

GoFaster

Get the maximum interactive performance on your iSeries

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I.- Knowing GoFaster.

GoFaster's application works through several programs which every certain period of time (30 seconds by default), check and control the interactive CPW consumption, providing the possibility of exceeding the interactive limit established by the manufacturer, and thus reaching the machine's total CPW.

Key the FASTER/FASTER command to access Faster Menu.

```
FASTER                      Faster Menu                      12/04/07  S448442A
      G O F A S T E R
Work with GoFaster
10. Start/Stop           Active
12. Insert/Display Code

Check GoFaster's Action
30. To Consume CPU (Inter)
31. To Consume CPU (Batch)
32. End Option 31
40. Display Identification
41. Display GoFaster Jobs
42. Display CPU Consume Summary
    Use F1 for Help

Work with WRKSYSAC2      (OPT)
50. Display Active Jobs
51. Select Jobs

Work with Help Desk     (OPT)
53. Display Active Screens
54. Select Jobs

Work with Deleted Records (OPT)
57. Retrieve Deleted Records

Work with System Information (OPT)
59. DSPSYSINF Menu

70. Codes Menu
80. Utilities Menu
90. Sign Off

Selection or Command
```

Fig.1 Faster Menu

The Faster Menu consists of 4 main sections:

- Work with GoFaster. Here you will find the commands to work with GoFaster itself.
- Checking GoFaster's Behaviour. Here you will find the options to test GoFaster's operation and the real effects on your machine's performance. You will also find useful information about GoFaster's configuration and your AS/400 or iSeries technical environment.
- Options to access the Codes Menu and Utilities Menu
- Work with Optional Applications. Contains additional applications which you could also try for free. WRKSYSAC2, Help Desk and RDR (Retrieve Deleted Records)

1.- Faster Menu

a)- Work with GoFaster

These two options will allow you to start taking advantage of GoFaster's benefits.

Option 10 Start / Stop.

This option will start GoFaster which will immediately cancel out the established interactive consumption limit. You can also stop GoFaster.

You can also start GoFaster with the FASTER/STRSGF command and stop it with the FASTER/ENDSGF command.

Option 12 Insert / Display Codes

This is a quick access to the Codes Menu so that you can introduce GoFaster's key or any other product key. You can display the key under which GoFaster is running.

b) – Checking GoFaster Behaviour

This section contains several options to check how GoFaster is working and its performance. The interactive “consume” control checking established by the manufacturer is done in different ways depending on the AS/400 or iSeries model or the OS/400 version, although, it normally has two variants: overloading its “consume” with the CFINT task or establishing an upper limit which prevents it from surpassing this established limit [by the addition of all the interactive jobs]. Normally, the CFINT task is the most commonly used, which apart from preventing the increase of further interactive consumption, it also works as an additional job - as a loop, which practically absorbs most of the CPU resources.

Option 30 To Consume CPU (Inter)

It launches an interactive job, WASTECPU, acting as a loop, with the intention to consume many interactive type resources. This allows us to, at any moment, create a strong interactive consumption, which will activate CFINT, or any other contention system for interactive consumption. This way we can verify the “ceiling” or limit for the machine established by the system.

If there wasn't any established limit for interactive consumption, we could see that this job would reach a 90% rate of consumption of the CPU that you can check with WRKSYSAC2. But if, as is probable, there is an established limit, the particular consumption of the job launched will settle at a very low rate, even if the machine was almost “idle”.

Here are two practical examples of running Option 30 with GoFaster active and GoFaster being inactive so you can check its utility and efficiency.

Case A – working with GoFaster ACTIVE

When we want to know how GoFaster works, we select Option 30, To Consume CPU (Inter), which will launch the WASTECPU job. We will see that now its “loop function” will be performed without problems and it will surpass the established limit whilst reaching a 90% interactive consumption. We can verify that although there is an interactive “consume limit”, GoFaster will override it [as is GoFaster's purpose].

Let's take a look at figure A and find out some very interesting facts. It's an AS/400 screen obtained with WRKSYSAC2. We can find all the tasks and jobs sorted by decreasing order of CPU consumption. Also, look at the interactive consumption, the Total consumption and the interactive consumption related to the machine. These are the relevant facts:

Total Consume:	100.1 %	Batch + Interactive	(Variable)
Real Interactive Consume:	93.9 %	Interactive	(Variable)
Contracted Interactive Consume:	30.1 %	Interactive Limit	(Fixed)

What we can read from this data is that the general consumption registered in that moment by that machine, including all kind of jobs, is a 100.1%. The consumption detected for interactive jobs is 93.9% and the interactive limit on this machine is 30.1%. Therefore, **while GoFaster is active, the established interactive limit is overridden, and the interactive jobs have no limit other than the total consumption of the CPU for this machine.**

```

Work with System Activity II                                     AS400ATT
                                                                23/09/04 13:35:25
Automatic refresh in seconds . . . . . : 5 OFF
Elapsed time . . . . . : 00:00:02 Overall CPU util % . . : 100,1
Active/Total CPUs . . . . . : 1 / 1 Interact util/limit % : 93,9 30,1

Type options, press Enter.
 2=Change 3=Hold 4=End 5=Work with 6=Release

Job or
Opt Task User Number Typ Pty % CPU total Sts Function
- DSP01 MANEL 520622 INT 23 79,6 30,9 RUN PGM-WASTECPU
- MANELIP1 QSECOFR 520630 INT 20 14,2 1,07 RUN CMD-WRKSYSAC2
- CFINT01 0 2,8 309,6
- SGF1 GLO 520615 BCH 20 1,0 36,1 TIMW PGM-GOFSTP1
- DEFAULT QTMHHTTP 520569 BCH 25 0,4 57,8 SIGW PGM-QZHBHTTP
- KMHHTPSRV QTMHHTTP 520570 BCH 25 0,4 57,3 SIGW PGM-QZHBHTTP
- RMTNSAFETASK 0 0,3 50,5
- SGF2 GLO 520616 BCH 20 0,3 7,83 DEQW PGM-GOFSTP2
- IPRTR00006 0 0,2 4,44
- DEFAULT QTMHHTTP 520569 BCH 25 0,1 19,0 SIGW PGM-QZHBHTTP
More...
F3=Exit F5=Refresh F10=Restart F12=Cancel F19=Auto Refresh F21=Cmd
  
