

zHISR

Software Resource Consumption Analysis Tool



PHOENIX Software International®



zHISR

uses data created by z/OS Hardware Instrumentation Services (HIS) on IBM System z10 or zEnterprise mainframe processors to produce hotspot analysis reports, which can be used to help tune applications by locating the specific sections of code that are the biggest CPU consumers.



zHISR

includes a z/OS UNIX file system interface for navigating, browsing and deleting files, including HIS collection files. Programmers can use zHISR to start or stop a HIS data collection event or view the status of a current or prior run. If zIIP specialty engines are available, nearly all of the CPU processing used by zHISR is redirected to a zIIP.

zHISR Primary Menu

```
04/06/2011          zHISR: P r i m a r y   M e n u          (V1R0) 13:25:04

Directory /u/his
_____
_____
_____

  Lrecl  FileName
  _____
-  99    /u/his/SYSHIS20081210.113303.MAP
-  64    /u/his/SYSHIS20081210.113303.SMP.00

1=Help  2=HIS  3=End  7=Bwd  8=Fwd  B=Browse  C=Cancel
```

The Primary Menu has a Directory field for entering a UNIX file system path as well as a list of files you are currently browsing.

zHISR UNIX File System

```
04/06/2011          zHISR: UNIX File System Directory Display          11:50:04
                    1=Help 2=Refresh 3=End 4=Return 7=Bwd 8=Fwd
Directory /u/his

  Type  Permission Owner   Group  FileName
  ---  -
  Dir   drwxr-xr-x  HIS    DEV    .
  Dir   dr-xr-xr-x  SYSOPER TTY    ..
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.CNT
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.MAP
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.SMP.00
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.SMP.01
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.SMP.02
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.CNT
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.00
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.01
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.02
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.03
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.CNT
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.MAP
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.SMP.00
  File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.SMP.01

0001 of 0008  A{n}=Analyze B{L}=Browse RM=Remove S=Slct Cursor=Slct  XXXX FB
```

Press Enter to display the directory in the Directory field using the zHISR UNIX File System.

zHISR UNIX File System

```
04/06/2011          zHISR: UNIX File System Directory Display          12:03:11
                    1=Help 2=Refresh 3=End 4=Return 7=Bwd 8=Fwd
Directory /u/his

Type  Permission Owner   Group  FileName
___  _____
Dir   drwxr-xr-x  HIS    DEV    .
___  _____
Dir   dr-xr-xr-x  SYSOPER TTY    ..
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20081210.113303.CNT
BL   3303.MAP
___  _____
       Provide the LRECL (2-255) to be used or press
       PF4 to accept the shown default value: 072
___  _____
       3=End 4=Accept
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.01
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.02
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090205.194324.SMP.03
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.CNT
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.MAP
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.SMP.00
___  _____
File  -rwxr-xr-x  HIS    SYS1   SYSHIS20090214.100114.SMP.01

0001 of 0008  A{n}=Analyze B{L}=Browse RM=Remove S=Slct Cursor=Slct  XXXX FB
```

Use the B or BL command to browse a UNIX file. BL prompts for logical record length.

zHISR Browse Mode

```
04/06/2011 UNIX-2049-PVT  BROWSE MODE /u/his/SYSHIS20081210.113303.MAP 12:05:02
NUNDO NNUM NCAPS NNULLS NTAB NCOLS CFIND NXMSG NCBL CS FWD NXC NFIND
      1---+---10-----+---20-----+---30-----+---40-----+---50-----+---60-----+---70--
000010 I SYS MVERA0
000020 I SMFIMVA0
000030 I OS  z/OS
000040 I FMIDHBB7740
000050 I DATE08345
000060 I TIME11340442
000070 I MAP V1R1
000080 I LPID000000004
000090 I MACH00002098
000100 B BDY PRIVATE 0000000000AFFFFF
000110 B BDY CSA      00B0000000D42FFF
000120 B BDY CSAALL0C0004A57801CBFB30
000130 B BDY CSACONVT0000000000000000
000140 B BDY MLPA   0000000000000000
000150 B BDY FLPA   0000000000000000
000160 B BDY PLPA   00D4300000F0AFFF
000170 B BDY SQA    00F0B00000FD6FFF
000180 B BDY SQAALL0C000369A800F15648
      Edit queue restart has been performed.
      1---+---10-----+---20-----+---30-----+---40-----+---50-----+---60-----+---70--
```

