(self)
def DumpToFile(self)
```

5 DispatcherItem

__CSVString = ''	#CSV string	
Applid = ''	#CICS Application ID	
Date = ''	#Data collection data	
ResTime = ''	#Last rest time	
ColTime = ''	#Data collection time	
ASCPU = ''	#Address space CPU time	
ASSRB = ''	#Address space SRB time	
ICV = 0	#ICV setting	
ICVR = 0	#ICVR setting	

```
QRDsp = '00:00:00'        #QR dispatch time
QRCPU = '00:00:00'        #QR CPU time
QRCPUUtilRatio = 0.0      #QR CPU/Interval
QRDispUtilRatio = 0.0     #QR Disp/Interval
QRDispRatio = 0.0         #QR CPU/dispatch


L8Dsp = '00:00:00'        #L8 dispatch time
L8CPU = '00:00:00'        #L8 CPU time
L8CPUUtilRatio = 0.0      #L8 CPU/Interval
L8DispUtilRatio = 0.0     #L8 Disp/Interval
L8DispRatio = 0.0         #L8 CPU/dispatch


ASCPUUtilRatio = 0.0      #Address space TCB CPU/Interval
SRBCPUUtilRatio = 0.0     #Address space SRB CPU/Interval
CPUPerUsrTran = 0.0       #CPU time (TCB+SRB) /User transaction
PkOpTCB = 0               #Peak open TCB usage
MAXOpTCB = 0              #Max open TCB usage
OpTCBRatio = 0            #Peak Open TCB/MAXOPENTCB
ASCPUV = 0.0              #Address space CPU in seconds
ASSRB = 0.0               #Address space SRC in seconds
QRDspQueuePk = 0          #Peak QR dispatchable queue length
```

QRDspQueueAvg = 0.00   #Average QR dispatchable queue length

def DispatcherItemCSV(self)

```
'''
CICS 680 and below:
+_____
0DISPATCHER STATISTICS
+_____
0  Dispatcher Start Date and Time. . . . . . . : 09/08/2015  22:10:53.1448
0  Address Space CPU Time. . . . . . . . . . . :      00:02:35.494468
   Address Space SRB Time. . . . . . . . . . . :      00:00:00.405410
0  Current number of dispatcher tasks. . . . . :                  46
   Peak number of dispatcher tasks . . . . . . :                  65
0  Current ICV time (msec) . . . . . . . . . . :               10000
   Current ICVR time (msec). . . . . . . . . . :               10000
   Current ICVTSD time (msec). . . . . . . . . :                   0
0  Current PRTYAGE time (msec) . . . . . . . . :                 500
0  Current MRO (QR) Batching (MROBTCH) value . :                   1
0  Number of Excess TCB Scans. . . . . . . . . :                   1
   Excess TCB Scans - No TCB Detached. . . . . :                   1
   Number of Excess TCBs Detached. . . . . . . :                   0
   Average Excess TCBs Detached per Scan . . . :                   0
0  Number of CICS TCB MODEs. . . . . . . . . . :                  18
0  Number of CICS TCB POOLs. . . . . . . . . . :                   4
```
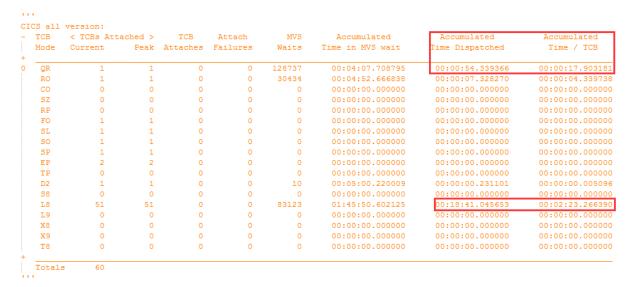
获得：ASCPU、ASSRB、ICV、ICVR

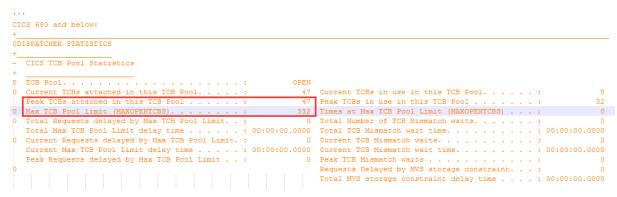ASCPUUtilRatio = ASCPUV/IntervalV   SRBCPUUtilRatio = ASSRBV/IntervalV

TCBMODENUM

```
'''
Only applicable for CICS 690
+_____
0DISPATCHER STATISTICS
+_____
-  CICS TCB Mode Statistics
+  _____
0  TCB         TCB    < TCBs Attached >  <- TCBs In Use ->   TCB     <-  Dispatchable Queue   ->
   Mode  Open  Pool   Current    Peak    Current    Peak  Attaches  Current    Peak    Average
+
0  QR    No   N/A        1        1         1        1        0        1         2       1.00
'''
```

获得：QRDspQueuePk、QRDspQueueAvg

```
'''
CICS all version:
-  TCB    < TCBs Attached >   TCB     Attach      MVS       Accumulated      Accumulated       Accumulated
   Mode  Current     Peak  Attaches  Failures   Waits    Time in MVS wait   Time Dispatched      Time / TCB
+
0  QR        1        1        0        0     128737   00:04:07.708795   00:00:54.339366    00:00:17.903181
   RO        1        1        0        0      30434   00:04:52.666838   00:00:07.328270    00:00:04.339738
   CO        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   SZ        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   RP        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   FO        1        1        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   SL        1        1        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   SO        1        1        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   SP        1        1        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   EP        2        2        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   TP        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   D2        1        1        0        0         10   00:05:00.220009   00:00:00.231101    00:00:00.005096
   S8        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   L8       51       51        0        0      83123   01:45:50.602125   00:18:41.045653    00:02:23.266390
   L9        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   X8        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   X9        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
   T8        0        0        0        0          0   00:00:00.000000   00:00:00.000000    00:00:00.000000
+
   Totals   60
'''
```

获得：CQRDisp、CQRCPU、CL8Disp、CL8CPU

QRCPUUtilRatio = CQRCPUV/CIntervalV

QRDispUtilRatio = CQRCPUV/CQRDispV

QRDispRadio = CQRDispV/CIntervalV

CL8UtilRatio = CL8CPUV/CIntervalV

CL8DispUtilRatio = CL8CPUV/CL8DispV

CL8DispRatio = CL8DispV/CIntervalV

