valofexternal() — Obtain value of external global

Description

valofexternal(name) returns the contents of the external global matrix, vector, or scalar whose name is specified by name; it returns J(0,0,.)) if the external global is not found.

Also see Linking to external globals in [M-2] Declarations.

Syntax

transmorphic matrix  valofexternal(string scalar name)

Remarks and examples

Also see [M-5] findexternal(). Rather than returning a pointer to the external global, as does findexternal(), valofexternal() returns the contents of the external global. This is useful when the external global contains a scalar:

\[
\text{tol} = \text{valofexternal("tolerance")}
\]
\[
\text{if (tol==J(0,0,.)) tol = 1e-6}
\]

Using findexternal(), one alternative would be

\[
\text{if ((p = findexternal("tolerance"))==NULL) tol = 1e-6}
\]
\[
\text{else tol = *p}
\]

For efficiency reasons, use of valofexternal() should be avoided with nonscalar objects; see [M-5] findexternal().

Conformability

valofexternal(name):

\[
\text{name: } \quad 1 \times 1
\]
\[
\text{result: } \quad r \times c \quad \text{or } \quad 0 \times 0 \text{ if not found}
\]

Diagnostics

valofexternal() aborts with error if name contains an invalid name.

valofexternal(name) returns J(0,0,.)) if name does not exist.
Also see

[M-5] `findexternal()` — Find, create, and remove external globals

[M-4] Programming — Programming functions