```

In fact, in figure A, the WASTECPU interactive job, uses 79.6% of the interactive capacity and another interactive job, such as WRKSYSAC2, takes the remaining 14.2%. The little remaining use which adds up to a 100% is made up by several jobs and batch tasks, including CFINT, which is “asleep”.

Figure.- A
WRKSYSAC2 screen
with GoFaster Active

Case B – working with GoFaster **INACTIVE**

If we want now to experiment with the results obtained by running WASTECPU program, while GoFaster remains inactive, we will see the huge difference in behaviour of the jobs running at the time. First we have to stop GoFaster and then use option 30, To Consume CPU (Inter). This way we will again launch the loop created by the WASTECPU interactive program and we will be able to observe how the system distributes the available resources in the machine. In a short time we will see that, in most of the cases, there is a notable interactive “consume” increase of the system task CFINT01, and reaches the highest level of consumption of all the jobs being executed at that time and almost prevents them from being executed ... since they can’t get at the CPU. The WASTECPU job, that with GoFaster active was from the beginning the most “consuming” job, is now [with GoFaster inactive] pushed into the background with little ability to progress.

In figure B, will see data very different from that observed in figure A, when GoFaster was active. As before, it’s an AS/400 screen obtained with WRKSYSAC2. We can find all the tasks and jobs sorted by decreasing order of CPU consumption. Also, look at the interactive consume, the Total consume and the interactive consume related to the machine. Here is the data for this case:

Total Consume:	99.4 %	Batch + Interactive	(Variable)
Real Interactive Consume:	26.8 %	Interactive	(Variable)
Contracted Interactive Consume:	30.1 %	Interactive Limit	(Fixed)

What we can read from this data is that the overall consumption registered at that moment by the machine, including all kind of tasks, is 99.4%. Consumption for interactive detected jobs is 26.8%. The interactive limit on this machine is 30.1%. Therefore, **while GoFaster is now NOT active, the established interactive limit of 30,1% comes into play [as is its job], preventing further jobs from passing this limit.**

In fact, in figure B, the CFINT01 system task takes 70.4% of the general interactive consume and other interactive jobs, such as WRKSYSAC2 and WASTECPU, take up 7.6% and 14.1% respectively. The remainder to 99.4% is taken up by several other minor jobs and batch tasks.

In case CFINT did not launch itself while running the WASTECPU job, whenever GoFaster is deactivated, this will occur because the interactive job contention is now done by the second system mentioned before; in this case, the CFINT01 task would appear with little consumption and also the interactive consumption wouldn’t be able to surpass the limit authorized by the manufacturer, which in this example is 30.1%.

```

Work with System Activity II                                     AS400ATT
                                                                23/09/04 13:43:03
Automatic refresh in seconds . . . . . : 5 OFF
Elapsed time . . . . . : 00:00:08 Overall CPU util % . . : 99,4
Active/Total CPUs . . . : 1 / 1 Interact util/limit %: 26,8 30,1

Type options, press Enter.
 2=Change 3=Hold 4=End 5=Work with 6=Release

Job or
Opt Task User Number Typ Pty CPU CPU Sts Function
- CFINT01 520633 INT 21 70,4 376,1
- DSP01 QSECOFR 520633 INT 21 14,1 95,9 RUN PGM-WASTECPU
- DSP02 GLO 520635 INT 20 7,6 6,93 DSPW CMD-WRKSYSAC2
- MANELIP1 QSECOFR 520630 INT 20 5,1 7,75 RUN CMD-WRKSYSAC2
- AUTORCV1 KFFAX 520632 BCH 10 0,4 2,89 ICFW CMD-FAXIN
- KMHTTSPRV QTMHHTTP 520570 BCH 25 0,4 58,9 SIGW PGM-QZHBHTTP
- RMTMSAFETASK 0 0,3 52,0
- DEFAULT QTMHHTTP 520569 BCH 25 0,3 59,5 SIGW PGM-QZHBHTTP
- IPRTR00006 0 0,2 4,73
- KMHTTSPRV QTMHHTTP 520570 BCH 25 0,1 19,3 SIGW PGM-QZHBHTTP
More...
F3=Exit F5=Refresh F10=Restart F12=Cancel F19=Auto Refresh F21=Cmd
    
```

Figure.- B
WRKSYSAC2 screen
With GoFaster Inactive

Practical case conclusions

By launching the WASTECPU job, we provoke a strong increase in “interactive consume”, although in many installations this situation could occur often in normal usage and be spontaneous [hence, it wouldn't be necessary to activate this extra job to achieve the same result].

While the WASTECPU job is being executed, we can observe via WRKSYSAC2 the data obtained, WITH or WITHOUT GoFaster running, and it is easily deduced that with GoFaster active, the only limit for the interactive consumption is the machine's total capacity. So, with GoFaster active, we reach a 93.9% interactive consumption, whilst when inactive, we only get a 26.8% interactive consumption. We have proven theoretically and practically that **with GoFaster we remove any interactive limit imposed**.