```
'''
CICS 680 and below:
+_____
0DISPATCHER STATISTICS
+_____
-  CICS TCB Pool Statistics
+  _____
0  TCB Pool. . . . . . . . . . . . . . . . . . . :        OPEN
0  Current TCBs attached in this TCB Pool. . . . :          47   Current TCBs in use in this TCB Pool. . . . . :            8
|  Peak TCBs attached in this TCB Pool . . . . . :          47   Peak TCBs in use in this TCB Pool . . . . . . :           32
0  Max TCB Pool limit (MAXOPENTCBS). . . . . . . :         332   Times at Max TCB Pool Limit (MAXOPENTCBS) . . :            0
0  Total Requests delayed by Max TCB Pool Limit. :           0   Total Number of TCB Mismatch waits. . . . . . :            0
|  Total Max TCB Pool Limit delay time . . . . . : 00:00:00.0000  Total TCB Mismatch wait time. . . . . . . . . : 00:00:00.0000
0  Current Requests delayed by Max TCB Pool Limit. :         0   Current TCB Mismatch waits. . . . . . . . . . :            0
|  Current Max TCB Pool Limit delay time . . . . : 00:00:00.0000  Current TCB Mismatch wait time. . . . . . . . : 00:00:00.0000
|  Peak Requests delayed by Max TCB Pool Limit . . :         0   Peak TCB Mismatch waits . . . . . . . . . . . :            0
0                                                                 Requests Delayed by MVS storage constraint. . :           0
|                                                                 Total MVS storage constraint delay time . . . . : 00:00:00.0000
'''
```

获得：PkOpTCB、MAXOpTCB

opTCBRatio = CPkOpTCB/MAXOpTCB

6 DispatcherReport

__Title =
"Applid,Date,ResTime,ColTime,ASCPU,ASSRB,ICV,ICVR,QRCPU,QRDsp,QRCPUUtilRatio%,QRDispUtilRatio%,QRDispRatio%,"+ \
"L8CPU,L8Dsp,L8CPUUtilRatio%,L8DispUtilRatio%,L8DispRatio%,ASTCBUtilRatio%,ASSRBCPUUtilRatio%,CPUPerUsrTran,PkOpTCB,MAXOpTCB,OpTCBRatio%"
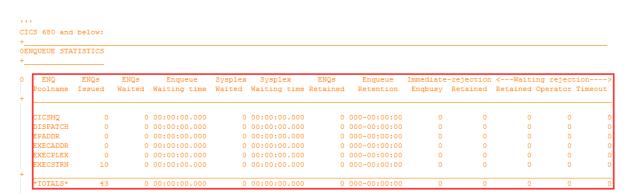
global CICSVERSION

DSItemList = list()   #Dispatcher item list
def __init__(self)
def AppendItem(self, DSItem)
def PrintInCSV(self)
def DumpToFile(self)

7 EnqueueItem

```
__CSVString = ''
Applid = ''                        #CICS Application ID
Date = ''                          #Data collection data
ResTime = ''                       #Last rest time
ColTime = ''                       #Data collection time
ENQPoolName = ''                   #Selected ENQ pool ID
ENQIssd = 0                        #ENQs Issued
ENQWtd = 0                         #ENQs Waited
ENQWTT = ''                        #Enqueue Waiting time
ENQSysWtd = 0                      #Sysplex Waited
ENQSysWtT = ''                     #Sysplex Waiting time
ENQRtnd = 0                        #ENQs Retained
ENQRtnT = ''                       #Enqueue retention time
ImmRejEqBsy = 0                    #Immediately rejected ENQBUSY
ImmRejEqRtn = 0                    #Immediately rejected due to RETAINED
WtRejRtn = 0                       #Waiting requests that were rejected due to the enqueue
                                    moving into a retained state
WtRejOp = 0                        #Waiting requests that were rejected due to the operator
                                    purging the waiting transaction
WtRejTo = 0                        #Waiting requests that were rejected due to the timeout
                                    value being exceeded
ENQBusyRatio = 0.0                 #ENQ Busy/ENQIssd
ENQWttRatio= 0.00                  #ENQ Waited/ENQIssd
ENQRetRatio= 0.00                  #ENQ Retained/ENQIssd
ENQImmRetRatio = 0.00              #ENQ Imme RETAINED/ENQIssd
ENQImmSuccessRatio = 0.00#Endqueue Immediate success

def EnqueueItemCSV(self):
```

```
...
CICS 680 and below:
+_____
0ENQUEUE STATISTICS
+_____

0   ENQ      ENQs    ENQs    Enqueue     Sysplex   Sysplex    ENQs    Enqueue    Immediate-rejection <---Waiting rejection---->
    Poolname  Issued  Waited  Waiting time Waited   Waiting time Retained  Retention   Enqbusy  Retained  Retained Operator Timeout
+

    CICSMQ       0      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
    DISPATCH     0      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
    EPADDR       0      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
    EXECADDR     0      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
    EXECPLEX     0      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
    EXECSTRN    10      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
+
    *TOTALS*    43      0 00:00:00.000     0 00:00:00.000     0 000-00:00:00     0        0        0        0        0
```

获得：ENQIssd、ENQWtd、ENQWTT、ENQSysWtd、ENQSysWtT、ENQRtnd、ENQRtnT、ImmRejEqBsy、ImmRejEqRtn、WtRejRtn、WtRejOp、WtRejTo

ENQBusyRatio = ImmRejEqBsy/ENQIssd

ENQWttRatio = ENQWtd/ENQIssd

ENQRetRatio = ENQRtnd/ENQIssd

ENQImmRetRatio = ImmRejEqRtn/ENQIssd

ENQImmSuccessRatio =

100-ENQBusyRatio-ENQWttRatio-ENQRetRatio-ENQImmRetRatio

8 EnqueueReport

__Title =
"Applid,Date,ResTime,ColTime,ENQPoolName,ENQIssd,ENQWtd,ENQWTT,ENQSysWtd,
ENQSysWtT,ENQRtnd,ENQRtnT,ImmRejEqBsy,ImmRejEqRtn,WtRejRtn,WtRejOp,WtRej
To,ENQBusyRatio%,ENQWttRatio%,ENQRetRatio%,ENQImmRetRatio%,ENQImmSucces
sRatio%"
NQItemList = list()
def __init__(self)
def AppendItem(self, NQItem)
def PrintInCSV(self)
def DumpToFile(self)

9 StorageManagerItem

__CSVString = ''	
Applid = ''	#CICS Application ID
Date = ''	#Data collection data
ResTime = ''	#Last rest time
ColTime = ''	#Data collection time
STGPROT = ''	#Storage Protection
TRANISO = ''	#Transaction Isolation
REENTPG = ''	#Write protection for reentrant programs
DSALIM = 0	#Current DSA Limit
PeakDSA = 0	#Peak DSA usage
EDSALIM = 0	#Current EDSA Limit
PeakEDSA = 0	#Peak EDSA usage
MEMLIMIT = ''	#z/OS MEMLIMIT
CDSASize = 0	#Peak CDSA usage
UDSASize = 0	#Peak UDSA usage
SDSASize = 0	#Peak SDSA usage
RDSASize = 0	#Peak RDSA usage
ECDSASize = 0	#Peak ECDSA usage
EUDSASize = 0	#Peak EUDSA usage
ESDSASize = 0	#Peak ESDSA usage
ERDSASize = 0	#Peak ERDSA usage
ETDSASize = 0	#Peak ETDSA usage
CDSAHWM = 0	#Peak - Lowest Free
UDSAHWM = 0	#Peak - Lowest Free
SDSAHWM = 0	#Peak - Lowest Free
RDSAHWM = 0	#Peak - Lowest Free
DSAHWMTotal = 0	#Total DSA HWM
DSASOSTms = 0	#SOS times
DSASTGVIOLTms = 0	#Storage Violation times

ECDSAHWM = 0	#Peak - Lowest Free
EUDSAHWM = 0	#Peak - Lowest Free
ESDSAHWM = 0	#Peak - Lowest Free
ERDSAHWM = 0	#Peak - Lowest Free
ETDSAHWM = 0	#Peak - Lowest Free
EDSAHWMTotal = 0	#Total EDSA HWM
EDSASOSTms = 0	#SOS times
EDSASTGVIOLTms = 0	#Storage Violation times
DSARatio = 0.0	#Peak DSA/DSALIM
EDSARatio = 0.0	#Peak EDSA/EDSALIM
CDSARatio = 0.0	#Percentage of CDSA
UDSARatio = 0.0	#Percentage of UDSA
SDSARatio = 0.0	#Percentage of SDSA
RDSARatio = 0.0	#Percentage of RDSA
ECDSARatio = 0.0	#Percentage of ECDSA
EUDSARatio = 0.0	#Percentage of EUDSA
ESDSARatio = 0.0	#Percentage of ESDSA
ERDSARatio = 0.0	#Percentage of ERDSA
ETDSARatio = 0.0	#Percentage of ETDSA
DSAHWMRatio = 0.0	#DSA HWM/DSALIM
EDSAHWMRatio = 0.0	#EDSA HWM/EDSALIM
CDSAFSTG = 0	#CDSA Free storage
UDSAFSTG = 0	#UDSA Free storage
SDSAFSTG = 0	#SDSA Free storage
RDSAFSTG = 0	#RDSA Free storage
ECDSAFSTG = 0	#ECDSA Free storage
EUDSAFSTG = 0	#EUDSA Free storage
ESDSAFSTG = 0	#ESDSA Free storage
ERDSAFSTG = 0	#ERDSA Free storage

CDSALFA = 0   #CDSA Largest Free Area
UDSALFA = 0   #USDA Largest Free Area
SDSALFA = 0   #SDSA Largest Free Area
RDSALFA = 0   #RDSA Largest Free Area

ECDSALFA = 0   #ECDSA Largest Free Area
EUDSALFA = 0   #EUDSA Largest Free Area
ESDSALFA = 0   #ESDSA Largest Free Area
ERDSALFA = 0   #ERDSA Largest Free Area

CDSAFragRatio = 0.0   #CDSALFA/CDSAFSTG
UDSAFragRatio = 0.0   #UDSALFA/UDSAFSTG
SDSAFragRatio = 0.0   #SDSALFA/SDSAFSTG
RDSAFragRatio = 0.0   #RDSALFA/RDSAFSTG

ECDSAFragRatio = 0.0   #ECDSALFA/ECDSAFSTG
EUDSAFragRatio = 0.0   #EUDSALFA/EUDSAFSTG
ESDSAFragRatio = 0.0   #ESDSALFA/ESDSAFSTG
ERDSAFragRatio = 0.0   #ERDSALFA/ERDSAFSTG

GDSASOSTms = 0   #GDSA SOS
GDSASTGVIOLTms = 0   #GDSA Storage Violation

def StorageManagerItemCSV(self)

