



jBASE Background Processing

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Documentation Conventions

This manual uses the following conventions:

Convention	Usage
BOLD	In syntax, bold indicates commands, function names, and options. In text, bold indicates keys to press, function names, menu selections, and MS-DOS commands.
UPPERCASE	In syntax, uppercase indicates JBASE commands, keywords, and options; BASIC statements and functions; and SQL statements and keywords. In text, uppercase also indicates JBASE identifiers such as filenames, account names, schema names, and Windows NT filenames and pathnames.
UPPERCASE <i>Italic</i>	In syntax, italic indicates information that you supply. In text, italic also indicates UNIX commands and options, filenames, and pathnames.
Courier	Courier indicates examples of source code and system output.
Courier Bold	Courier Bold In examples, courier bold indicates characters that the user types or keys (for example, <Return>).
[]	Brackets enclose optional items. Do not type the brackets unless indicated.
{ }	Braces enclose nonoptional items from which you must select at least one. Do not type the braces.
ItemA .itemB	A vertical bar separating items indicates that you can choose only one item. Do not type the vertical bar.
...	Three periods indicate that more of the same type of item can optionally follow.
⇒	A right arrow between menu options indicates you should choose each option in sequence. For example, “Choose File ⇒ .Exit ” means you should choose File from the menu bar, and then choose Exit from the File pull-down menu.

Syntax definitions and examples are indented for ease in reading.

All punctuation marks included in the syntax—for example, commas, parentheses, or quotation marks—are required unless otherwise indicated.

Syntax lines that do not fit on one line in this manual are continued on subsequent lines. The continuation lines are indented. When entering syntax, type the entire syntax entry, including the continuation lines, on the same input line.

BACKGROUND PROCESSING

This section describes how to use jBASE Background Processing -jBP

A process in jBASE is defined as the session that occurs between logging on and logging off. Each process is normally associated with a physical line (or port) which has some sort of terminal output device. jBP allows you to run a process on any line and does not require an associated terminal.

Use jBP to perform tasks, which do not require operator intervention and for those which any required inputs can be queued. Typically, these are batch-style processes such as reports or updates. The main benefit of using jBP is that you can perform lengthy operations in the background of the system, without occupying physical terminal devices.

Input to a process which would normally require a terminal can be queued for submission to the background task. The **PH-START** command will prompt you for the list of commands or inputs required by the process.

Output that would normally go to a terminal (such as error messages) can be directed to a spooler hold file for review later.

Background Processing in jBASE

LIST-JOB	Displays history and status information for each background process.
PH-ALLOCATE	Allocates port numbers for background processes.
PH-CLEAR	Clears the background task history log file.
PH-DELETE	Deallocates port numbers for background processes.
PH-KILL	Stops a background process.
PH-LINES	Displays all allocated background task port numbers.
PH-RESUME	Resumes a background process.
PH-START	Starts a background process.
PH-STATUS	Displays the background tasks history log file.
PH-SUSPEND	Suspends a background process.
Z	Starts a background process.
ZH	Starts a background process and directs output to a hold file.

LIST-JOB

The LIST-JOB command displays status and history information for each jBASE background processing.

