Subject: Another intrinsic, or another constant for ISO\_FORTRAN\_ENV From: Van Snyder

## 1 Introduction

Every Fortran programmer eventually gets around to writing a "tell me an usused unit number" procedure. The usual way is to write a loop with INQUIRE statements in it. One knows that the smallest possible unit number is zero, but one doesn't know the largest possible unit number.

It would be useful to have an intrinsic "tell me an usused unit number" procedure, or at least to have a named constant in ISO\_FORTRAN\_ENV that provides the maximum possible unit number.

## 2 Edits – Preferred solution

Edits refer to 01-107. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + (-) indicates that immediately following text is to be inserted after (before) the indicated line. Remarks are noted in the margin, or appear between [ and ] in the text.

 $13.17.43\frac{1}{2}$  GET\_UNIT (UNIT)

305:31+

**Description.** Provide the number of an input/output unit that exists and is not connected to a file.

Class. Subroutine.

**Argument.** UNIT shall be a scalar of type integer. It is an INTENT(OUT) argument. It is assigned a nonnegative value that identifies a unit that exists but is not connected to a file.

## 3 Alternate solution

[Editor: Add in the same paragraph: "The maximum unit number is given by the named 169:9 constant MAX\_IO\_UNIT in the intrinsic module ISO\_FORTRAN\_ENV. A processor is not required to cause every unit between zero and MAX\_IO\_UNIT to exist."]

## 13.18.1.3 MAX\_IO\_UNIT

The value of the default integer scalar constant MAX\_IO\_UNIT specifies the maximum unit number that might exist. A processor is not required to cause every unit between zero and MAX\_IO\_UNIT to exist.

339:40+