```
'''
CICS 680 and below:
0STORAGE MANAGER STATISTICS
+_____
0   Global Statistics
+   _____
0   Storage protection . . . . . . . . :        ACTIVE
    Transaction isolation. . . . . . . :        INACTIVE
    Reentrant programs . . . . . . . . :        PROTECT
0   Current DSA limit. . . . . . . . . :        5120K
    Current DSA total. . . . . . . . . :        1536K
    Peak DSA total . . . . . . . . . . :        1536K
0   Current EDSA limit . . . . . . . . :        1280M
    Current EDSA total . . . . . . . . :        1278M
    Peak EDSA total. . . . . . . . . . :        1278M
0   MEMLIMIT size. . . . . . . . . . . :        NOLIMIT
    MEMLIMIT set by. . . . . . . . . . :        REGION
```

获得：STGPROT、TRANISO、REENTPG、DSALIM、PeakDSA、EDSALIM、PeakEDSA、MEMLIMIT

```
'''
+_____
0   Dynamic Storage Areas (above 16M)
+   _____
0                            ECDSA        EUDSA        ESDSA        ERDSA        ETDSA
+
0   Current DSA size. . . . . :      208896K    1041408K      21504K      35840K       1024K
    Peak DSA Size . . . . . . :      208896K    1041408K      21504K      35840K       1024K
    Cushion Size. . . . . . . :         128K          0K        128K        256K        128K
0   Free storage (inc. cushion) :     15152K     915072K       1088K       1288K        992K
    Percentage free storage . . :        7%          87%          5%          3%         96%
    Peak free storage . . . . . :     15284K    1037824K       1088K       1288K        992K
    Lowest free storage . . . . :     14628K     480128K       1088K       1288K        992K
    Largest free area . . . . . :      5120K      21504K        572K        748K        992K
0   Getmain Requests. . . . . . :    1684313      284611       18080           0       72320
    Freemain Requests . . . . . :    1684310      284608       18080           0       72320
0   Current no of Subpools. . . :        393          31          14           4           6
    Add Subpool Requests. . . . :      36223       36223           0           0           0
    Delete Subpool Requests . . :      36223       36223           0           0           0
0   Times no storage returned . :          0           0           0           0           0
    Times request suspended . . :          0           0           0           0           0
0   Current suspended . . . . . :          0           0           0           0           0
    Peak requests suspended . . :          0           0           0           0           0
    Purged while waiting. . . . :          0           0           0           0           0
0   Times cushion released. . . :          0           0           0           0           0
    Times went short on storage :          0           0           0           0           0
    Total time SOS. . . . . . . : 00:00:00.0000 00:00:00.0000 00:00:00.0000 00:00:00.0000 00:00:00.0000
    Average time SOS. . . . . . : 00:00:00.0000 00:00:00.0000 00:00:00.0000 00:00:00.0000 00:00:00.0000
0   Storage violations. . . . . :          0           0           0           0           0
    Access. . . . . . . . . . . :       CICS        USER        USER    READONLY     TRUSTED
0   Current extents . . . . . . :         43          62          21          22           1
    Extents added . . . . . . . :          0           0           0           0           0
    Extents released. . . . . . :          0           0           0           0           0
'''
```

获得：C*、CFS*、CLFS*、CLFA*

以及 CDSASOSTMS 和 CDSASTGVIOLTMS

SIZE = C

HWM = C-CLFS*

DSAHWMTotal = CDSAHWM+UDSAHWM+SDSAHWM+RDSAHWM

DSAHWMRatio = DSAHWMTotal/DSALIM

DSASOTms = CDSASOSTMS

DSASTGVIOLTms = CDSASTGVIOLTMS

FragRatio = CFRAGRATIO

(* = CDSA、UDSA、SDSA、RDSA)

```
'''
CICS 660 and below:
0  Dynamic Storage Areas (above 16M)
+  _____
0                                      ECDSA            EUDSA            ESDSA            ERDSA
+                                      _____
0  Current DSA size. . . . . . :       61440K           41984K           1024K           201728K
   Peak DSA Size . . . . . . . :       61440K           41984K           1024K           201728K
   Cushion Size. . . . . . . . :         128K               0K            128K              256K
0  Free storage (inc. cushion) :        3084K           41664K            844K             2224K
   Percentage free storage . . :           5%              99%             82%                1%
   Peak free storage . . . . . :        3208K           41664K            848K             2324K
   Lowest free storage . . . . :        2116K           19072K            844K             2224K
   Largest free area . . . . . :        1024K            2048K            844K              528K
0  Getmain Requests. . . . . . :      147445K          110746K         1179591                2
   Freemain Requests . . . . . :      147445K          110746K         1179591                0
0  Current no of Subpools. . . :          385               22              13                4
   Add Subpool Requests. . . . :      2354975          2354975               0                0
   Delete Subpool Requests . . :      2354975          2354975               0                0
0  Times no storage returned . :            0                0               0                0
   Times request suspended . . :            0                0               0                0
0  Current suspended . . . . . :            0                0               0                0
   Peak requests suspended . . :            0                0               0                0
   Purged while waiting. . . . :            0                0               0                0
0  Times cushion released. . . :            0                0               0                0
   Times went short on storage :            0                0               0                0
   Total time SOS. . . . . . . :  00:00:00.0000    00:00:00.0000    00:00:00.0000    00:00:00.0000
   Average time SOS. . . . . . :  00:00:00.0000    00:00:00.0000    00:00:00.0000    00:00:00.0000
0  Storage violations. . . . . :            0                0               0                0
   Access. . . . . . . . . . . :         CICS             USER            USER         READONLY
0  Current extents . . . . . . :           56               30               1              176
   Extents added . . . . . . . :            0                0               0                0
   Extents released. . . . . . :            0                0               0                0
```

获得：CE*、CFSE*、CLFSE*、CLFAE*

以及 CEDSASOSTMS 和 CEDSASTGVIOLTMS

E*SIZE = CE*

E*HWM = CE*-CLFSE*

EDSAHWMTotal = ECDSAHWM+EUDSAHWM+ESDSAHWM+ERDSAHWM

EDSAHWMRatio = EDSAHWMTotal/EDSALIM

EDSASOTms = ECDSASOSTMS

EDSASTGVIOLTms = ECDSASTGVIOLTMS

DSARatio = CPeakDSA/CDSALIM

EDSARatio = CPeakEDSA/CEDSALIM

Ratio = C/DSATotal

E*Ratio = EC*/EDSATotal

E*FragRatio = CFRAGRATIO*

(* = CDSA、UDSA、SDSA、RDSA)