Option 31 To Consume CPU (Batch)

It runs a batch job, WASTEBCH, which acts as a loop, trying to consume many batch type resources. In this way we can create, at any time, a high batch consumption until it reaches the machine's total capacity.

With Option 31, we want the user to verify the system's different behaviour while a job is executed, in this case a loop, depending on whether it is launched as batch or interactive job. If launched as batch, it will use all the needed resources, but if launched as interactive, it will be limited by the machine's interactive capacity. With GoFaster active, the interactive behaviour is just as free as the batch behaviour to be able to use all the needed resources.

In figure C below, we will see an AS/400 screen obtained with WRKSYSAC2. We can find all the tasks and jobs sorted by decreasing order of CPU consumption. Also check the interactive consumption, the Total consumption and the Interactive consumption related to the machine. Here is the data for this case:

Total Consume:	101.7 %	Batch + Interactive	(Variable)
Real Interactive Consume:	15.5 %	Interactive	(Variable)
Contracted Interactive Consume:	30.1 %	Interactive Limit	(Fixed)

What we can read from this data is that the overall consumption registered at that moment by the machine, including all kind of jobs, is 101.7%. The detected interactive jobs' consumption is 15.5%. The interactive job's limit in this machine is 30.1%.

In fact, in figure C, the WASTEBCH job, takes 80.4% of the overall capacity and other interactive jobs, such as WRKSYSAC2 (3 jobs), use 15.4%. The remaining, up to 101.7%, is taken up by several minor jobs and batch tasks.

As we can see, the WASTEBCH job is executed with the only limit being the machine's capacity, and because it is a batch job, it is not constrained by any artificial limitations, with or without GoFaster.

```
Work with System Activity II                                     AS400ATT
                                                                23/09/04 13:54:51
Automatic refresh in seconds . . . . . : 5 OFF
Elapsed time . . . . . : 00:00:10 Overall CPU util % . : 101.7
Active/Total CPUs . . : 1 / 1 Interact util/limit %: 15.5 30.1

Type options, press Enter.
 2=Change 3=Hold 4=End 5=Work with 6=Release

Job or CPU CPU
Opt Task User Number Typ Pty % total Sts Function
- WASTEBCH ELI 520639 BCH 23 80.4 99.1 RUN PGM-WASTEBCH
- DSP01 ELI 520638 INT 10 6.8 3.74 DSPW CMD-WRKSYSAC2
- DSP02 GLO 520635 INT 20 4.5 47.3 DSPW CMD-WRKSYSAC2
- MANELIP1 QSECOFR 520630 INT 20 4.1 8.53 RUN CMD-WRKSYSAC2
- CFINT01 0 3.3 742.3
- DEFAULT QTMHHTTP 520569 BCH 25 0.3 61.9 SIGW PGM-QZHBHTTP
- KMHTTSPRV QTMHHTTP 520570 BCH 25 0.3 61.3 SIGW PGM-QZHBHTTP
- RMTMSAFETASK 0 0.3 54.4
- PAETUNER QPGMR 520607 ASJ 20 0.3 47.2 DEQA
- AUTORCV2 KFFAX 520620 BCH 10 0.2 10.4 ICFW CMD-FAXIN
More...
F3=Exit F5=Refresh F10=Restart F12=Cancel F19=Auto Refresh F21=Cmd
```

Figure.- C
WRKSYSAC2 screen
Batch Consume without limits

Option 32 End Option 31

It cancels the batch job launched with Option 31.

Option 40 Display Identification

Provides information about the machine where GoFaster is installed as well as the installed version, the expiry date for the user's license and the access code.

Option 41 Display GoFaster Jobs

It allows us to check that GoFaster's jobs are currently running.

Option 42 Display CPU Consume Summary

Allows to visualize in a quick way the consumption of the different type of jobs.

2.- Menu Claves ... claves?? [keys?]

Option 70 Codes Menu Access

It is a shortcut to the Codes Menu in which we can introduce and visualize the codes which allow activating GoFaster and its optional applications.

```
GOFSTMNU2          Codes Menu          12/04/07  S448442A
Select one of the following options

10. Insert GoFaster Code
11. Insert WRKSYSAC2 Code
12. Insert Help Desk Code
13. Insert RDR Code
14. Insert DSPSYSINF Code
15. Display Codes

60. Faster Menu
80. Utilities Menu
90. Sign Off
```

Fig.2 Codes Menu

3.- Utilities Menu

Option 80 Utilities Menu Access

It presents various commands which allow us to see, and in some cases modify, the behaviour of some system components. They are classified into three groups: Jobs Management, Disks Management and System Management.

```
GOFSTMNU3                      Utilities Menu                      12/04/07  S448442A
Select one of the following options

Jobs Management                System Management
10. CPU consume greater than 3% 20. Work with system status
11. Response time > 1 sec.      21. Dynamic priority adjustment
12. Sorted by CPU consume       22. Dynamic priority schedule
13. Sorted by response time     23. Work with subsystems
14. Sorted by I/O operations    24. Retrieve system information
15. Class of job               25. Print system information
                                26. Update system information

Disks Management
30. Work with disk status
31. Start disk reorganization
32. Start ASP balance
33. Print disk information
60. Faster Menu
70. Codes Menu
90. Sign Off
```

Fig.3 Utilities Menu

Jobs Management

Presents several options:

- Option 10, CPU consume greater than 3%, shows all the active jobs which consume more than 3% of CPU, and classifies them attending to this % of CPU consume.
- Option 11, Response time greater than 1 sec., shows all the active jobs which its response time is over a second.
- Option 12, Sorted by CPU consume, shows all the active jobs classified by its CPU consume.
- Option 13, Sorted by response time, shows all the active jobs classified by response time.
- Option 14, Sorted by I/O operations, shows all the active jobs classified by access to disks.
- Option 15, Class of Job, informs us the class of any active job.

