NAG Library Function Document

nag_ode_ivp_rk_free (d02ppc)

1   Purpose

nag_ode_ivp_rk_free (d02ppc) is the function for freeing memory from the structure of type Nag_ODE_RK. This memory will have been allocated during a call to the function nag_ode_ivp_rk_setup (d02pvc) and nag_ode_ivp_rk_interp (d02pxc). The structure is used to communicate information between the functions nag_ode_ivp_rk_range (d02pcc), nag_ode_ivp_rk_onestep (d02pdc), nag_ode_ivp_rk_interp (d02pxc), nag_ode_ivp_rk_reset_tend (d02pwc), and nag_ode_ivp_rk_errass (d02pzc).

2   Specification

```
#include <nag.h>
#include <nagd02.h>
void nag_ode_ivp_rk_free (Nag_ODE_RK *opt)
```

3   Description

A structure of type Nag_ODE_RK is used to communicate information between the Runge–Kutta functions. On completion of the integration you can free this memory by a call to nag_ode_ivp_rk_free (d02ppc).

4   References

None.

5   Arguments

1:     **opt** – Nag_ODE_RK *   *Input/Output*

On entry: the structure used to communicate between the Runge–Kutta functions.

On exit: all memory allocated to this structure will have been freed and the pointers set to **NULL**.

6   Error Indicators and Warnings

None.

7   Accuracy

Not applicable.

8   Parallelism and Performance

Not applicable.

9   Further Comments

None.

10   Example

See the Runge–Kutta example programs.