```
'''
+_____
0  DYNAMIC STORAGE AREAS (ABOVE 2GB)
+     _____
0                                            GCDSA
+                                        _____
0  CURRENT DSA SIZE. . . . . . :                  6M
   PEAK DSA SIZE . . . . . . . :                  9M
   CUSHION SIZE. . . . . . . . :                 64M
0  FREE STORAGE (INC. CUSHION) :               2042M
   PEAK FREE STORAGE . . . . . :               2042M
   LOWEST FREE STORAGE . . . . :               2042M
   LARGEST FREE AREA . . . . . :               2041M
0  GETMAIN REQUESTS. . . . . . :                  3
   FREEMAIN REQUESTS . . . . . :                  3
0  CURRENT NO OF SUBPOOLS. . . :                 11
   ADD SUBPOOL REQUESTS. . . . :                  2
   DELETE SUBPOOL REQUESTS . . :                  2
0  TIMES NO STORAGE RETURNED . :                  0
   TIMES REQUEST SUSPENDED . . :                  0
0  CURRENT SUSPENDED . . . . . :                  0
   PEAK REQUESTS SUSPENDED . . :                  0
   PURGED WHILE WAITING. . . . :                  0
0  TIMES CUSHION RELEASED. . . :                  0
   TIMES WENT SHORT ON STORAGE :                  0
   TOTAL TIME SOS. . . . . . . :        00:00:00.0000
   AVERAGE TIME SOS. . . . . . :        00:00:00.0000
0  STORAGE VIOLATIONS. . . . . :                  0
   ACCESS. . . . . . . . . . . :               CICS
0  CURRENT EXTENTS . . . . . . :                  1
   EXTENTS ADDED . . . . . . . :                  0
   EXTENTS RELEASED. . . . . . :                  0
'''
```

GDSASTGVIOLTms、CGDSASTGVOIL

10 StorageManagerReport

__Title = "Applid,Date,ResTime,ColTime,STGPROT,TRANISO,REENTPG,DSALIM,PeakDSA,EDSALIM,PeakEDSA,MEMLIMIT,CDSASize,UDSASize,SDSASize,RDSASize,ECDSASize,EUDSASize,ESDSASize,ERDSASize,ETDSASize,DSARatio%,EDSARatio%,CDSAHWM,UDSAHWM,SDSAHWM,RDSAHWM,DSASOSTms,DSASTGVIOLTms,ECDSAHWM,EUDSAHWM,ESDSAHWM,ERDSAHWM,ETDSAHWM,EDSASOSTms,EDSASTGVIOLTms, CDSAFragRatio%, UDSAFragRatio%, SDSAFragRatio%, RDSAFragRatio%, ECDSAFragRatio%, EUDSAFragRatio%, ESDSAFragRatio%, ERDSAFragRatio%, DSAHWMRatio%, EDSAHWMRatio%,GDSASOSTms, GDSASTGVIOLTms"

ItemList = list()

def __init__(self)
def AppendItem(self, SMItem)
def PrintInCSV(self)
def DumpToFile(self)

11 LogManagerItem

__CSVString = ''	
Applid = ''	#CICS Application ID
Date = ''	#Data collection data
ResTime = ''	#Last rest time
ColTime = ''	#Data collection time
DFHLOG = ''	#Name of DFHLOG
DASDOnly = ''	#DSAD Only?
AKPFREQ = 0	#AKPFREQ setting
AKPTaken = 0	#AKP number
LGDFINT = 0	#LGDFINT setting
WriteReq = 0	#Write request number
ByteWritten = 0	#Bytes written
BufAppend = 0	#Buffer append times
WaitFullBuf = 0	#Times to wait due to buffer full
PkForceWts = 0	#The peak number of tasks suspended while requesting a flush of the logstream buffer currently in use
RetryError = 0	#MVS system logger retryable errors occurred when a block of data was being written to the logstream
ShuntWriteRequest = 0	#Write request against DFHSHUNT

def LogManagerItemCSV(self)

```
'''
+_____
0LOGSTREAM GLOBAL STATISTICS
+
0  Activity Keypoint Frequency (AKPFREQ) . . . . . :      5000
   Activity Keypoints Taken. . . . . . . . . . . . :         0
0  Log Deferred Force (LGDFINT) Interval (msec). . :         5
'''
```

获得：AKPFRQE、AKPTaken、LGDFINT

```
'''
+_____
0LOGSTREAM STATISTICS - RESOURCE
+_____
0                             System                    Max Block  DASD  Retention  Auto    Delete     Query
   Log Stream Name            Log     Structure Name     Length     Only  Period     Delete  Requests   Requests
+
   CIRUFA.CIT3FA12.DFHLOG     Yes                         64000     Yes       0       No         0          3
   CIRUFA.CIT3FA12.DFHSHUNT   Yes                         64000     Yes       0       No         0          0

    *TOTALS*                                                                                    0          3
'''
```

获得：DFHLOG、DASDOnly

```
+_____
0LOGSTREAM STATISTICS - REQUEST
+_____
0              Write     Bytes    Buffer    Waits    Current    Peak      Total     Browse    Browse    Retry
   Log Stream Name  Requests  Written  Appends  Buff Full Frce Wtrs  Frce Wtrs Force Wts  Starts    Reads     Errors
+
   CIRUFA.CIT3FA12.DFHLOG       0        0         0         0         0         0          0         0         0         0
   CIRUFA.CIT3FA12.DFHSHUNT     0        0         0         0         0         0          0         0         0         0