COMMAND SYNTAX

LIST-JOB {(Options)}

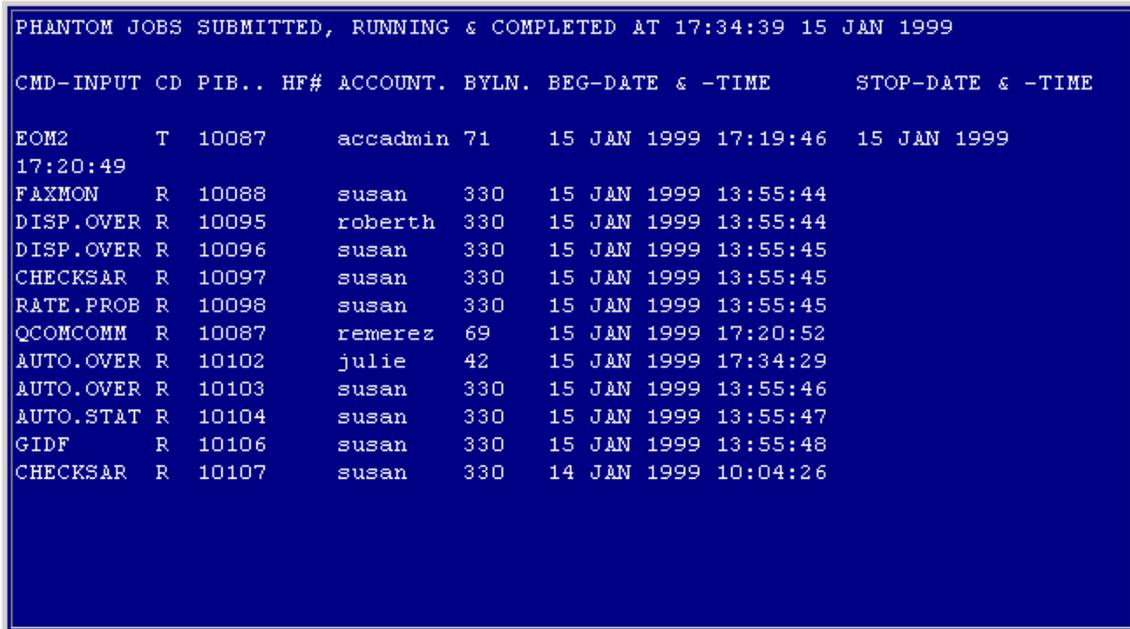
SYNTAX ELEMENTS

Options

P Redirect output to the spooler

NOTES

The information displayed in the LIST-JOB screen is contained in columns:



```
PHANTOM JOBS SUBMITTED, RUNNING & COMPLETED AT 17:34:39 15 JAN 1999
CMD-INPUT CD PIB.. HF# ACCOUNT. BYLN. BEG-DATE & -TIME      STOP-DATE & -TIME
EOM2      T  10087      accadmin 71      15 JAN 1999 17:19:46  15 JAN 1999
17:20:49
FAXMON    R  10088      susan   330    15 JAN 1999 13:55:44
DISP.OVER R  10095      roberth 330    15 JAN 1999 13:55:44
DISP.OVER R  10096      susan   330    15 JAN 1999 13:55:45
CHECKSAR  R  10097      susan   330    15 JAN 1999 13:55:45
RATE.PROB R  10098      susan   330    15 JAN 1999 13:55:45
QCOMCOMM R  10087      remerez 69     15 JAN 1999 17:20:52
AUTO.OVER R  10102      julie   42     15 JAN 1999 17:34:29
AUTO.OVER R  10103      susan   330    15 JAN 1999 13:55:46
AUTO.STAT R  10104      susan   330    15 JAN 1999 13:55:47
GIDF     R  10106      susan   330    15 JAN 1999 13:55:48
CHECKSAR  R  10107      susan   330    14 JAN 1999 10:04:26
```

Column	Description
CMD-INPUT	The command line for the jBASE background processing provided by the Z command.

Column	Description
CD	The status code for the jBASE background processing.
PIB	The port number of the jBASE background process.
HF#	The spooler holds file number used by the jBASE background processing.
ACCOUNT	The userid/account that is used by the jBASE background processing for execution
BYLN	The port number that started the job
BEG-DATE	The date the jBASE background processing was started
BEG-TIME	The time the jBASE background processing was started
STOP-DATE	The date the jBASE background processing completed
STOP-TIME	The time the jBASE background processing completed

NOTE: Use the PH-CLEAR command to manually clear the jBP log.

STATUS CODES

Code	Description
R	Process is still active
S	Process terminated by UNIX system command
T	Process terminated normally
E	Process terminated incorrectly. Usually because the executing process requires input but there are no more statements left in the command stack
Q	Process queued for port

PH-ALLOCATE

The jBASE PH-ALLOCATE command allocates a port number for use by jBASE background processes.

COMMAND SYNTAX

PH-ALLOCATE {port {port}} {(Options)}

PROMPT

PORT TO ALLOCATE?

SYNTAX ELEMENTS

Port	port number to allocate
port port	specifies that all ports with the range be to be allocated.