Disks Management

Presents several options:

- Option 30, Work with disk status, shows general information about the use and space of each disk unit.
- Option 31, Start disk reorganization, allows reorganizing all disks.
- Option 32, Start ASP balance, distributes the used capacity between all the disks on a balanced basis.
- Option 33, Retrieve disk information, retrieves system objects information on member QCURRENT of file QAEZDISK on library QUSRSYS.

System Management

Presents several options:

- Option 20, Work with system status, offers information over several aspects about the system use which will allow us to know its limitations and do a better redistribution of its possibilities.
- Option 21, Dynamic priority adjustment, allows us to view and modify the value of this parameter.
- Option 22, Dynamic priority schedule, allows us to view and modify the value of this parameter.
- Option 23, Work with subsystems, presents an active subsystems list and information about their work conditions
- Option 24, Retrieve system information, retrieves vital system information and stores it on some specified library.
- Option 25, Print system information, prints all information that could be outstanding in case of a disaster recovery or system verification.
- Option 26, Update system information, updates system configuration, total or partially, regarding information retrieved on option 24.

II.- Optional Applications.

A.- Work with WRKSYSAC2

It is basically an improved version of the well known WRKSYSACT (Work with System Activity). It shows all the active jobs and tasks in a given period and sorted by the highest CPU “consume” level. The list can be refreshed manually or automatically. Other differences with the standard command are

- Function F5= Refresh and F10= Restart like the ones used in WRKACTJOB
- Can be executed in multiple sessions.
- Presents additional job information: type, estate, function and CPU total time.
- Hold, end and change jobs.
- Sort by users name or job name and by CPU %.
- Print, archive or display on screen the information.

Let's get to know the different options shown on Faster Menu to use WRKSYSAC2.

Option 50 Display Active Jobs

It is used to activate the WRKSYSAC2 command, and we will obtain the following screen which will show the active jobs and tasks, including CFINT, sorted by decreasing “consume” order. See figure 4.

```
Work with System Activity II                                     AS400ATT
                                                                23/09/04 13:59:23
Automatic refresh in seconds . . . . . :      5      OFF
Elapsed time . . . . . :      00:00:09      Overall CPU util % . . :      12.9
Active/Total CPUs . . . :      1 / 1      Interact util/limit % :      7.8 30.1

Type options, press Enter.
  2=Change  3=Hold  4=End  5=Work with  6=Release

  Job or
Opt  Task      User      Number  Typ  Pty  CPU  CPU  Sts  Function
  DSP01     ELI      520638  INT  10   5.1  44.6 DSPW  CMD-WRKSYSAC2
  MANELIP1   QSECOFR  520630  INT  20   2.7  13.1 RUN   CMD-WRKSYSAC2
  AUTORCV2   KFFAX    520620  BCH  10   1.9  11.7 ICFW  CMD-FAXIN
  CFINT01
  KMHTTSPRV  QTMHHTTP 520570  BCH  25   0.4  62.1 SIGW  PGM-QZHBHTTP
  DEFAULT    QTMHHTTP 520569  BCH  25   0.3  62.7 SIGW  PGM-QZHBHTTP
  RMTMSAFETASK
  PAETUNER   QPGMR    520607  ASJ  20   0.2  47.8 DEWQ
  KMHTTSPRV  QTMHHTTP 520570  BCH  25   0.1  20.4 SIGW  PGM-QZHBHTTP
  DEFAULT    QTMHHTTP 520569  BCH  25   0.1  20.6 SIGW  PGM-QZHBHTTP
More...
F3=Exit  F5=Refresh  F10=Restart  F12=Cancel  F19=Auto Refresh  F21=Cmd
```

Fig.4 WRKSYSAC2 screen

This screen shows a list of the active jobs and tasks which have had any activity since the last execution, ordered by CPU “consume”. These jobs can be selected to take some actions. Let's see a description of the fields shown on screen (figure D).

Automatic refresh in seconds

Indicates the frequency in seconds with which the screen refreshes in automatic mode (ON). This action is the same as executed with F10=Restart. To initiate or terminate automatic mode use F19=Auto refresh. ON and OFF indicate the situation condition.

Elapsed time

Indicates elapsed time since last refresh. This can be since we executed WRKSYSAC2, when we pressed F10 or an automatic refresh. It refreshes the data. Long periods produce significant averages.

Overall useful CPU %

It is the total “consume” of CPU as a % for all the system jobs during the period observed. It is the sum of all the job activity on screen. Due to rounding and errors on time measurements, this total can be higher than 100%.

Active/Total CPUs

Indicates the number of total processors and the number of active processors. Both factors are fixed

Interact useful/limit %

Indicates the CPU's interactive consumption and the available interactive capacity. The first number is a variable factor which is the addition of activity from all interactive jobs. The second one is a fixed factor, corresponding to the interactive card contracted

Option

In this column you can execute actions for each job, but not for tasks.

Valid actions are:

- 2 Change job. A prompt CHGJOB will appear.
- 3 Hold job.
- 4 End job. A prompt ENDJOB with *IMMED will appear by default.
- 5 Work with job.
- 6 Release job.

Job or task

Name of job or task.

Job type

Job Type. See WRKACTJOB help for a complete list.

Priority

Priority for the job's execution.

CPU percentage

CPU's time consumed by a job or task during an elapsed time. The list is always displayed, ordered decreasingly, according to this column.