    *TOTALS*                    0        0         0         0                   0          0         0         0         0
'''
```

获得： WriteReq、ByteWritten、BufAppend、WaitFullBuf、PkForceWts、

ShuntWriteRequest(index+7)

12   LogManagerReport

__Title =
"Applid,Date,ResTime,ColTime,DFHLOG,DASDOnly,AKPFREQ,AKPTaken,LGDFINT,WriteReq,ByteWritten,BufAppend,WaitFullBuf,PkForceWts,RetryError,ShuntWriteRequest"

LGItemList = list()

def __init__(self)
def AppendItem(self, LGItem)
def PrintInCSV(self)
def DumpToFile(self)

13 DB2ENTRYItem

__CSVString = ''	
Applid = ''	#CICS Application ID
Date = ''	#Data collection data
ResTime = ''	#Last rest time
ColTime = ''	#Data collection time
DB2EntryName = ''	#DBEntry name
AccountRec = ''	#Accounting record
ThreadWait = ''	#Thread wait
ThreadPrty = ''	#Thread priority
CallCount = 0	#Numbers of SQL call
SignonCount = 0	#Numbers of Signon
PartialSignon = 0	#Numbers of Partial singons
TwoPCommitCount = 0	#2PC count
AbortCount = 0	#Abort count
OnePCommitCount = 0	#1PC count
ThreadCreate = 0	#Number of create thread requests
ThreadReuse = 0	#Times to reuse a thread
ThreadTerms = 0	#Number of terminate thread requests
ThreadWtOrOF = 0	#Times all threads were busy and a transaction had to wait for a thread to become available, or overflow to the pool
ThreadLimit = 0	#Thread Limit for this DB2ENTRY
ThreadHWM = 0	#Peak active threads
PthreadLimit = 0	#Protected thread limit
PthreadHWM = 0	#Peak active protected threads
Readyq = 0	#Peak number of CICS tasks that waited for a thread to become available on this DB2ENTRY
Reuselm = 0	#Times the reuselimit has been reached by a thread for this DB2ENTRY
CommitRatio = 0.0	#Percentage of success commit
ThreadRatio = 0.0	#Percentage of thread limit usage
PthreadRatio = 0.0	#Percentage of pthread usage

def DB2ENTRYItemCSV(self)

```
'''
0DB2ENTRY STATISTICS - RESOURCES
+
0  DB2Entry    Plan      PlanExit    Auth     Auth     Account   Thread   Thread
   Name        Name      Name        Id       Type     Records   Wait     Prty
+

   CICSIAD     CIUCICS                         USERID   NONE      POOL     EQUAL
   DB2EAT      PLANCGAT              NGDBA     N/A      TASK      POOL     EQUAL
   DB2EK       PLANCGK               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EL       PLANCGL               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EM       PLANCGM               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EN       PLANCGN               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EO       PLANCGO               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EOT      PLANCGOT              NGDBA     N/A      TASK      POOL     EQUAL
   DB2EP       PLANCGP               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EQ       PLANCGQ               NGDBA     N/A      TASK      POOL     EQUAL
   DB2ER       PLANCGR               NGDBA     N/A      TASK      POOL     EQUAL
   DB2ES       PLANCGS               NGDBA     N/A      TASK      POOL     EQUAL
   DB2ET       PLANCGT               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EU       PLANCGU               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EV       PLANCGV               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EW       PLANCGW               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EX       PLANCGX               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EY       PLANCGY               NGDBA     N/A      TASK      POOL     EQUAL
   DB2EZ       PLANCGZ               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E0       PLANCG0               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E1       PLANCG1               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E2       PLANCG2               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E3       PLANCG3               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E4       PLANCG4               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E5       PLANCG5               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E6       PLANCG6               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E7       PLANCG7               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E8       PLANCG8               NGDBA     N/A      TASK      POOL     EQUAL
   DB2E9       PLANCG9               NGDBA     N/A      TASK      POOL     EQUAL
'''
```

获得：DB2EntryName、AccountRec、ThreadWait、ThreadPrty

'''

0DB2ENTRY STATISTICS - REQUESTS

DB2Entry Name	Call Count	Signon Count	Partial Signon	Commit Count	Abort Count	Single Phase	Thread Create	Thread Reuse	Thread Terms	Thread Waits/Overflows
CICSIAD	0	0	0	0	0	0	0	0	0	0
DB2EAT	0	0	0	0	0	0	0	0	0	0
DB2EK	0	0	0	0	0	0	0	0	0	0
DB2EL	0	0	0	0	0	0	0	0	0	0
DB2EM	0	0	0	0	0	0	0	0	0	0
DB2EN	41096	768	768	583	372	476	330	1101	330	0
DB2EO	600227	4747	4747	14	124	4964	418	4628	418	56
DB2EOT	11131240	185320	185320	23671	117812	45159	253	185909	252	0
DB2EP	3353	33	33	0	6	83	21	68	21	0
DB2EQ	0	0	0	0	0	0	0	0	0	0
DB2ER	6045	1209	1209	0	0	1209	153	1056	152	0
DB2ES	0	0	0	0	0	0	0	0	0	0
DB2ET	33089	183	183	0	0	202	72	130	71	0
DB2EU	0	0	0	0	0	0	0	0	0	0
DB2EV	0	0	0	0	0	0	0	0	0	0
DB2EW	1599612	12233	12233	2	30	12246	14	12264	14	0
DB2EX	59976	141	141	0	30	341	89	282	89	0
DB2EY	822	6	6	0	1	7	5	3	5	0
DB2EZ	506	10	10	0	0	11	3	8	3	0
DB2E0	505632	5160	5160	0	410	4772	144	5038	144	0
DB2E1	201520	2859	2859	0	41	5021	160	4901	161	0
DB2E2	83354	233	233	0	58	424	117	362	117	0
DB2E3	1161174	3968	3968	0	637	7148	126	7659	127	0
DB2E4	369160	2364	2363	0	119	3820	162	3764	163	0
DB2E5	3170112	1806	1806	30	252	1756	237	1801	237	0
DB2E6	48024	96	96	0	11	148	63	96	63	0
DB2E7	288	8	8	1	0	14	4	11	4	0
DB2E8	0	0	0	0	0	0	0	0	0	0
DB2E9	0	0	0	0	0	0	0	0	0	0
TOTALS	19015230	221144	221143	24301	119903	87801	2371	229081	2371	56

'''

获得：CallCount、SignonCount、PartialSignon、TwoPCommitCount、AbortCount、OnePCommitCount、ThreadCreate、ThreadReuse、ThreadTerms、ThreadWtOrOF

CommitRatio = (TwoPCommitCount+OnePCommitCount)/(TwoPCommitCount+OnePCommitCount+AbortCount)

```
'''
CICS 660 and below:
+
0DB2ENTRY STATISTICS - PERFORMANCE
+
0 DB2Entry   Thread    Thread    Thread   Pthread   Pthread   Pthread   Task      Task      Task      Readyq    Readyq
   Name      Limit     Current   HWM      Limit     Current   HWM       Current   HWM       Total     Current   HWM
+

   CICSIAD      15        0         0         0         0         0         0         0         0         0         0
   DB2EAT       20        0         0        10         0         0         0         0         0         0         0
   DB2EK        10        0         0         5         0         0         0         0         0         0         0
   DB2EL        10        0         0         5         0         0         0         0         0         0         0
   DB2EM        10        0         0         5         0         0         0         0         0         0         0
   DB2EN        20        0         8         5         1         5         0         8       1431         0         0
   DB2EO        10        0        10         5         1         5         0        20       4735         0         0
   DB2EOT       20        0         7         5         2         5         0         7     185314         0         0
   DB2EP        10        0         1         5         0         1         0         1         33         0         0
   DB2EQ        10        0         0         5         0         0         0         0         0         0         0
   DB2ER        10        0         2         5         1         2         0         2       1209         0         0
   DB2ES        10        0         0         5         0         0         0         0         0         0         0
   DB2ET        10        0         1         5         1         1         0         1        183         0         0
   DB2EU        10        0         0         5         0         0         0         0         0         0         0
   DB2EV        10        0         0         5         0         0         0         0         0         0         0
   DB2EW        10        0         2         5         1         2         0         2      12233         0         0
   DB2EX        10        0         3         5         1         3         0         3        141         0         0
   DB2EY        10        0         1         5         0         1         0         1          6         0         0
   DB2EZ        10        0         1         5         0         1         0         1         10         0         0
   DB2E0       100        0         2        50         1         2         0         2       5160         0         0
   DB2E1        60        0         1        30         0         1         0         1       2859         0         0
   DB2E2        30        0         1        15         0         1         0         1        233         0         0
   DB2E3        10        0         3         5         0         3         0         3       3968         0         0
   DB2E4        30        0         3        15         0         3         0         3       2364         0         0
   DB2E5        10        0         2         5         1         2         0         2       1806         0         0
   DB2E6        10        0         1         5         0         1         0         1         96         0         0
   DB2E7        10        0         1         5         0         1         0         1          8         0         0
   DB2E8        10        0         0         5         0         0         0         0         0         0         0
   DB2E9        10        0         0         5         0         0         0         0         0         0         0

