



NJA

Navan Job Accounting Facility

An overview

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VERSION 6 RELEASE 0

This edition applies to Version 6, Release 0 of the NJA Navan Job Accounting Facility Program Product.

Unless otherwise stated, all pages in this edition are to Version 6 Release 0 and refer to the iSeries Operating System Version 7.3 or greater.

Any references in this manual to NJA, Navan Utilities or NUTIL refer to standard Navan Utility products. Information on these products can be obtained from your nearest Navan agent.

iSeries Job accounting in general

Job Accounting is a standard function of the iSeries operating system; supplied by IBM as a means of automatically obtaining 'raw' data on who is using your system, and to what extent.

However, as supplied it is not really usable unless the data gathered is processed into some more meaningful form. This is the purpose of the Navan Job Accounting Facility (NJA) - to collate the data into a set of database files from which it can be manipulated; and then to provide tools to process the data.

NJA is an Accounting (financial) tool - it will generate financial documents (invoices) from the information gathered. However, once the information is loaded into NJA files it can be processed by any user method (programs, query, SQL etc) into any management reporting format you require.

Source code is available for a nominal charge, to allow you to see what it is actually doing, as well as to allow you to alter the application to meet your own needs.

As previously discussed, i/OS Job Accounting is a standard system function on the iSeries. The definition of this function is explained in the iSeries Work Management Guide and it is highly recommended that you read this.

Basically, Job Accounting records the use of your iSeries resources and keeps these statistics in a special system accounting journal. The information recorded is divided into two types:

Job Resource Accounting data, which records an entry at the completion of a job, recording various pieces of information about the job:

- Job Name and User
- Accounting code
- Job Type (batch/interactive)
- Start and End time
- Job completion code
- Number of routing steps
- Auxiliary I/O operations
- Number of database reads/writes
- Number of communications transactions

Printer Resource Accounting data, which records an entry at the completion of printing a spooled or non-spooled printer file (no entry is made if the file is not printed), recording information such as:

- Job Name and User
- Accounting code
- Printer device used
- Number of pages and lines printed

Because this information is journalled at the completion of the relevant function, the system overhead in using Job Accounting is minimal (the statistics are accumulated by i/OS regardless of whether Job Accounting is in operation, so this is not considered an overhead of Job Accounting itself).

The Navan Job Accounting Facility (NJA)

Once i/OS is notified that Job Accounting is in use, it will collate usage information automatically. Periodically (daily, weekly, monthly etc), you will be required to extract this raw i/OS information from the journals and load it into files that can be used by NJA. This is performed by selecting a menu option from the NJA menu.

Whilst ALL accounting data is retrieved and stored within the NJA data files, NJA only calculates values based on a subset of the information retrieved from the Accounting journals:

- The CPU usage of a job (in seconds)
- The number of I/O transactions performed by a job
- The number of print lines processed by printers for the job

You can attach financial values to each of these types of system usage in order to charge users (or groups of users) for their machine usage.

You can optionally apply a penalty loading onto interactive jobs (so that Batch processing is cheaper than Interactive processing).

You can also define penalties between time ranges, that will be applied to any batch processing commencing between the defined times.

All features of NJA are selectable from a menu. The batch processes can be run from this menu, or they can be set to run automatically from a Job Scheduler (such as the NUTIL Job Scheduling facility) on a periodical basis.

The NJA main menu

To access NJA, you simply add NJALIB to your library list and call up the NJA main menu:

```
:: ADDLIBLE NJALIB _____  
:: GO NJA _____
```

NJA		Navan Job Accounting Facility		
Select one of the following:				
1.	Control Factors Maintenance	JAR010		
2.	Exchange Rates Maintenance	JAR030		
3.	Time of Day Penalty Rates Maintenance	JAR035		
4.	Account Master File Maintenance	JAR020		
10.	Load Accounting files from Journalling	JALOAD		
11.	Maintain Job Resource lines	JAR040		
12.	Maintain Printer Resource lines	JAR050		
13.	Check all Uninvoiced lines for valid Account numbers	JAACCTCHK		
20.	Print Invoices and Invoice Register	JAGENINV		
30.	Invoice Reprint	JAR060		
40.	Invoice Inquiry	JAR070		
50.	Cleanse all files of old data	JARGZ		
100.	Year End Processing	JAR085		
200.	Installation Procedure	JAINSTALL		
Selection or command _____				
F3=Exit	F4=Prompt	F9=Retrieve	F12=Previous	F13=User Support
F10=Command Entry	F14=Work with Submitted Jobs	F18=Work with output		
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This menu provides a simplified access to all NJA facilities. Should you need to access any (or all) of the options by any means other than via this menu, you simply call the appropriate program (the program to call is shown beside each option on the menu).

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