

UF_DPUD_ask_dpud [\(view source\)](#)

Defined in: `uf_dpud.h`

Overview

Return the `UF_DPUD_id_t` identifier which corresponds to the `UF_CAM_exit_id_t` that was passed to the User Exit from NX.

Environment

Internal and External

```
int UF_DPUD_ask_dpud
(
    UF_CAM_exit_id_t exit_id,
    UF_DPUD_id_t * dpud_id
)
```

<code>UF_CAM_exit_id_t</code>	<code>exit_id</code>	Input	Identifier passed to User Exit from NX
<code>UF_DPUD_id_t *</code>	<code>dpud_id</code>	Output	Identifier of corresponding DPUD

UF_DPUD_ask_drpos0 [\(view source\)](#)

Defined in: `uf_dpud.h`

Overview

Returns the identifier of the requested drive position of this request.
This drive position is available only when the purpose of the request is `UF_DPUD_GET_NEXT` or `UF_DPUD_GET_INTERMEDIATE`.

Environment

Internal and External

```
int UF_DPUD_ask_drpos0
(
    UF_DPUD_id_t dpud,
    UF_DRPOS_id_t * drpos
)
```

<code>UF_DPUD_id_t</code>	<code>dpud</code>	Input	Identifier for a DPUD object
<code>UF_DRPOS_id_t *</code>	<code>drpos</code>	Output	The drive position of this request

UF_DPUD_ask_drpos1 [\(view source\)](#)

Defined in: `uf_dpud.h`

Overview

Return the identifier of the first input drive position of this request.
This drive position is available only when the purpose of the request is
UF_DPUD_GET_INTERMEDIATE.

Environment

Internal and External

```
int UF_DPUD_ask_drpos1
(
    UF_DPUD_id_t dpud,
    UF_DRPOS_id_t * drpos
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_DRPOS_id_t *	drpos	Output	First input drive position of this request

UF_DPUD_ask_drpos2 [\(view source\)](#)

Defined in: uf_dpud.h

Overview

Return the identifier of the second input drive position of this request.
This drive position is available only when the purpose of the request is
UF_DPUD_GET_INTERMEDIATE.

Environment

Internal and External

```
int UF_DPUD_ask_drpos2
(
    UF_DPUD_id_t dpud,
    UF_DRPOS_id_t * drpos
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_DRPOS_id_t *	drpos	Output	2nd input drive position of this request

UF_DPUD_ask_oper [\(view source\)](#)

Defined in: uf_dpud.h

Overview

Return the identifier for the operation requesting the service.

Environment

Internal and External

```
int UF_DPUD_ask_oper
(
    UF_DPUD_id_t dpud,
    UF_OPER_id_t * oper
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_OPER_id_t *	oper	Output	Identifier for an OPER object

UF_DPUD_ask_proj_option [\(view source\)](#)

Defined in: `uf_dpud.h`

Overview

Determine the projection vector option chosen by the user in the NX dialog.

Environment

Internal and External

```
int UF_DPUD_ask_proj_option
(
    UF_DPUD_id_t dpud,
    UF_DPUD_proj_option_t * proj_option
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_DPUD_proj_option_t *	proj_option	Output	the projection vector option chosen

UF_DPUD_ask_proj_vec [\(view source\)](#)

Defined in: `uf_dpud.h`

Overview

Determine the projection vector chosen by the user in the NX dialog, if the projection vector option is `UF_DPUD_proj_constant`. For other options the result of this call is undetermined.

Since the drive position projection vector in this case is automatically set by the NX processor, there is no need to do it in the Open C API program. This function is included only for the information it provides.

Environment

Internal and External

```
int UF_DPUD_ask_proj_vec
(
```

```
UF_DPUD_id_t dpud,  
double proj_vec [ 3 ]  
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
double	proj_vec [3]	Output	The constant projection vector

UF_DPUD_ask_purpose (view source)

Defined in: uf_dpud.h

Overview

Return the purpose of this request.

Environment

Internal and External

```
int UF_DPUD_ask_purpose  
(  
    UF_DPUD_id_t dpud,  
    UF_DPUD_purpose_t * purpose  
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_DPUD_purpose_t *	purpose	Output	The purpose of this request

UF_DPUD_ask_ratio (view source)

Defined in: uf_dpud.h

Overview

Returns the ratio at which an intermediate drive position must be generated. The value of this ratio is between 0.0 and 1.0. If ratio= 0.0, the Open C API program must return a copy of drpos2. Note: while the parameterization of the drive path (used to associate the ratio with a drive position) is not expected to equal the actual curve length, it must be strictly monotonous and a continuous function of the curve length.

This function is only available when the purpose of the request is UF_DPUD_GET_INTERMEDIATE.

Environment

Internal and External

```
int UF_DPUD_ask_ratio  
(
```

```
UF_DPUD_id_t dpud,  
double* ratio  
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
double*	ratio	Output	The ratio for the intermediate point

UF_DPUD_ask_taxis_option (view source)

Defined in: uf_dpud.h

Overview

Determine the tool axis option chosen by the user in the NX dialog.

Environment

Internal and External

```
int UF_DPUD_ask_taxis_option  
(  
    UF_DPUD_id_t dpud,  
    UF_DPUD_taxis_option_t * taxis_option  
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
UF_DPUD_taxis_option_t *	taxis_option	Output	The tool axis option chosen

UF_DPUD_ask_tool_axis (view source)

Defined in: uf_dpud.h

Overview

Determine the tool axis chosen by the user in the NX dialog, if the tool axis option is UF_DPUD_taxis_constant. For other options the result of this call is undetermined.

Since the drive position tool axis in this case is automatically set by the NX processor, there is no need to do it in the Open C API program. This function is included only for the information it provides.

Environment

Internal and External

```
int UF_DPUD_ask_tool_axis  
(  
    UF_DPUD_id_t dpud,  
    double tool_axis [ 3 ]  
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
double	tool_axis [3]	Output	The constant tool axis

UF_DPUD_set_user_data_size (view source)

Defined in: uf_dpud.h

Overview

Set the size of the user data portion to be used for all drive postions.
This function is available only when the purpose of the request is
UF_DPUD_GET_USER_DATA_SIZE.

Environment

Internal and External

```
int UF_DPUD_set_user_data_size
(
    UF_DPUD_id_t dpud,
    int size
)
```

UF_DPUD_id_t	dpud	Input	Identifier for a DPUD object
int	size	Input	Size of User data drive positions (bytes)