   *TOTALS*    505        0                  235        10                  0                221789         0
```

获得 ThreadLimit、ThreadHWM、PthreadLimit、PthreadHWM、Readyq、Reuselm

ThreadRatio = ThreadHWM/ThreadLimit

PthreadRatio = PthreadHWM/PthreadLimit

14 DB2CONNItem

```
__CSVString = ''
Applid = ''                    #CICS Application ID
Date = ''                      #Data collection data
ResTime = ''                   #Last rest time
ColTime = ''                   #Data collection time
DB2Conn = ''                   #DB2CONN name
TCBLimit = 0                   #TCBLIMIT
PkConnWithTCB = 0              #Peak Connection
PkConnReadyq = 0              #Peak number of tasks on the Conn Readyq
PoolPriority = ''              #Priority of the pool thread
PkPoolTasks = 0               #Peak number of Pool Threads in use
PkPoolReadyq = 0             #Peak number of tasks on the Pool Readyq
PkCmdThreads = 0              #Peak number of Command Threads
DB2TCBRatio = 0.0             #Percentage of TCBLIMIT usage
DB2ENTRYItemList = list()

def __init__(self)
def AppendDB2Entry(self,DB2ENTRYItem)
def PeakDEItem(self)
def DB2CONNItemCSV(self)
```

```
'''
+_____
0DB2 CONNECTION STATISTICS
+_____

    DB2 Connection Name . . . . . . . . . . . . :   CBSDB2C    DB2 Connect Date / Time . . . . . . . . . . :   09/08/2015 / 22:11:18
    DB2 Groupid . . . . . . . . . . . . . . . . :   BMA0       DB2 Disconnect Date / Time. . . . . . . . . :
    Resyncmember. . . . . . . . . . . . . . . . :   YES
    DB2 Sysid . . . . . . . . . . . . . . . . . :   BMA1       DB2 Release . . . . . . . . . . . . . . . . :   10.1.0
0   Connection Limit (TCB Limit). . . . . . . . :        120   Current number of Connections with a TCB. . :          5
    Thread reuselimit . . . . . . . . . . . . . :       1000   Peak number of Connections with a TCB . . . :         28
    Current number of Connections without a TCB :         44
0   Current number of tasks on the Conn Readyq. :          0
    Peak number of tasks on the Conn Readyq . . :          0
0   Pool Thread Plan name . . . . . . . . . . . :
    Pool Thread Dynamic Planexit name . . . . . :   DSNCUEXT
    Pool Thread Authtype. . . . . . . . . . . . :   USERID     Pool Thread Authid. . . . . . . . . . . . . :
    Pool Thread Accountrec setting. . . . . . . :   TASK
    Pool Thread Threadwait setting. . . . . . . :   YES
    Pool Thread Priority. . . . . . . . . . . . :   HIGH
0   Number of calls using Pool Threads. . . . . :          0
    Number of Pool Thread Signons . . . . . . . :          0
    Number of Pool Thread Partial Signons . . . :          0
    Number of Pool Thread Commits . . . . . . . :          0
    Number of Pool Thread Aborts. . . . . . . . :          0
    Number of Pool Thread Single Phases . . . . :          0
    Number of Pool Thread Creates . . . . . . . :          0
    Number of Pool Thread Reuses. . . . . . . . :          0
    Number of Pool Thread Terminates. . . . . . :          0   Total times reuselimit hit by a pool thread :          0
    Number of Pool Thread Waits . . . . . . . . :          0
0   Current Pool Thread Limit . . . . . . . . . :        120
    Current number of Pool Threads in use . . . :          0
    Peak number of Pool Threads in use. . . . . :          0
0   Current number of Pool tasks. . . . . . . . :          0
    Peak number of Pool tasks . . . . . . . . . :          0
    Total number of Pool tasks. . . . . . . . . :          0
0   Current number of tasks on the Pool Readyq. :          0
    Peak number of tasks on the Pool Readyq . . :          0
0   Command Thread Authtype . . . . . . . . . . :   USERID     Command Thread Authid . . . . . . . . . . . :
0   Number of Calls using Command Threads . . . :          0
    Number of Command Thread Signons. . . . . . :          0
    Number of Command Thread Creates. . . . . . :          0
    Number of Command Thread Terminates . . . . :          0
    Number of Command Thread Overflows to Pool. :          0
0   Command Thread Limit. . . . . . . . . . . . :          1
    Current number of Command Threads . . . . . :          0
    Peak number of Command Threads. . . . . . . :          0
'''
```

获得：DB2Conn、TCBLimit、PkConnWithTCB、PkConnReadyq、PoolPriority、PkPoolTasks、PkPoolReadyq、PkCmdThreads

DB2TCBRatio = CPkConnWithTCB/CTCBLimit

15 DB2Report

__Title_DC =
"Applid,Date,ResTime,ColTime,DB2Conn,TCBLimit,PkConnWithTCB,PkConnReadyq,Pool Priority,PkPoolTasks,PkPoolReadyq,PkCmdThreads,DB2TCBRatio%"

__Title_DE =
"Applid,Date,ResTime,ColTime,DB2EntryName,AccountRec,ThreadWait,ThreadPrty,CallCount,TwoPCommitCount,AbortCount,OnePCommitCount,ThreadCreate,ThreadReuse,ThreadTerms,ThreadLimit,ThreadHWM,PthreadLimit,PthreadHWM,Readyq,Reuselm,CommitRatio%,ThreadRatio%,PthreadRatio%"

DB2CONNItemList = list()

def __init__(self)
def AppendItem(self, DB2CONNItem)
def PrintInCSV(self)
def DumpToFile(self)

16　DumpItem

__CSVString = ''
Applid = ''   #CICS Application ID
Date = ''   #Data collection data
ResTime = ''   #Last rest time
ColTime = ''   #Data collection time
SysDumpTaken = 0   #System dumps taken
SysDumpSupp = 0   #System dumps suppressed
TranDumpTaken = 0   #Transaction dump taken
TranDumpSupp = 0   #Transaction dump suppressed

def DumpItemCSV(self)

```
'''
+_____
0DUMP STATISTICS
+_____
-  System Dumps
+  _____
0  Dumps taken      :        0
   Dumps suppressed :        0
'''
```

获得 SysDumpTaken、SysDumpSupp

```
'''
-  Transaction Dumps
+  _____
0  Dumps taken      :        0
   Dumps suppressed :        0
'''
```

获得 TranDumpTaken、TranDumpSupp

17　DumpReport

　__Title =
"Applid,Date,ResTime,ColTime,SysDumpTaken,SysDumpSupp,TranDumpTaken,TranDump
Supp"

　DumpItemList = list()

　def __init__(self)
　def AppendItem(self, DumpItem)
　def PrintInCSV(self)
　def DumpToFile(self)

18 TSQItem

