

# NAG Library Function Document

## nag\_dae\_ivp\_dassl\_cont (d02mcc)

### 1 Purpose

nag\_dae\_ivp\_dassl\_cont (d02mcc) is a setup function which must be called prior to a continuation call to nag\_dae\_ivp\_dassl\_gen (d02nec).

### 2 Specification

```
#include <nag.h>
#include <nagd02.h>
void nag_dae_ivp_dassl_cont (Integer icom[])
```

### 3 Description

nag\_dae\_ivp\_dassl\_cont (d02mcc) is provided to permit you to signal that the next call to nag\_dae\_ivp\_dassl\_gen (d02nec) is a continuation call. In particular, if nag\_dae\_ivp\_dassl\_gen (d02nec) exits because the maximum number of integration steps has been exceeded, then a call to nag\_dae\_ivp\_dassl\_cont (d02mcc) resets the step counter allowing the integration to proceed.

### 4 References

See Section 3 in nag\_dae\_ivp\_dassl\_gen (d02nec).

### 5 Arguments

1: **icom**[15] – Integer *Communication Array*

This must be the same array **icom** as passed to the integration function nag\_dae\_ivp\_dassl\_gen (d02nec); nag\_dae\_ivp\_dassl\_cont (d02mcc) does not require access to all of that array, hence the smaller dimension given here.

*On entry:* contains details of the current state of integration as returned by nag\_dae\_ivp\_dassl\_gen (d02nec).

*On exit:* one or more of the values is changed to signal to the integrator that a continuation call is being made. This will reset the step counter to zero.

### 6 Error Indicators and Warnings

None.

### 7 Accuracy

Not applicable.

### 8 Parallelism and Performance

Not applicable.

### 9 Further Comments

None.

## **10 Example**

See Section 10 in nag\_dae\_ivp\_dassl\_gen (d02nec).

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