CPU total

Total CPU consumption in seconds used by a job or task since its beginning.

Job status

See the help for WRKACTJOB for a complete list.

Job function

Job Function. See the help for WRKACTJOB for a complete list. When the function is a program, such as "PGM-xxxx", it appears on the top of the invocation pile, and it is not limited to the driver

Function Keys

- F1 Help
- F3 Exit
- F5 Refresh. Refreshes adding tasks and jobs working during a certain time period. It's similar to WRKACTJOB's F5.
- F10 Restart. Gathers data since it's pressed, ignoring the previous. It's similar to WRKACTJOB's F10.
- F12 Cancel
- F19 Auto Refresh. It's used to initiate or terminate the automatic refresh. Acts the same as F10. The action interval is variable.
- F21 Cmd Command line

Option 51 Select Active Jobs

Here we can get a handle on the WRKSYSAC2 parameters and then visualize jobs according to different criteria and also obtain cyclic information. See figure 5 for the parameters:

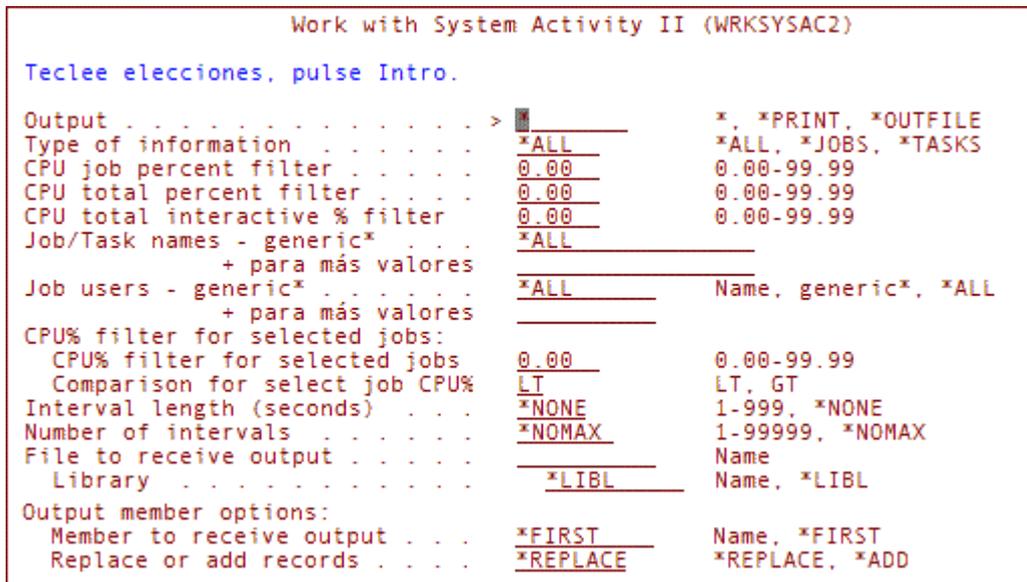


Fig.5 WRKSYSAC2 screen with active jobs parameters

Let's take a closer look at these parameters:

Output (OUTPUT)

Specifies how WRKSYSAC2 command information is going to be obtained.

- * Will be received on screen.
- *PRINT Will be printed on the jobs' exit queue.
- *OUTFILE Will be directed to the exit file specified on the OUTFILE parameter.

Type of information (INFTYPE)

Specifies the type of information obtained.

- *ALL Tasks and jobs.
- *JOBS Only jobs.
- *TASKS Only tasks.

CPU job percent filter (CPUJOBPCT)

Limits the information to the jobs and tasks that consume more than the established number. It's not applied on the jobs and tasks specified by JOBNAME/JOBUSERS if parameter CPUSJOBPC is also used.

CPU total percent filter (CPUTOTPCT)

Limits the information to the tasks and jobs being executed when the CPU's total "consume" surpasses certain level.

CPU total interactive % filter (CPUINTPCT)

Limits the information to the jobs and tasks that are active while the total "consume" of INTERACTIVE CPU surpasses certain level.

Job/Task names (JOBNAME)

Indicates the names of jobs and tasks from which we want to obtain information. Only those will be listed. Generics' can be specified.

Job users (JOBUSERS)

Indicates the names of job and task users from which we want to obtain information. Generics' can be specified.

CPU% filter for selected jobs (CPUSJOBPC)

Indicates the CPU % that, once it is surpassed by the jobs and tasks specified by JOBNAME and/or JOBUSERS, will provide us with information on those jobs. This parameter is related only with the jobs and users specified with JOBNAME and JOBUSERS. This has the following effect:

- A) If JOBNAME and/or JOBUSERS are specified and CPUSJOBPC as well, jobs exceeding the specified % will be listed. On the other hand [ie if CPUSJOBPC not specified], the rest of system jobs will be listed, though these can be filtered with the CPUJOBPCT parameter. This allows us to compare the CPU's % "consume" between the jobs selected and the rest.
- B) If JOBNAME and/or JOBUSERS are specified but NOT CPUSJOBPC, only the JOBNAME and JOBUSERS and the ones that surpass CPUJOBPCT and the rest of filters, will be listed.
- C) If JOBNAME and/or JOBUSERS are not specified, but CPUSJOBPC is specified, then the parameter CPUJOBPCT is ignored.

The second part of this command is a comparative type. It indicates when the CPU % of selected jobs should be lower (LT) or higher (GT) than the value represented on CPUSJOBPC.

Interval length (ITVLEN)

Specifies the frequency in seconds to refresh the screen, in automatic mode, or also when send to a file or printed.

