

GNU Fortran Internals

For GCC version 16.0.0 (pre-release)

(GCC)

The gfortran team

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1 Introduction

This manual documents the internals of **gfortran**, the GNU Fortran compiler.

Warning: This document, and the compiler it describes, are still under development. While efforts are made to keep it up-to-date, it might not accurately reflect the status of the most recent GNU Fortran compiler.

At present, this manual is very much a work in progress, containing miscellaneous notes about the internals of the compiler. It is hoped that at some point in the future it will become a reasonably complete guide; in the interim, GNU Fortran developers are strongly encouraged to contribute to it as a way of keeping notes while working on the compiler.

3.2.7 Constant Substring References

`EXPR_SUBSTRING` is a special type of expression that encodes a substring reference of a constant string, as in the following code snippet:

```
x = "abcde"(1:2)
```

In this case, `value.character` contains the full string's data as if it was a string constant, but the `ref` member is also set and points to a substring reference as described in the subsection above.