Starting a Data Collection Run

```
04/06/2011          zHISR: Manage H.I.S. Event Data Collection          13:48:34

System MVS70      Proc HIS      Title HIS RUN FOR BOB
BufCnt 256      Duration 10      SampFreq 325000      DataLoss IGNORE
CtrSet ALL
MapAsid _____
MapJob  _____
Path /u/his
Command File Dsname BOB.CLIST

1=Help  2=View  3=End  4=Start  5=Stop  6=Clear  7=Status
```

Press PF2 from the Primary Menu to invoke the Collection Panel. This is where you put in the parameters for a data collection run and where you start or stop a run.

The CPU Panel

```
05/12/2011          zHISR: H.I.S. Sample Data CPU Selection          13:21:37
CPU Report          SYSHIS20110130.203656.000          Sort: Cpu#

Check the box next to each sample file name that is to be included
in the analysis. Uncheck the box if the file is not to be included
in the analysis. Once you have completed your selections press PF5
to continue.

X SYSHIS20110130.203656.000.SMP.00    156.00K
X SYSHIS20110130.203656.000.SMP.01     0.00K
X SYSHIS20110130.203656.000.SMP.02    72.00K
X SYSHIS20110130.203656.000.SMP.03  1096.00K

0001 of 0001          1=Help  3=End  5=Next  7=Bwd  8=Fwd          XXXX FB
```

The CPU panel lets you choose one or more CPUs to analyze. The last two digits of the displayed file name represents the CPU number in hexadecimal. Press PF5 to continue to the next screen.

The HASN Panel

```
05/12/2011          zHISR: H.I.S. Sample Data HASN Selection          13:22:25
ASID Report          SYSHIS20110130.203656.000                      Sort: Percent
```

Move the cursor to the ASID of the address space to be excluded or included in the analysis and press Enter. Only one ASID may be selected. Once you have completed your selection press PF5.

```
- 83.999% 0031-C4CONDOR      3.145% 0036      1.788% 000B
  1.164% 0024      0.947% 013C      0.626% 0040
  0.541% 0025      0.497% 004A      0.449% 013D
  0.411% 0006      0.408% 0020      0.406% 000F
  0.275% 012A      0.270% 0035      0.208% 0001
  0.179% 0012      0.169% 0137      0.159% 001E
  0.154% 0038      0.118% 004B      0.096% 0007
  0.096% 0033      0.089% 0015      0.080% 000A
  0.063% 0014      0.053% 0034      0.043% 0028
  0.043% 0044      0.041% 0009      0.034% 0008
  0.034% 00C3      0.029% 001D      0.029% 0046
  0.024% 0017      0.024% 0022      0.017% 0131
  0.014% 002F      0.012% 0051      0.009% 000C
  0.009% 001B      0.009% 0042      0.007% 0037
  0.007% 0039      0.007% 0134      0.005% 001F
```

```
0001 of 0002    1=Help 2=Anal 3=End 5=Next 7=Bwd 8=Fwd 9=Sort_ASID    XXXX FB
```

Use the HASN Panel to select the Home Address Space Id of the address space that is the target of the analysis. From here, you can then analyze the run (PF2) or choose the modules to include (PF5).