- *NONE When the screen is open, this is the default value, when not in automatic mode.
When producing information for a file or print, this value is ignored, and acts every 5 seconds.
- Nnnn Specifies the number of seconds, between 1 and 999, for the executions.

Number of intervals (NBRITV)

Specifies the number of times that data will be collected to be shown on screen, file or printed.

- *NOMAX Indicates an undetermined number of intervals. When the output is printing or file, it will be necessary to stop the process for cancellation.
- Nnnn Number of times to collect data , between 1 and 99.999 times.

Print blank between results (PRTBLANK)

Specifies if a blank line should appear between register groups.

- *YES Prints a blank line between the job lists in the output ... for easier reading.
- *NO Doesn't print a blank line. When one job is controlled, by the JOBNAME or JOBUSERS parameters, it could be useful not to leave a blank line.

File to receive output (OUTFILE)

Specifies the name of the file and the library where the command exit is to be directed. If the file doesn't exist, it will be created in the indicated library. If it does exist, it must have the same format as file WRKSYSACO which is part of the product.

Output member options (OUTMBR)

Specifies the name of the file's member which relieves the command output.

- *FIRST The first member on the file will relieve the output. If not existing, it will be created with the same name for the file specified in OUTFILE parameter.
Name of the file's member which will relieve the output. If not existing, it will be created.
- *REPLACE The output will replace all the previous records in the specified file.
- *ADD The file is added to the records existing in the specified file.

Using WRKSYSAC2 samples

Here are some samples of how to use the filters allowed by WRKSYSAC2.

- 1.- Obtain an all jobs report when the total system CPU "consume" surpasses 80%. The report will be refreshed every 60 seconds, for a total of 1440 times, that is, 24 hours.

```
WRKSYSAC2 OUTPUT(*PRINT) CPUTOTPCT(80)
ITVLEN(60) NBRITV(1440)
```

The request will be executed in batch releasing the screen.

- 2.- Send to a file all the jobs and tasks which consume more than 50%. The frequency will be 30 seconds indefinitely.

```
WRKSYSAC2 OUTPUT(*OUTFILE) CPUJOBPCT(50)
ITVLEN(30) OUTFILE(QGPL/CPUOUTPUT)
```

Because NBRITV has by default this value, *NOMAX, the job should be cancelled on purpose. But the obtained file CPUOUTPUT, can be reviewed at any time.

- 3.- We want to know when a night job consumes less than 50%. When it does happen, we want to get a list of jobs that consume more than 1%. This can explain why some jobs take longer than we thought. The name of the job is DAYEND and the user is QSYSOPR. It will be controlled every 30 seconds over 8 hours and the result will be sent to a print file.

```
WRKSYSAC2 OUTPUT(*PRINT) CPUJOBPCT(1.00)
JOBNAMES(DAYEND) JOBUSERS(QSYSOPR) CPUJOBPC(50 LT)
ITVLEN(30) NBRITV(960)
```

- 4- We want to know when the consumption created by all the interactive resources totals the permitted interactive limit and launches CFINT. We shall control any CFINTnn that surpasses CPU 10%. When this happens we want a list of other jobs which are consuming more than 1% of CPU. This way we can see which activities are responsible for launching CFINT. Control will be done every 10 seconds over 24 hours and the result will be sent to a print file.

```
WRKSYSAC2 OUTPUT(*PRINT) CPUJOBPCT(1.00)
JOBNAMES(CFINT*) CPUSJOBPC(10 LT)
ITVLEN(10) NBRITV(8640)
```

For more information on WRKSYSAC2 go to www.gofaster.us/edownload.htm

B.- Work with HELP DESK

This tool will allow you to view and take control over other active user screens whether the user is present or not. Its main objective is to give support to remote users and help the administrator when disconnecting users from certain applications. These are some of its benefits:

- Give support to final users
- Train users "on-line"
- Control and answer error messages from other users
- Update your programs with total control of what is going on
- Disconnect interactive jobs
- Supervise suspicious users
- Recreates even the last transaction
- Disconnect users
- Avoid unnecessary travelling
- Avoid inefficient communications over the phone

Option 53 Display Active Screens

It runs the RVC command, which will allow us to visualize a copy of the all active screens on the system and even take control of them from our own keyboard. This is what you get:

```

Remote View/Change
User.: *ALL      Job.: *ALL      Filters: OFF      15/01/07 13:26:58
Type options, press Enter.
2=Change 5=Display QTP=QTEMP/LDA CMD=Remote Command Jnn=Job option ...

Opt Job      User      Number  Type  Sts  Function      Library      Time
--- ---      ---      ---     ---  ---  ---           ---         ---
01  GARIP2    GAR       380031  INT   DSPW  CMD-STRSEU    QPDA         : : 17
02  MANELIP1  MANEL     380032  INT   RUN   CMD-RVC       FASTERI      : : 0
03  MANELIP2  QPGMR     380034  INT   DSPW  MNU-FASTER    QSYS         : : 7

F3/F12=Exit  F5=Refresh  F11=View-1/2  F13=Repeat  F14=Job filters
F16=Resequene  F21=Command  F23=More options
Bottom

```

Fig.6 Active Screens on your System

The optional actions for each job are:

2	Change	To see and change the screen.
5	Display	To see the screen
QTP	QTEMP/LDA	Shows a window allowing direct access to the QTEMP and LDA of another job.
CMD	Remote Command	Shows a window allowing you to send commands to another job.
Jnn	Job option	Allows you to act on the job attending to the nn chosen.
Wnn	WRKJOB	Acts as WRKJOB command incorporating the menu option in nn.

