

Section 2: Coding the IF statement to check for a preferred code of 0 and an acceptable return code of 4

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Olivia

This article is brought to you as published in the BMC Web Scholar Newsletter, Issue 2, December 2001, Tips and Techniques section.

This Tips and Techniques section demonstrates how to code the IF statement to check for a preferred return code of 0 and an acceptable return code of 4, along with guidelines for you that should make the job easier.

Coding the IF Statement

To ensure that your batch production jobs complete successfully and to promote easier job restarts, code condition checks at every step.

The user can check the successful completion of a previous step or steps before executing by using two methods. Method 1 is coding the COND parameter on the EXEC PGM statement. This is the older coding technique that uses reverse logic (to be covered in Tips & Techniques in another newsletter issue). Method 2, where you code the IF statement before the EXEC PGM statement, is the newer technique and the topic of our discussion here.

Simple guidelines to use the IF statement include:

1. Accept a return code of 0; allow a return code of 4, and avoid allowing anything higher than a 4 into production. *
2. Code one IF statement per step to facilitate job restart. *
3. Code on every step. *

The impact of human intervention on the production batch cycle was dramatic and expensive. Typically, thousands of jobs must complete successfully in a given order and by a certain time frame before the on-line systems can come up. The goal is to avoid unnecessary human intervention whenever possible, always keeping accuracy high.

Upon further investigation, we discovered that if the user coded a FIN statement as the last statement of the FOCUS code, the return code was then the preferred return code of 0. The FOCUS return code 8 mystery was thus solved. By adding FIN, the user was allowed to exit FOCUS gracefully with the acceptable return code of 0.

Sharing Advantages

Many people prefer the IF statement over the COND parameter because it is easier to understand. This is because the step executes when the IF result is true, while with the COND parameter the step executes when the COND result is false. The real key to produce more efficient production JCL code and to help the production batch cycle to run more smoothly is to consistently apply the guidelines for IF and COND.

Taking Action

Look at your jobs with completion codes greater than 4. Then determine what action, if any, you can take to allow the job to complete with a return code of 0. Document and share your findings with your coworkers so that the

shop's standards, procedures, and processes are updated. This is how you can promote more efficient JCL code. The fewer batch jobs that require human intervention, the better the job and the lower the cost. Some companies lose hundreds of thousands of dollars a minute when their online systems are not available. Follow these tips and techniques to prevent such catastrophes at your organization.

About the Authors

Olivia R. Carmandi is President of MVS Training, Inc., and Editor in chief of the MVS Mainframe Series. She is founder of the company and originator of the MVS Training process, which ensures quality instructor-led training.



Olivia is a recognized expert in the JCL language. She has authored and published articles whose stories dramatize the how and why of creating efficient JCL and JCL standards. Currently she is leading the company and performs training whenever time and opportunity present.

John Hanley is a seasoned mainframe instructor with MVS Training, Inc., the JCL experts. His experience as an Operator, Application Programmer, and Systems Programmer equip John with a "real world" perspective that is beneficial in the classroom. John



Reprinted from BMC Software, Inc., Web Scholar Newsletter Tips & Techniques, Issue 2, December 200 1



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