The Module Panel

```
05/12/2011          zHISR: H.I.S. Sample Data Module Selection      13:27:22
Module Report          SYSHIS20110130.203656.000                Sort: Owner

Move the cursor to a module to be excluded or included in the
analysis and press Enter. Continue this process as often as
needed. Once you have completed your selections press PF5.

_ 0031-$$LOGON  00000000_00011840 00000000_00011CBF C4CONDOR
0031-BPXWREXX  00000000_0CF78000 00000000_0CF95E17 C4CONDOR
0031-CALL      00000000_0D97B000 00000000_0D9B3FFF C4CONDOR
0031-CALL1     00000000_0DA0C000 00000000_0DA31FFF C4CONDOR
0031-CALL2     00000000_0D8CB000 00000000_0D8E5FFF C4CONDOR
0031-CALL3     00000000_0D8BA000 00000000_0D8C3FFF C4CONDOR
0031-CALL4     00000000_0DA32000 00000000_0DA41FFF C4CONDOR
0031-CALL5     00000000_0DA67000 00000000_0DA89FFF C4CONDOR
0031-CALL6     00000000_0DABA000 00000000_0DAA1FFF C4CONDOR
0031-CAMLIOCS  00000000_0D2DB000 00000000_0D2DFFFF C4CONDOR
0031-CONDOR    00000000_0D8B1000 00000000_0D8B13C7 C4CONDOR
0031-CYGIFRT   00000000_0DCC0000 00000000_0DCC03FF C4CONDOR
0031-CYGINIT   00000000_000B0000 00000000_000B5FFF C4CONDOR
0031-CYGLOGIC  00000000_0D32B000 00000000_0D35DFFF C4CONDOR
0031-CYGPXNX   00000000_0DCDE000 00000000_0DCE2FFF C4CONDOR

0001 of 0100      1=Help 2=Mask 3=End 5=Next 7=Bwd 8=Fwd 9=Sort_Address  XXXX FB
```

On the Module Panel, you can choose the modules you want to analyze. You can also use a generic mask to include or exclude modules.

The Csect Panel

```
05/12/2011          zHISR: H.I.S. Sample Data Csect Selection      13:27:52
Csect Report        SYSHIS20110130.203656.000                    Sort: Owner

Move the cursor to a Csect to be excluded or included in the
analysis and press Enter. Continue this process as often as
needed. Once you have completed your selections press PF5.

_ 0031-$$LOGON  00000000_00011840 00000000_00011CBF
0031-@@KJUMP  00000000_0CF7A958 00000000_0CF7AA07
0031-@@TRT    00000000_0CF7CB30 00000000_0CF7CC2F
0031-@@XTQVFN 00000000_0CF7CF00 00000000_0CF7D11F
0031-ACCESS   00000000_0CF6D000 00000000_0CF6D486
0031-ALLOC    00000000_0CF50000 00000000_0CF5128D
0031-ALTER    00000000_0CF52000 00000000_0CF52A4D
0031-ATTRIB   00000000_0CF4A000 00000000_0CF4B4FF
0031-BPXWESTA 00000000_0CF7D1A0 00000000_0CF7D22B
0031-BPXWREXX 00000000_0CF7D230 00000000_0CF95913
0031-BPXWRFM  00000000_0CF95AC0 00000000_0CF95B6D
0031-BPXWRFMS 00000000_0CF95B70 00000000_0CF95C2B
0031-BPXWRGM  00000000_0CF95A08 00000000_0CF95ABB
0031-BPXWRTIM 00000000_0CF95C30 00000000_0CF95D2B
0031-BPXWRT2E 00000000_0CF95D30 00000000_0CF95E13

0001 of 1537      1=Help 2=Mask 3=End 5=Next 7=Bwd 8=Fwd 9=Sort_Address  XXXX FB
```

The Csect Panel lets you choose csects for analysis. As with the Module Panel, you can use a generic mask to exclude or include csects.

The Boundary Panel

05/12/2011 zHISR: H.I.S. Sample Data Bndry Selection 13:28:18
Boundary List SYSHIS20110130.203656.000 Sort: Owner

Move the cursor to a boundary to be excluded or included in the analysis and press Enter. Continue this process as often as needed. Once you have completed your selections pres PF5.