```
__CSVString = ''
Applid = ''                      #CICS Application ID
Date = ''                        #Data collection data
ResTime = ''                     #Last rest time
ColTime = ''                     #Data collection time
PutqMainReqs = 0                 #Put main TSQ requests
GetqMainReqs = 0                 #Get main TSQ requests
TSMAINLIMIT = 0                  #Main stroage limit for TSQ
TSMAINLIMITTms = 0               #Times to reach TSQ storage limit
PeakUsedTSMAIN = 0               #Storage used
TSMAINLIMITRatio = 0.0           #Percentage of TSMAINLIMIT usaged
AutoDelTSQs = 0                  #Number of TS queues auto-deleted
PutqAuxReqs = 0                  #Put/Putq auxiliary storage requests
GetqAuxReqs = 0                  #Get/Getq auxiliary storage requests
QueueCreTms = 0                  #Times queues created
CISize = 0                       #Control Interval size
WriteMTCI = 0                    #Writes more than control interval
LongestRec = 0                   #Longest auxiliary temp storage record
AuxStgExh = 0                    #Times aux. storage exhausted
TSCompress = 0                   #Number of temp storage compressions
BufferWait = 0                   #Buffer waits
StringWait = 0                   #String wait
IOErrorTSQDS = 0                 #IO error on TS dataset
GetqShareReqs = 0                #Shared read requests
PutqShareReqs = 0                #Shared write requests

def TSQItemCSV(self)
```

```
'''
+_____
0TEMPORARY STORAGE
+_____
0   Put/Putq main storage requests        :          352
    Get/Getq main storage requests        :          352
0   TSMAINLIMIT Setting                   :     67108864
    Times at TSMAINLIMIT                  :            0
0   Current storage used for TSMAINLIMIT  :            4
    Peak storage used for TSMAINLIMIT     :           55
    Number of TS queues auto-deleted      :            0
    Number of times cleanup task has run  :            4
0   Put/Putq auxiliary storage requests   :        49764
    Get/Getq auxiliary storage requests   :        49764
0   Peak temporary storage names in use   :            6
    Current temporary storage names in use :           2
    Number of entries in longest queue    :            1
    Times queues created                  :        50116
0   Control interval size                 :         4096
    Available bytes per control interval  :         4032
    Segments per control interval         :           63
    Bytes per segment                     :           64
    Writes more than control interval     :           50
    Longest auxiliary temp storage record :         6817
0   Number of control intervals available :        53999
    Peak control intervals in use         :            4
    Current control intervals in use      :            3
    Times aux. storage exhausted          :            0
    Number of temp storage compressions   :           74
0   Temporary storage buffers             :           45
    Buffer waits                          :            0
    Peak users waiting on buffer          :            0
    Current users waiting on buffer       :            0
    Buffer writes                         :            0
    Forced writes for recovery            :            0
    Buffer reads                          :            0
    Format writes                         :            0
0   Temporary storage strings             :           20
    Peak number of strings in use         :            0
    Times string wait occurred            :            0
    Peak number of users waiting on string :           0
    Current users waiting on string       :            0
0   I/O errors on TS dataset              :            0
    Shared pools defined                  :            1
    Shared pools currently connected      :            0
    Shared read requests                  :            0
0   Shared write requests                 :            0
'''
```

获得：PutqMainReqs、GetqMainReqs、TSMAINLIMIT、TSMAINLIMITTms、PeakUsedTSMAIN、AutoDelTSQs、PutqAuxReqs、GetqAuxReqs、QueueCreTms、CISize、WriteMTCI、LongestRec、AuxStgExh、TSCompress、BufferWait、StringWait、IOErrrorTSQDS、GetqShareReqs、PutqShareReqs

TSMAINLIMItRatio = PeakUsedTSMAIN/TSMAINLIMIT

19 TSQReport

__Title =
"Applid,Date,ResTime,ColTime,PutqMainReqs,GetqMainReqs,TSMAINLIMIT,TSMAINLI
MITTms,PeakUsedTSMAIN,TSMAINLIMITRatio%,AutoDelTSQs,PutqAuxReqs,GetqAux
Reqs,QueueCreTms,CISize,WriteMTCI,LongestRec,AuxStgExh,TSCompress,BufferWait,Str
ingWait,IOErrorTSQDS,GetqShareReqs,PutqShareReqs"

TSQItemList = list()

def __init__(self)
def AppendItem(self, TSQItem)
def PrintInCSV(self)
def DumpToFile(self)

20　TDQItem

```
__CSVString = ''
Applid = ''                    #CICS Application ID
Date = ''                      #Data collection data
ResTime = ''                   #Last rest time
ColTime = ''                   #Data collection time
PutqIntraReqs = 0              #Writes to intrapartition dataset
GetqIntraReqs = 0              #Reads from intrapartition dataset
IOErrors = 0                   #I/O errors
BufferWait = 0                 #Intrapartition buffer waits
StringWait = 0                 #String waits
NOSPACETms = 0                 #NOSPACE condition
IntraBuffers = 0               #Intra buffers
PeakIntraBuffData = 0          #Peak valid
StringNum = 0                  #String number


def TDQItemCSV(self)
```

```
'''
+_____
0TRANSIENT DATA
+_____

  Control interval size                    :     32768
  Control intervals                        :     22000
  Current control interval in use          :         2
  Peak control intervals used              :         6
0 Times NOSPACE occurred                   :         0
0 Writes to intrapartition dataset         :         0
  Reads from intrapartition dataset        :         0
  Formatting writes                        :         0
  I/O errors                               :         0
0 Intrapartition buffers                   :      3000
  Current buffers containing valid data    :         1
  Peak intra. buffers containing valid data :        5
  Intrapartition accesses                  :    254880
  Current concurrent buffer accesses       :         0
  Peak concurrent intrapartition accesses  :         1
  Intrapartition buffer waits              :         0
  Current intrapartition buffer waits      :         0
  Intrapartition buffer waits          :         0
0 Number of strings                        :       255
  Times string accessed                    :         0
  Current concurrent string accesses       :         0
  Peak concurrent string accesses          :         0
  Intrapartition string waits              :         0
  Current intrapartition string waits      :         0
  String waits                         :         0
'''
```

获得：NOSPACETms、PutqIntraReqs、GetqIntraReqs、IOErrors、IntraBuffers、
PeakIntraBufferData、BufferWait、StringNum、StringWait

21 TDQReport

__Title =
"Applid,Date,ResTime,ColTime,NOSPACETms,PutqIntraReqs,GetqIntraReqs,IntraBuffers,PeakIntraBuffData,BufferWait,StringNum,StringWait"

TDQItemList = list()

def __init__(self)
def AppendItem(self, TDQItem)
def PrintInCSV(self)
def DumpToFile(self)

22 ConnectionItem

Applid = ''	#CICS Application ID
Date = ''	#Data collection data
ResTime = ''	#Last rest time
ColTime = ''	#Data collection time
TotalAlloc = 0	#TOTAL NUMBER OF ALLOCATES
QueuedAlloc = 0	#QUEUED ALLOCATES
FailedLinkAlloc = 0	#FAILED LINK ALLOCATES
FailedAllocSessUsed = 0	#FAILED ALLOCATES DUE TO SESSIONS IN USE

def ConnectionCSV(self)

