

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

1 **Number**

2 TBD

3 **Title**

4 ON EXIT and ON RETURN sections of constructs and procedures.

5 **Submitted By**

6 J3

7 **Status**

8 For consideration.

9 **Basic Functionality**

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

13 **Rationale**

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

19 **Estimated Impact**

20 Minor.

21 **Detailed Specification**

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

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

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

32 **History**