_ CSA	00000000_00B00000	00000000_00D2FFFF
CSAALLOC	00000000_000413D8	00000000_0246CEF8
DONUC	00000000_3F3E1000	00000000_3F3E4FFF
ECSA	00000000_07E52000	00000000_0CEFFFFFFF
EFLPA	00000000_07E41000	00000000_07E43FFF
EMLPA	00000000_07E44000	00000000_07E51FFF
EPLPA	00000000_03AD1000	00000000_07E40FFF
EPRV	00000000_0CF00000	00000000_7FFFFFFF
ERON	00000000_01000000	00000000_01A050AF
ERWN	00000000_01A06000	00000000_01A6BFFF
ESQA	00000000_01A6C000	00000000_03AD0FFF
PLPA	00000000_00D30000	00000000_00F07FFF
PRIVATE	00000000_00000000	00000000_00AFFFFFFF
RON	00000000_00FE4000	00000000_00FFFFFFF
RWNUC	00000000_00FD5000	00000000_00FE3B17

0001 of 0002 1=Help 2=Mask 3=End 5=Next 7=Bwd 8=Fwd 9=Sort_Address XXXX FB

Use the Boundary Panel to choose certain storage types to include in the analysis. A generic mask can be used on this display too.

The Analysis Panel

```
05/12/2011          zHISR: H.I.S.  D a t a  A n a l y s i s          13:22:53
Analysis            SYSHIS20110130.203656.000                Hasn=0031
```

Up to ten modules, Csects or address ranges may be entered into this screen. To specify a module or Csect, enter its name in the left field while setting the right field to blanks. Press PF2 to display a usage report that includes all the data that you have selected for address space 0031.

Wait state: N Include Wait dispatched, Y or N

Address range: _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ to _____

1=Help 2=Run 3=End 4=Return 6=Clear 7=Counter 8=Info 9=Select_All 10=Memory

The Analysis Panel is the kickoff point for the Full and Spot analysis reports. From here, you can also view the HIS counters report and various statistic calculated by zHISR.

The Full Analysis Panel

```
05/12/2011          zHISR: H.I.S. Full Analysis          13:23:28
Run Summary          SYSHIS20110130.203656.000      Sort: Tot_Pct
```

PSW_Address	Tot_Pct	Sel_Pct	Csect	Module	Boundary
- 00000000_0DD1A340	34.011%	40.490%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD4A040	15.558%	18.522%	EJESFT3	EJESFT3	EPRV
00000000_0DD49DC0	7.806%	9.293%	EJESFT3	EJESFT3	EPRV
00000000_0DD1A500	2.684%	3.195%	EJESSUB3	EJESSUB3	EPRV
00000000_0D2BB4C0	2.450%	2.916%	GAOLPI0G	GAOLPI0G	EPRV
00000000_0DD1A300	1.718%	2.045%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD1AAC0	1.155%	1.375%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD1A1C0	1.094%	1.303%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD1A400	0.959%	1.142%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD1A2C0	0.930%	1.107%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD1AB80	0.850%	1.012%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD4A1C0	0.802%	0.955%	EJESFT3	EJESFT3	EPRV
00000000_0DD440C0	0.785%	0.935%	EJESFT3	EJESFT3	EPRV
00000000_0DD1A4C0	0.773%	0.920%	EJESSUB3	EJESSUB3	EPRV
00000000_0D2D8D00	0.751%	0.894%	GAQID	GAQID	EPRV
00000000_0DD4A700	0.645%	0.768%	EJESFT3	EJESFT3	EPRV
00000000_0DD49E00	0.594%	0.707%	EJESFT3	EJESFT3	EPRV

```
0001 of 0039  1=Help 3=End 7=Bwd 8=Fwd 9=Sort_Sel_Pct 10=Mem 12=Print  XXXX FB
```

The Full Analysis Panel is a display of all of the selected sample data, initially sorted by percentage of total entries. The display can be sorted by any of the six columns. Place your cursor on an entry and press Enter to display the Spot Analysis Panel.