Options;

- F Allocate port numbers for foreground processes.
- B Allocate port numbers for background processes. (default).

NOTES

Enter the port number to allocate to the available list of jBASE background ports.
The port number will remain allocated until de-allocated with PH-DELETE command.
Allocated port numbers can still be used for normal foreground processes when not being used for jBASE background processes.
The user must have root privileges for this command.

EXAMPLE

```
PH-ALLOCATE
PORT TO ALLOCATE? 100
Allocates as available port number 100 for use by jBASE background processing
```

PH-CLEAR

The jBASE PH-CLEAR command clears the jBP log and history file.

COMMAND SYNTAX

```
PH-CLEAR {taskid | port} {(Options)}
```

SYNTAX ELEMENTS

- taskid specifies that only the entries for the taskid be to be cleared.
- port specifies that the entries for the port number be to be cleared.

Options

I Clears entries interactively i.e. prompt before deleting entry

NOTES

This command can only be executed by the superuser/Administrators.

If a taskid, port number or interactive option is NOT specified all entries in the log file will be deleted.

EXAMPLE

```
PH-CLEAR 100
```

Deletes log and history records for port number 100.

PH-DELETE

The jBASE PH-DELETE command deletes a port number allocated for the jBASE background processing.

COMMAND SYNTAX

```
PH-DELETE {port {port}} {(Options)}
```

PROMPT

```
PORT TO DELETE?
```

SYNTAX ELEMENTS

Port	port number to delete
port port	specifies that all ports with the range are to be deleted

Options

F	delete port numbers for foreground processes
B	delete port numbers for background processes. (default)

NOTES

Enter the port number to delete from the available list of jBASE background ports.

The port number is not available for jBASE background processes until allocated by the PH-ALLOCATE command.

The user must have root privileges for this command.

EXAMPLE

```
PH-DELETE
PORT TO DELETE? 100
100 DELETED FROM SERVICE
```

Port number 100 is no longer available for use by jBASE background processing.

PH-KILL

The jBASE PH-KILL command stops the specified jBASE background processing.

COMMAND SYNTAX

PH-KILL n

SYNTAX ELEMENTS

n is the port number associated with jBASE background processing to be terminated.

NOTES

The user must have root privileges if the jBASE background processing is running as a different user name.

ERROR MESSAGES

If you do not specify a port number, you will see the following message

:

[316] WHICH LINE?

If you specify a port number that is not currently logged on, you will see:

PROCESS NOT LOGGED ON

If you have no root privileges and attempt to terminate a jBASE background-processing running under a different user name, displayed is the following:

[82] YOUR SYSTEM PRIVILEGE LEVEL IS NOT SUFFICIENT FOR THIS STATEMENT.

EXAMPLE

PH-KILL 100

terminates the jBASE background-processing running on port 100

PH-LINES

The jBASE PH-LINES command displays all allocated jBASE background task port numbers.

COMMAND SYNTAX

PH-LINES port {Options}

SYNTAX ELEMENTS

Port specifies a port number to be displayed.

Option	Description
C	Compress display to only active ports
V	Verbose display
P	Direct output to spooler
N	No pagination
F	Delete port numbers for foreground processes
B	Delete port numbers for background processes. (Default)

EXAMPLE

```
PH-LINES
```

```
LINES AVAILABLE FOR USE
```

```
100
```

```
103
```

Shows as available ports 100 and 103 for jBASE background processing

PH-RESUME

The jBASE PH-RESUME command resumes a suspended jBASE background processing.

COMMAND SYNTAX

PH-RESUME n

SYNTAX ELEMENTS

N is the port number associated with the jBASE background processing to be resumed.

NOTES

The user must have root privileges if the jBASE background processing is running as a different user name.

ERROR MESSAGES

If you do not specify a port number, you will see the following message
:

[316] WHICH LINE?

If you specify a port number that is not currently logged on, you will see:

PROCESS NOT LOGGED ON

If you attempt to resume a jBASE background-processing running as a different user name and you are not root, you will see:

[82] YOUR SYSTEM PRIVILEGE LEVEL IS NOT SUFFICIENT FOR THIS STATEMENT.