```
+_____
0   SYSTEM ENTRY
+   _____
0   ** SYSTEM TOTALS **
+   _____
0   AIDS IN CHAIN. . . . . . . . . . . . . . . . . :        0      GENERIC AIDS IN CHAIN. . . . . . . . . . . . . . :        0
0   ATIS SATISFIED BY CONTENTION LOSERS. . . . . . :        0      ATIS SATISFIED BY CONTENTION WINNERS . . . . . . :        0
]0  TOTAL BIDS SENT. . . . . . . . . . . . . . . . :        0
-   CURRENT BIDS IN PROGRESS . . . . . . . . . . . :        0
]0  TOTAL NUMBER OF ALLOCATES. . . . . . . . . . . :    15053
    QUEUED ALLOCATES . . . . . . . . . . . . . . . :        0
    FAILED LINK ALLOCATES. . . . . . . . . . . . . :        0
-   FAILED ALLOCATES DUE TO SESSIONS IN USE. . . . :        0
]0  NUMBER OF QUEUELIMIT ALLOCATES REJECTED. . . . :        0      NUMBER OF XZIQUE ALLOCATES REJECTED. . . . . . . :        0
    NUMBER OF MAXQTIME ALLOCATE QUEUE PURGES . . . :        0      NUMBER OF XZIQUE ALLOCATE QUEUE PURGES . . . . . :        0
-   NUMBER OF MAXQTIME ALLOCATES PURGED. . . . . . :        0      NUMBER OF XZIQUE ALLOCATES PURGED. . . . . . . . :        0
]0  TERMINAL SHARING REQUESTS - TOTAL. . . . . . . :        0
-     TERMINAL SHARING REQUESTS - CHANNEL. . . . . :        0
0   FUNCTION SHIPPING REQUESTS
]+  _____
    |  FILE CONTROL (FC). . . . . . . . . . . . . . :        0
]   |  INTERVAL CONTROL (IC) - TOTAL. . . . . . . . :    15053
-   |    INTERVAL CONTROL (IC) - CHANNEL. . . . . . :        0
]   |  PROGRAM CONTROL (PC) - TOTAL . . . . . . . . :        0
-   |    PROGRAM CONTROL (PC) - CHANNEL . . . . . . :        0
    |  TRANSIENT DATA (TD). . . . . . . . . . . . . :        0
    |  TEMPORARY STORAGE (TS) . . . . . . . . . . . :        0
-   |  DLI REQUESTS . . . . . . . . . . . . . . . . :        0
]0  BYTES SENT BY TRANSACTION ROUTING REQUESTS . . :        0
-   BYTES RECEIVED BY TRANSACTION ROUTING REQUESTS . :      0
]0  BYTES SENT BY PROGRAM CHANNEL REQUESTS . . . . :        0
-   BYTES RECEIVED BY PROGRAM CHANNEL REQUESTS . . . :      0
]0  BYTES SENT BY INTERVAL CHANNEL REQUESTS. . . . :        0
]   BYTES RECEIVED BY INTERVAL CHANNEL REQUESTS. . . :      0
    '''
```

获得：TotalAlloc、QueuedAlloc、FailedLinkAlloc、FailedAllocSessUsed

23 ConnectionReport

__Title =
"Applid,Date,ResTime,ColTime,TotalAlloc,QueuedAlloc,FailedLinkAlloc,FailedAllocSessUsed"

CONItemList = list()

def __init__(self)
def AppendItem(self, CONItem)
def PrintInCSV(self)
def DumpToFile(self)

24 IntervalItem

__CSVString = ''

Applid = ''   #CICS Application ID

Date = ''   #Data collection data

ResTime = ''   #Last rest time

ColTime = ''   #Data collection time

TMItem = TransactionManagerItem()

DSItem = DispatcherItem()

NQItem = EnqueueItem()

SMItem = StorageManagerItem()

LGItem = LogManagerItem()

DCItem = DB2CONNItem()

DUItem = DumpItem()

TSQItem = TSQItem()

TDQItem = TDQItem()

CONItem = ConnectionItem()

def __init__(self)

def UpdateIntervalInfo(self)   更新 10 个 Item 的 4 个基本信息

def IntervalFullJSON(self)

def IntervalBriefJSON(self)

```
+
| Interval Report      5 (02:00:00)  Collection Date-Time 06/01/2015-10:00:00  Last Reset 08:00:00  Applid CP11P1AA  Jobname CP11P1AA
| END OF DAY STATISTICS REPORT       COLLECTION DATE-TIME 01/21/2014-00:00:00  LAST RESET 23:00:00  APPLID CIP1BAB2  JOBNAME CIP1BAB2
| Requested Statistics Report        Collection Date-Time 08/15/2015-08:55:00  Last Reset 00:00:00  Applid CI1ACAA1  Jobname CI1ACAA1
+
```

获得：APPLID、CollectDate、CollectTime、LastResetTime、IntervalV

ReportType   0:INTERVAL ERPORT
                  1:END OF DAY STATISTICS REPORT
                  2:REQUESTED STATISTICS REPORT

if(APPLID 不符合正则) 跳过

if(APPLID 不同‖ResetTime 不同)

    if(APPID 空&&ResTIme 空) 填充当前 IntItem   else   新建 IntItem

25 IntervalItemListByInterval

ResTimeMin = ''   #Last rest time in minutes, remove second because second
                                may be different for applids

ColTimeMin = ''   #Data collection time in minutes, remove second because
                                second may be different for applids

ItemList = list()
TotTranNum = 0

ScoreTransaction = 100
RiskTransaction = ''

ScoreDispatch = 100
RiskDispatch = ''

ScoreStorage = 100
RiskStorage = ''

ScoreData = 100
RiskData = ''

ScoreQueue = 100
RiskQueue = ''

ScoreOther = 100
RiskOther = ''

global DSARATIOTHRES
global EDSARATIOTHRES
global QRDISPRATIOTHRES
global ENQIMMESUCCESSTHRESHOLD
global TMFlag
global TCFlag

```
global DSFlag
global LGFlag
global DBFlag
global NQFlag
global TSQFlag
global TDQFlag
global SMFlag
global CONFlag
global DUFlag

def __init__(self)
def AppendItem(self,IntervalItem)
def InsightsTM(self)
def InsightsTC(self)
def InsightsDS(self)
def InsightsSM(self)
def InsightsLG(self)
def InsightsDB(self)
def InsightsNQ(self)
def InsightsTSQ(self)
def InsightsTDQ(self)
def InsightsCON(self)
def InsightsDU(self)
def InsightsRiskSummary(self)
def IntervalScoreJSON(self)
def HealthSummary(self)
```

26 IntervalReport

```
IntervalItemList = list()
SubListbyInterval = list()
ApplidSet = set()
ApplidNum = 0
IntervalSet = set()
IntervalNum = 0
PeakColTime = ''
PeakTotalTran = 0
PeakIndex = -1
ExtractFlag = 0

def __init__(self)
def AppendItem(self,IntItem)
def ExtractInfo(self)
def SummInfoJSON(self)
def TrendInfoJSON(self)
def PeakInfoJSON(self)
def PeakScoreJSON(self)
def InsightsTMPeak(self)
def InsightsDSPeak(self)
def InsightsSMPeak(self)
def InsightsTCPeak(self)
def InsightsLGPeak(self)
def InsightsDBPeak(self)
def InsightsNQPeak(self)
def InsightsTSQPeak(self)
def InsightsTDQPeak(self)
def InsightsCONPeak(self)
def InsightsDUPeak(self)
def InsightsScorePeak(self)
def InsightsAllInterval(self)
```