The Spot Analysis Panel

```
05/12/2011          zHISR: H.I.S. Spot Analysis          13:24:01
By Csect            SYSHIS20110130.203656.000          Sort: Address
```

Psw_Address	Offset	Tot_Pct	Sel_Pct	Csect	Module	Boundary
00000000_0DD0F0C0	000000C0	0.005%	0.006%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F100	00000100	0.009%	0.011%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F140	00000140	0.024%	0.029%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F2C0	000002C0	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F300	00000300	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F340	00000340	0.007%	0.008%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F380	00000380	0.005%	0.006%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F4C0	000004C0	0.012%	0.014%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F500	00000500	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F700	00000700	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD0F9C0	000009C0	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD10B00	00001B00	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD10FC0	00001FC0	0.121%	0.144%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD11040	00002040	0.067%	0.080%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD11080	00002080	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD114C0	000024C0	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV
00000000_0DD13200	00004200	0.002%	0.003%	EJESSUB3	EJESSUB3	EPRV

```
0001 of 0004  1=Help 3=End 7=Bwd 8=Fwd 9=Sort_Tot_Pct 10=Mem 12=Print  XXXX FB
```

The Spot Analysis Panel is a detailed display of the Csect, Module, or Boundary that the line item describes.

Associated Data Prompt

05/12/2011

zHISR: Associated Data Prompt
SYSHIS20110130.203656.000

13:24:37

For Assembly enter the SYSADATA dataset name, for Cobol enter the SYSPRINT dataset name, correct the member name if necessary and then press the PF2 key to view the associated data.

Input dataset name BOB1.ADATA

Target member name ODE

Report page limit 1000

Instruction address 00000000_0DD10B00

Instruction offset 00001B00

1=Help 2=Adata 3=End 6=Clear

You can access source text associated with the Csect or module displayed in the Spot Analysis panel by pressing Enter on a line item. The Associated Data Prompt lets you specify the parameters of the associated data report.

Associated Data Panel

```
05/12/2011          zHISR: A s s o c i a t e d   D a t a          13:25:35
                   SYSHIS20110130.203656.000                   More➔

                   THRU ODE2200-PROG-OPN-CTL-EXIT .              062500 (000625)
                                                                062600 (000626)
001AE8             PERFORM ODE2200-PROG-PROCESS-WORK             062700 (000627)
                   THRU ODE2200-PROG-PROCESS-WORK-EXIT         062800 (000628)
                   UNTIL ARE-THERE-MORE-RECORDS = 'NO ' .       062900 (000629)
                                                                063000 (000630)
001B1A             PERFORM ODE2200-TERM-PROGRAM                 063100 (000631)
                   THRU ODE2200-TERM-PROGRAM-EXIT .            063200 (000632)
                                                                063300 (000633)
001B3E             ODE000-GET-DATE .                             063400 (000634)
                                                                063500 (000635)
001B42             ACCEPT THE-RUN-DATE FROM DATE .              063600 (000636)
001B84             ACCEPT THE-RUN-TIME FROM TIME .              063700 (000637)
001BC6             IF RUN-YEAR LESS THAN 69                     063800 (000638)
001BE0             MOVE '20' TO CENT-OUT .                      063900 (000639)
001BF2             MOVE RUN-MONTH TO MNTH-OUT .                 064000 (000640)
001C00             MOVE RUN-DAY   TO DAY-OUT .                   064100 (000641)
001C0E             MOVE RUN-YEAR  TO YEAR-OUT .                  064200 (000642)
001C1C             MOVE RUN-HOUR  TO HOUR-OUT .                  064300 (000643)

0034 of 0070  1=Help 3=End 4=Return 7=Bwd 8=Fwd 10=Lft 11=Rht 12=Print XXXX FB
```

Press PF2 from the ADATA Prompt to view the Associated Data Panel. This panel consists of multiple pages of program text and offset information for the selected Csect or module.