EXAMPLE

PH-RESUME 100

Resumes the jBASE background-processing running on port 100

PH-START

The jBASE PH-START command starts a jBASE background processing.

COMMAND SYNTAX

PH-START

PROMPTS

ENTER TASKID FOR PH TASK? {task-id}

ENTER LINE# FOR PH TASK? {port-number}

ENTER OPTIONS? {options}

ENTER ACCOUNT FOR PH JOB ? {user-id/account-name}

ENTER COMMAND STREAM <CR TO END>

USE "<" FOR A NULL LINE

command-stream

SYNTAX ELEMENTS

- task-id is the name to identify the jBASE background processing. The default name is "None". This name is recorded in the jBP log file and displayed by PH-STATUS.
- port-number is the number of the port on which the jBASE background processing should be run. If you do not specify a port number, the next available port number (starting with the highest number in use) will be chosen.
- options allow you to queue another job for that jBASE background task port, redirect stderr to stdout, or redirect the output from the port to a terminal or a spooler hold file. If used, the spooler hold file will contain all output that would otherwise be displayed on a terminal. If no options are specified, a spooler hold file is created and output is suppressed.

Options can be one or more of the following:

Option	Explanation
H	Hushes the PH-START message.
P	Prints the hold file on the printer assigned to your process after the jBASE background processing is finished. The hold file is not deleted.
N	No logging. A hold file is not created and all terminal output is lost.

T	Use terminal output. Assumes that a terminal device is associated with the jBASE background processing. No hold file is created.
Q	Queue this task to a currently active jBASE background process.
E	Redirect stderr to stdout. This ensures no loss of output to the hold file.
userid/account -name	is the name under which the jBASE background processing command stream is to be executed.
command- stream	is a list of commands and application inputs to be executed. Can be any valid commands except LOGTO. Terminate the command stream by pressing <Enter> on a blank line.

If a userid/account-name other than the current userid/account-name is enter the user will be Prompted for the password if it exists.

NOTES

Data for any jBC program INPUT statements should be entered as separate lines for each INPUT statement, as part of the command stream.

The "OFF" command is appended automatically to the command stack.

If a RETURN is the only response required, enter the left chevron character, (<) in the command stream.

It may be more efficient to create a jCL program that contains your list of commands, and then call the program from the command-stream. This will avoid having to enter a lengthy series of commands.

If you use a jCL program to drive the PH-START command, you can stack a null line in the command stream by using "H<<<<"

After you enter the final command-stream command, you should see the following message:

TASK taskid STARTED ON LINE port FOR ACCOUNT userid

If you do not see this message, the process was not started. NOTE: that the responses to each Prompt are not validated until you have completed all Prompts.

If you type an invalid response at any of the PH-START Prompts, a suitable message will be displayed. You must then repeat the entire procedure.

ERROR MESSAGES

If you specify a port number that has not been allocated, the following message will be displayed:

NO LINE AVAILABLE

If you specify a port number that is not available, the following message will be displayed:

NO LINE AVAILABLE

If you specify a port number to which another user is already logged on, the following message will be displayed:

LINE ALREADY LOGGED ON

If you specify an invalid user-id and password or account name and password, the following message is displayed after you finish typing the command stream:

INCORRECT ACCOUNT OR PASSWORD

EXAMPLE

This example starts the jBASE background processing named SALESREP.

PH-START

ENTER TASKID FOR PH TASK? SALESREP

ENTER PORT NUMBER FOR TIPH TASK? 23

ENTER OPTIONS? HT

ENTER ACCOUNT FOR PH JOB? SALES

ENTER COMMAND STREAM <CR TO END>

USE "<" FOR A NULL LINE

>SP-ASSIGN HS

>SORT SALES95 (P)

><RETURN>

TASK SALESREP STARTED ON LINE 23 FOR ACCOUNT SALES

PH-STATUS

The jBASE PH-STATUS command displays status and history information for each jBASE background process.

COMMAND SYNTAX

```
PH-STATUS {task-id n} {(Options)}
```

SYNTAX ELEMENTS

- task-id is the name of the jBASE background task process specified in the PH-START procedure. Use an asterisk (*) to indicate that you want all tasks for port number n.
- n is the port number of the background process for which to limit the display.
- Options; P Redirect output to the spooler..

