Subject: ON EXIT and ON RETURN sections of constructs and procedures
From: Van Snyder
Reference: 03-258r1, section 2.1.8

Number

TBD

Title

ON EXIT and ON RETURN sections of constructs and procedures.

Submitted By

J3

Status

For consideration.

Basic Functionality

Provide for a section of a construct or procedure that is executed when an EXIT or RETURN statement is executed, respectively, but not when a construct is terminated "normally" or a procedure is terminated by executing an END statement.

Rationale

Sometimes there are things that need to be done if a construct or procedure is terminated "abnormally," i.e., by execution of an EXIT or RETURN statement, but not if the construct or procedure is terminated "normally." If such things are needed, and a construct has more than one EXIT statement, or a procedure has more than one RETURN statement, one needs to use flags and tests, GOTO statements, or to put the extra stuff into a procedure and call it at each abnormal termination.

Estimated Impact

Minor.

Detailed Specification

Provide a section at the end of a construct, introduced by a statement such as ON EXIT, that is executed when an EXIT statement that belongs to the construct but not within the section is executed, but not executed if the construct is terminated "normally," that is, by execution reaching the end of the construct without executing an EXIT statement. If EXIT is extended to apply to any construct, there will be a question whether such a section applies to the construct as a whole, or to the subconstruct in which it appears. This can be decided later.

Similarly, provide a section at the end of a subprogram, introduced by a statement such as ON RETURN, that is executed when a RETURN statement not within the section is executed, but not when the END statement is executed.

In both cases, control doesn't "fall into" the section from the previous executable statement.

History