Print, Save, or Export Results

```
07/06/2011          zHISR: Print/Save/Export - Spot Analysis          12:12:41
                    SYSHIS20110130.203656.000

To print the current report provide a valid SYSOUT class and press the PF4
key. To save the current report supply the name of a PDS or PDSE dataset
that you are authorized to update and the member name that is to contain the
report and press the PF5 key. To export the current report as a CSV file
specify the output path name and press the PF7 key.

Sysout Class  _

Output Dataset Name _____
Output Member Name  _____

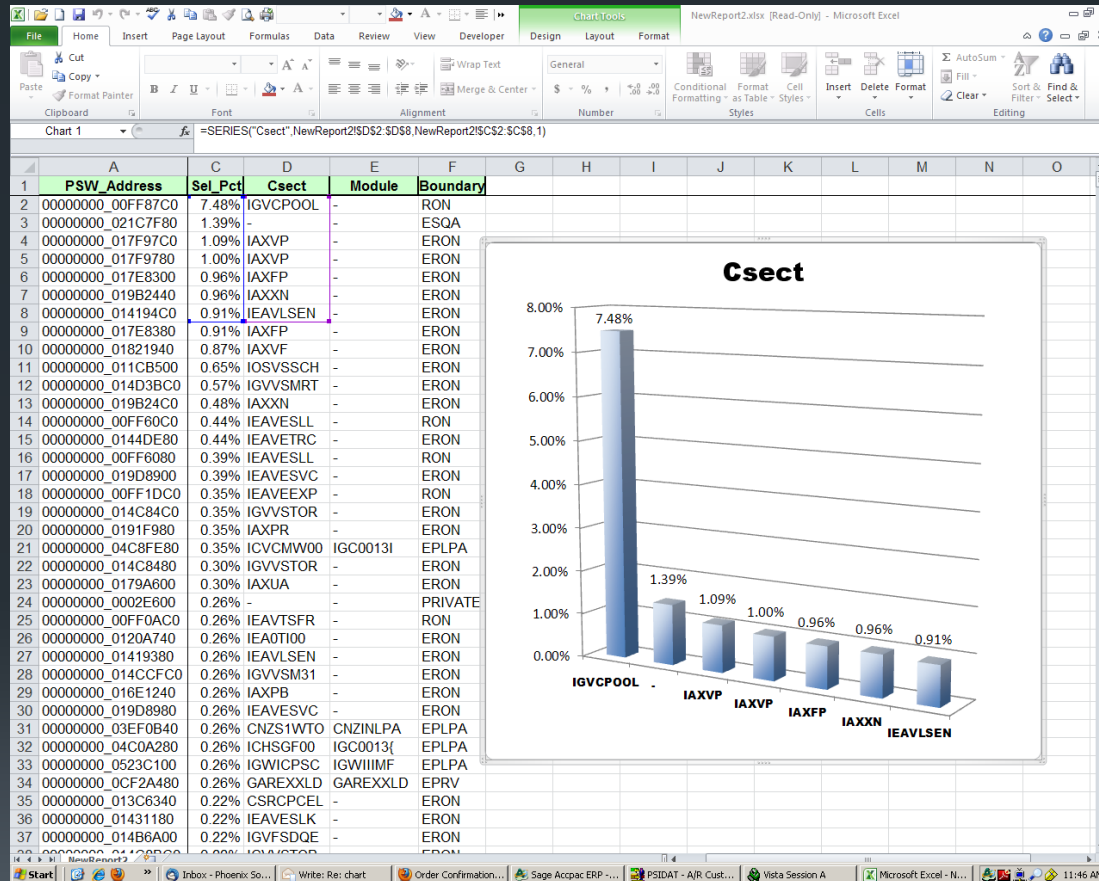
Output Path Name  _____
                  _____

Character encoding ASCII

1=Help  3=End  4=Print  5=Save  6=Clear  7=Export
```