NOTES

The information displayed in the PH-STATUS screen is contained in columns:

```
TASK-ID..LINE ACCOUNT. STARTER-ACC DATE..... TIME.. STATUS OP OUTFL#
```

TASK-ID is the name identifier give to the jBASE background process by PH-START

LINE is the port number running the jBASE background process.

ACCOUNT is the userid/account-name that the background process is using for execution.

STARTER-ACC is the name of the userid/account from which the background process was started.

DATE is the date the jBASE background process was started.

TIME is the time the jBASE background process was started.

STATUS is the current status of the background process.(see "Status Codes" below).

OP indicates the options that were assigned to the jBASE background process.

OUTFL# is the spooler job number where output has been redirected.

STATUS CODES

- A Process is still active.
- S Process terminated by UNIX system command.
- T Process terminated normally.
- X Process terminated incorrectly. Usually because the executing process requires input but there are no more statements left in the command stack.
- K Process terminated by the PH-KILL command.
- Q Process queued for port.

EXAMPLE

> PH-STATUS

TASK-ID..	LINE	ACCOUNT.	STARTER-ACC	DATE.....	TIME..	STATUS	OP	OUTFL#
SALESREP	101	SALES	SALES	06 JAN 1995	09:15	A		12
INVUP	103	INV	ACCOUNTS	06 JAN 1995	10:30	T		T
ACC3	130	ACCOUNTS	ACCOUNTS	06 JAN 1995	13:00	K		42
TEL.LIST	999	ADMIN	ADMIN	06 JAN 1995	15:04	A		6

PH-SUSPEND

The jBASE PH-SUSPEND command suspends jBASE background processing.

COMMAND SYNTAX

PH-SUSPEND n

SYNTAX ELEMENTS

- **n** is the number of the port number associated with the jBASE background processing to be suspended.

NOTES

The user must have root privileges if the jBASE background processing is running as a different user name.

See also PH-RESUME.

ERROR MESSAGES

If you do not specify a port number, you will see the following message

:

[316] WHICH LINE?

If you specify a port number that is not currently logged on, you will see:

PROCESS NOT LOGGED ON

If you do not have root privileges and attempt to suspend a jBASE background-processing running as a different user name, displayed is the following:

[82] YOUR SYSTEM PRIVILEGE LEVEL IS NOT SUFFICIENT FOR THIS STATEMENT.

EXAMPLE

PH-SUSPEND 10173

Resumes the jBASE background-processing running on port 10173

Z

Use the Z command to start a background processing.

COMMAND SYNTAX

```
Z {port} {command}
```

PROMPT

```
ENTER ACCOUNT FOR PH TASK? {user-id|account-name}  
ENTER COMMAND TO EXECUTE ?{command}  
ENTER DATA ASSOCIATED WITH COMMAND  
USE `<` FOR A NULL LINE  
>{input}
```

SYNTAX ELEMENTS

port is the port number, on which to run the background processing

.command is the command for the background processing to execute

.user-id|account-name is the account name or user-id to use when executing the background processing

input is the data to supply to jBC program INPUT statements. Each input should be placed on a separate line.

ZH

Use the jBASE ZH command to start jBASE background processing and direct output a hold file.

COMMAND SYNTAX

ZH {port} {command}

PROMPT

ENTER ACCOUNT FOR PH TASK? {userid/account-name}

ENTER COMMAND TO EXECUTE ?{command}

ENTER DATA ASSOCIATED WITH COMMAND

USE "<" FOR A NULL LINE

>{input}

SYNTAX ELEMENTS

- port is the port number, on which to run the jBASE background processing.
- command is the command for the jBASE background processing to execute.
userid/account-name is the name to use when executing the jBASE background processing.
- input is the data to supply to jBC program INPUT statements. Each input should be placed on a separate line.

Comment Sheet

Please give page number and description for any errors found:

Page	Error

Please use the box below to describe any material you think is missing; describe any material which is not easily understood; enter any suggestions for improvement; provide any specific examples of how you use your system which you think would be useful to readers of this manual. Continue on a separate sheet if necessary.

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