

MONITOR SYSTEM HISTORY JOBS

TECHNICAL OVERVIEW

The AS/400 generates and logs thousands of messages daily to different message queues. Manually monitoring messages is not practical because time is wasted filtering through less important messages, to get the message you want. We have batch jobs that ends only to find out 2 days later that the job ended normally.

We can automate message monitoring and feel comfortable that all jobs that end abnormally are given immediate attention. The Monitor Job (MONJOB) checks the messages logged in the System History (QHST). A batch monitor job called MONQHST is submitted to read these messages. This job collects all the information in QHST every 10 minutes. (The wait time for the submitted job can be modified by sending the data queue MONQHSTDQ a parameter of "WAIT" in the first 10 positions, and the number of seconds in position 11 to 15.)

Current Monitor function:

- A batch monitor job is submitted to collect all messages in QHST
- Filtered by date
- Filtered by job status – Completed, Inquiry or Abnormal End
- Filtered by user
- Position by time of day

Future Enhancements:

- Filter by Message Id
- Filter by Job Name
- Filter by User Name (allow Generic* name)
- Filter by Message Severity
- Time position field
- Automatic Screen Refresh
- Calculate total elapsed time for a Job
- Send messages by email for alert
- Paging Escalation
- Reporting

WORK WITH QHST (MONHST) MENU

```
MONHST                               Work with QHST Menu                               System:  TECHCO

Select one of the following:

Monitor QHST jobs
  1. Start monitor
  2. End Monitor

Work with QHST jobs
  3. Job Abends
  4. Inquiry Jobs
  5. Complete Jobs

Selection or command
====> _____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
(C) Alex Nubla of PGMR, Inc. 2002
```

A menu is provided to monitor System History Log. The menu name is MONHST (found in CNVADMIN library).

1. Start Monitor

Select this option to start the batch job monitor. You will be prompted to determine when the monitor ends. A job with MONQHST name will be submitted to batch. The job queue where it is submitted is based on your user profile default.

2. End Monitor

Select this option to stop the batch job monitor of QHST.

3. Work with Jobs that ended Abnormally (ABEND)

Select this option to view all System jobs that ended abnormally. User messages can be added as long as the text sent to the history log (*HSTLOG) has the word "abnormal".

4. Work with Inquiry Jobs

Select this option to view all System jobs that have an inquiry message sent to the History Log.

5. Work with Completed Jobs

Select this option to view all System jobs that completed normally.

WORK WITH QHST LOG

```

                                Work with QHST Log
                                05/14/02 13:57:13
                                TECHCO
Job selected:                    Number of jobs . . . . . : 1217
Job date . . . . . : 05/14/02
Condition . . . . . : ABEND      Position to . . . . . : _____
User . . . . . : *ALL

Type options, press Enter.
5=Work with

Opt  Job      User      Number  Date      Time      Status
--  ---      -
_   RUNMQCHL  QMQM     287113  05/14/02  00:16:00
_   RUNMQCHL  QMQM     287117  05/14/02  00:36:01
_   RUNMQCHL  QMQM     287120  05/14/02  00:56:01
_   RUNMQCHL  QMQM     287128  05/14/02  01:16:02
_   FPU5819R  NMCLELLA 287129  05/14/02  01:17:38
_   FPU5819R  NMCLELLA 287130  05/14/02  01:22:03
_   FPU5819R  NMCLELLA 287131  05/14/02  01:23:21
                                         More...

Parameters or command
====>
F3=Exit      F4=Prompt   F5=Refresh  F9=Retrieve  F11=Display message
F12=Cancel   F17=Subset

(C) Alex Nubla of PGMR, Inc. 2002
```

The Work with QHST Log displays the list of jobs that was written to the System History (QHST) log. The list is based on the job selected filter (description found on the top left-hand side of the screen). The total number of jobs listed is displayed on the top right-hand side of the display.

Option 5

Execute the Work with Job (WRKJOB) command for the job on the list. Only jobs you are authorized to can be displayed.

F5

Refresh the list with updated information. This key must be pressed when the Position to time field is changed.

F11

Display the detailed message of the log.

F17

Display the subset (filter) window to select a different date or condition or user, or a combination of all filters.

Position to time

Display the subset (filter) window beginning with this time entry. You may enter a time of 0700 to signify 07:00:00. Press Enter to edit the time, then press F5 to refresh the list.