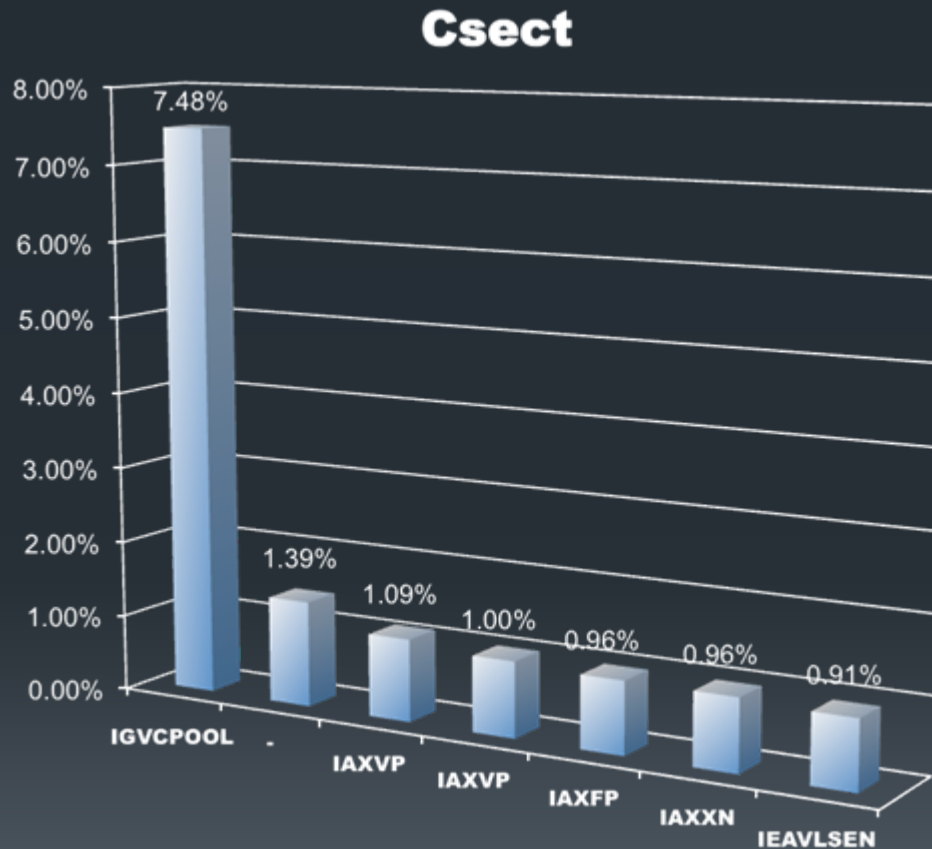
You can print or save a Full Analysis, Spot Analysis, or Associated Data report by pressing the PF12 key from any of those panels. You can also export Full and Spot Analysis reports to a CSV file.

Work With Your Data



If you export your results in a CSV file, you can import the file into Excel or any similar program to analyze and visualize your data.

Work With Your Data



If you save your results in a CSV file, you can import the file into Excel or any similar program to analyze and visualize your data.

zHISR On-line Help

```
04/06/2011 Tutorial zHISR: Help Tutorial GAHI0000 12:01:00
-----
Move the cursor to your selection and press the Enter key
      (Or Point-and-Shoot)
Press PF3 to Return to Invoker or PF12 to End Help

      Basic zHISR Functions
      -----
      - Start a data collection event
      - Stop a data collection event
      - Display HIS status
      - Navigate the UNIX File System
      - Remove files from the UNIX File System
      - Browse a UNIX file
      - Cancel a browsed UNIX file
      - Analyze a completed data collection run

zHISR may be used to generate a hot spot analysis of customer,
vendor or operating system program execution. zHISR uses data
that is created by z/OS Hardware Instrumentation Services that

0001 of 0008          3=End 7=Bwd 8=Fwd 12=Return          XXXX FB
```

zHISR has an online Help Tutorial with step-by-step, detailed instructions for using zHISR.

zHISR



Find your problem code by “shining a spotlight” on those areas that are the biggest CPU resource consumers. (If your spotlight is blinking you may not be able to see everything).

zHISR runs under z/OS 1.8 or later on IBM System z10 or zEnterprise mainframe processors.