

[print](#) | [close](#)

## Sending Commands to Another Job - Revisited for i5/OS V5R4

[System iNetwork Systems Management Newsletter](#)

[Carsten Flensburg](#)

Carsten Flensburg

Wed, 03/05/2008 (All day)

This article presents an update to the Run Job Command (RUNJOB CMD) published [in the May 25, 2005, issue of the Systems Management Newsletter](#).

Reading the aforementioned article reveals that the original RUNJOB CMD command exploited a feature of the Trace Job command. This allowed you to specify an exit program to be run as part of the job trace, which combined with the Start Service Job (STRSRVJOB) command that enables you to run the trace and exit program in another job, ultimately lead to the often sought option of running a command in another job.

Due to restrictions imposed by IBM on the TRCJOB command on V5R4, disabling the exit program parameter, this setup no longer works from that release and onward. Instead, IBM has introduced the concept of Job Interrupt Programs and Job Interrupt Status, which will enable you to run programs in other jobs, provided that these jobs have been allowed to let that happen. Jason Spieth of IBM discussed this new facility in detail in [his great article in the April 2006 issue of System iNEWS](#).

To provide a brief recap of the requirements involved in making the job interrupt facility work, the two most noticeable are listed below:

You will need to change the system value QALWJOBITP (Allow jobs to be interrupted). By default this value is set to zero, meaning that no jobs are allowed to be interrupted at any point.

Changing the QALWJOBITP system value to '1' will allow you to interrupt a job, but only if this job explicitly had its interrupt status changed appropriately. This change can only occur from within the job to interrupt, so for batch jobs this will present a challenge. To change a job's interrupt status, you will need to call an API – or run the Change Job Interrupt Status (CHGJOBITPS) presented in an upcoming article in this newsletter.

Changing the QALWJOBITP system value to '2' by default causes all jobs started on your system to be interruptible without further actions required. Using the above mentioned API or command, you will be able to make a job uninterruptible, in case you would want that.

Since batch jobs are quite difficult to make interruptible once they have become active (as opposed to interactive jobs), I hope IBM in a future release will consider introducing a fourth option '3' that by default will set interactive jobs as uninterruptible and all other (batch type) jobs as interruptible. In a future article, I will show you how to exploit subsystem routing entries to achieve something similar, but having the system do it would definitely be my preferred choice.

As a further precaution and requirement, you must register any exit program that you want to call by means of the job interrupt facility, in the registration facility. Run the command WRKREGINF EXITPNT(QIBM\_QWC\_JOBITPPGM) to inspect the exit point available for this purpose.

Both of the above requirements is taken care of by the CBX975M CL program that is provided to build the RUNJOBCMD utility, but you'll need to read the source header and adapt a variable initialization in that program to ensure that the QALWJOBITP system value is set in accordance with your requirement.

Please also refer to the RUNJOBCMD command's online help text to get the full documentation of restrictions and conditions applying to the command.

The new RUNJOBCMD command is created from the following source code:

CBX975H	PNLGRP	Run Job Command - Help
CBX975X	CMD	Run Job Command
CBX9751	RPGLE	Run Job Command - CPP
CBX9752	RPGLE	Run Job Command - Exit Program
CBX976	RPGLE	Change Job Interrupt Status - CPP
CBX975M	CLP	Run Job Command - Build command

Compile and run the CBX975M CL program following the instructions in the source header to have the RUNJOBCMD command and all involved objects created for you. As implied above the RUNJOBCMD command requires V5R4 or later to run.

You can download a zip file containing all the source code from the URL  
<http://www2.systeminetwork.com/noderesources/code/clubtechcode/runjobcmd2.zip>

**Note:** As with all new programs, test these routines thoroughly before placing them into a production environment. No warranty is expressed or implied.

**Source URL:** <http://iprodeveloper.com/security/sending-commands-another-job-revisited-i5os-v5r4>