# 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 the user can free this memory by a call to nag\_ode\_ivp\_rk\_free.

#### 4. Parameters

opt

Input: the structure used to communicate between the Runge–Kutta functions. Output: all memory allocated to this structure will have been freed and the pointers set to **NULL**.

## 5. Error Indications and Warnings

None.

#### 6. Further Comments

None.

## 7. See Also

nag\_ode\_ivp\_rk\_setup (d02pvc)

## 8. Example

See the Runge–Kutta example programs.

[NP3275/5/pdf] 3.d02ppc.1