The function Keys for this screen are:

F3	Exit	Exit the product
F5	Refresh	Screen refresh
F11	View-1/2	Show alternate view. Additional columns: User Group and User text Description.
F13	Repeat	Duplicate an option till the end of the list. The first non-blank option found on the list will be duplicated through the end of the list. This is similar to F13 used in PDM.
F14	Job Filters	Shows the screen to filter information through several criteria.
F16	Resequenece	Order the column where the cursor is located
F21	Command	Shows a command line
F23	Options	Shows additional job options.

Option 2 execution (CHANGE)

When choosing option Change a screen is shown giving instructions of how to act and when pressing Enter again it creates a copy of the screen selected, with which we can work directly with our keyboard.

Option 5 execution (DISPLAY)

This will provoke a screen giving instructions of how to act and when pressing Enter again it creates a copy of the screen selected, with which we cannot work directly with our keyboard. It will refresh automatically when changes take place on the controlled screen.

Remote command execution (CMD)

While keying CMD in the job options it will show a window with the command line in which we should write down the command we want to execute on the job or screen controlled.

Access to QTEMP and LDA (QTP)

While keying QTP in the job options a window with a list command line will be shown, through which we will have access to the QTEMP library of another job and its LDA. Key the command you want and press Enter. This command will execute in its own job but it will access to QTEMP and LDA of the other job and therefore the result of the command will not appear on the screen or job controlled.

Differences between CMD mode and QTEMP mode

In mode CMD the execution is done in the remote or controlled job while in mode QTP execution is done on our own job.

When to use QTP:

- Better for working with the remote QTEMP or LDA, because the results can display on local screen.
- Can access jobs which are held and disconnected.
- It doesn't interrupt the other remote job.

When to use CMD:

- To alter the list of libraries of another job.
- To access the Group Data Area (GDA) of another job.
- To start an application of a user who doesn't have that option available on their menu.

Option 54 Select Jobs

It is used to access RVC parameters, which will allow us to select particular jobs and screens and even batch jobs. The RVC command has the following parameters:

RVC DEVUSR(*ALL) SRTSEL(U)

These parameters have the following alternatives:

Remote Device or User ID (DEVUSR)

Name Name of the device or user whose screen we want to visualize and control depending on what is specified on SELSRT. A generic name can be used. If it finds more than one active session, a list will be shown to select one. If there's only one active session it will visualize directly.

*ALL Selects all the active devices and users.

*FILT Using *generic*, we can select user and device, relating to, number of job or jobs rang. You can also filter relating to job type as you'll see in the next figure 7:

Job Filters

```

Job . . . . . *ALL      *generic* or name
User . . . . . *ALL      *generic* or name
Number . . . . . *ALL    *ALL, number, or From number
To number . . . . .      To number or blank
User text contains: _____ case insensitive

Include all interactive jobs . . . . . N  Y=Yes N=No
Include all job types . . . . . N    Y=Yes N=No
Include jobs in JOBQ/OUTQ status . . . N  Y=Yes N=No

F3=Exit  F12=Previous

```

Fig.7 Selection by job type

Select/Sort Device or User (SELSRT)

If you specify "D" on DEVUSR parameter, it will be a device or devices. If you specify "U", it will be a user or users. It is also used to classify by user or device. If you specify "U" and the user profile indicated on DEVUSR cannot be found, it will look for a device with the same name.

U Specifies that the previous parameter, DEVUSR, refers to users.

D Specifies that the previous parameter, DEVUSR, refers to devices.

Additional Command RVEDTSEC Authorizations

It executes RVEDTSEC command, which allows us to configure the rules used for Help Desk's RVC command. It presents two sections: Header Options and Detail Options. The first one has a general effect and the second one has an effect on a particular user.

General Security Options (Header options)

When RVEDTSEC command is executed, the next screen in figure 8 will appear. It shows the general work conditions for the product for any user.

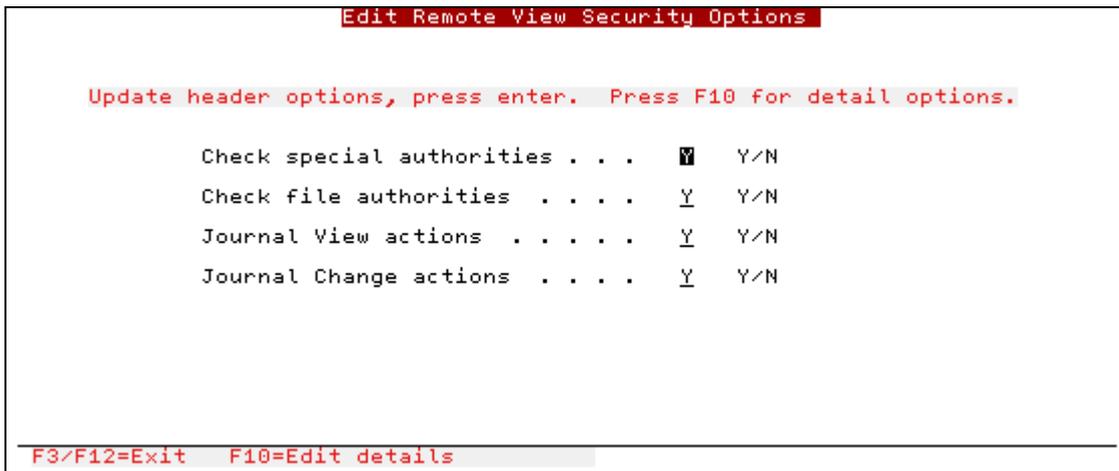


Fig.8 General Security Conditions

Personalized Security Options (Detail options)

We gain access to it by pressing F10 on the Header Options screen. Now we can create, modify or control the condition rules for each possible user. You can see figure 9:

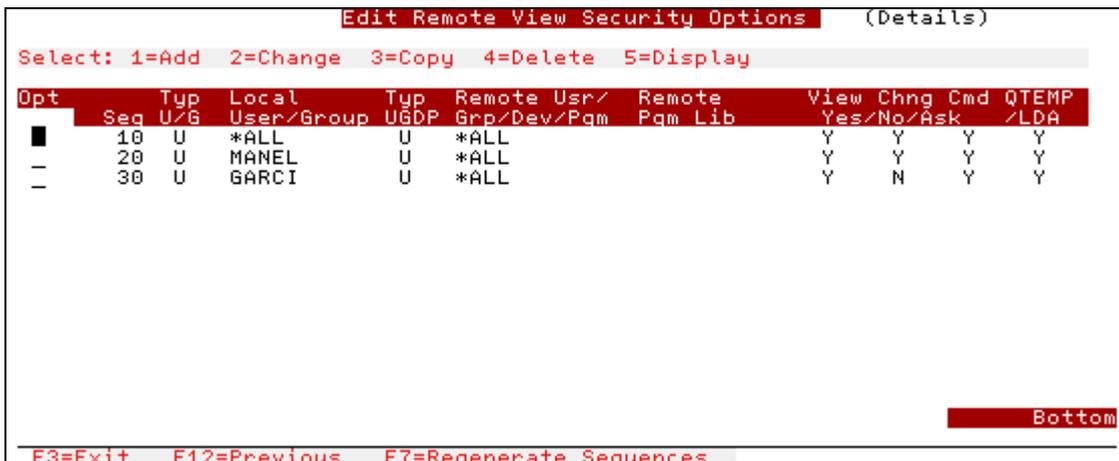


Fig.9 Create, modify and control user conditions

When you want to have access to the user's conditions you'll obtain a screen like the one shown in figure 10, where it specifies each and every one of the rules available:

```

Change details
Sequence . . . . . █ 20      1-99999 blank=next
Local type . . . . . U       U=User G=Group
Local User/Group . . . . . MANEL name, generic*, *ALL
Remote type . . . . . U       User/Group/Device/Program
Remote u/g/d/p . . . . . *ALL name, generic*, *ALL
Remote Pgm lib . . . . .      name, generic*, *ALL
Allow View . . . . . Y       Y=Yes N=No A=Ask
Allow Change . . . . . Y     Y=Yes N=No A=Ask
Allow Command . . . . . Y    Y=Yes N=No
Allow QTEMP/LDA . . . . . Y  Y=Yes N=No
Time out on View confirm . . . . . 0 seconds
Default View reply . . . . . Y  Y=Grant N=Deny
Time out on Change confirm . . . . . 0 seconds
Default Change reply . . . . . Y  Y=Grant N=Deny
F12=Previous
  
```

Fig.10 Change user rules

For more information on Help Desk go to www.gofaster.us/edownload.htm

C.- Work with Deleted Records (RDR)

Option 57 Retrieve Deleted Records

It comprises the options to manage the program RDR (Retrieve Deleted Records).

This useful tool has the mission to help you retrieve all or part of the deleted records from a physical file or from a member on a physical file, as long as the file has not been reorganized. Though the tools name “talks about” deleted records, we want to distinguish between suppressed and deleted records. The suppressed files remain in the physical file till it is reorganized and then the files are completely deleted and impossible to retrieve. So RDR Works with the **suppressed records**, which can still be recovered, before they are definitely and permanently deleted. See figure 11:

```

Retrieve Deleted Records (RDR)
Teclee elecciones, pulse Intro.
File Name: . . . . . █      Name
Library Name: . . . . . *LIBL Name, *LIBL
Member Name: . . . . . *FIRST Name, *First
From Record: . . . . . 1    1 to 999999999
To Record: . . . . . 999999999 1 to 999999999
Output File Name: . . . . . RDRDLTS Name, RDRDLTS
Output Library Name: . . . . . QTEMP Name
Output Member Name: . . . . . *OUTFILE Name, *OUTFILE
Include Relative Record N: . . . . *YES *YES, *NO
Final
F3=Salir F4=Solicitud F5=Renovar F12=Cancelar
F13=Cómo utilizar esta pantalla F24=Más teclas
  
```

Fig.11 Select records to retrieve

For more information on RDR go to www.gofaster.us/edownload.htm

D.- Work with System Information

Option 59 Menu DSPSYSINF

It comprises the options to manage the DSPSYSINF application. These are various information options about the use of resources on your machine by all the jobs performed daily in the machine and help us be more efficient with resources.

```
DSPSYSINF                System Information                12/04/07  S448442A
Select one of the following options

1. CPU Consume Summary
2. Partition's Information
3. Machine's Identification
4. System's Values
5. Work with Active Subsystems
6. Work with Active Jobs' Class
7. CPU's Performance Test

60. Faster Menu
70. Codes Menu
80. Utilities Menu
90. Sign Off
```

Fig.12 DSPSYSINF Menu

Option 1 CPU Consume Summary

It shows a summary of the CPU consumption classified by type and class of jobs.

Option 2 Partition Information

It shows information about the existing partitions and the system values on the current partition.

Option 3 Machine Identification

It shows information about the hardware and software in your system.

Option 4 System Values

It shows some parameters which could affect the machine's performance.

Option 5 Work with Active Subsystems

It displays the active subsystems with all their individual information and allows the changing of their properties.

Option 6 Work with Active Jobs' Class

It allows you to see the job class of any active job.

Option 7 CPU Performance Test

It presents several tests to evaluate the machine's performance.