

## UF\_CGM\_colors\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_colors_t`

### Overview

Enumerated data type `UF_CGM_colors_t` defines symbols to specify the colors applied to geometry recorded in exported CGM files. The colors field of the `UF_CGM_export_options_t` structure is set to one of these symbols.

### Data Members

#### **UF\_CGM\_AS\_DISPLAYED\_COLORS**

Apply the colors displayed on screen.

#### **UF\_CGM\_PART\_COLORS**

Apply the colors of the part color table.

#### **UF\_CGM\_CUSTOM\_PALETTE\_COLORS**

Apply the session custom colors.

#### **UF\_CGM\_BLACK\_ON\_WHITE**

Apply black to all geometry.

#### **UF\_CGM\_LEGACY\_COLORS**

Apply 15 fixed colors supported by NX releases before NX 3.

#### **UF\_CGM\_COLOR\_BY\_WIDTH**

Apply the first twelve entries (representing thin, normal & thick and 9 new widths) of the session custom colors. In other words the color is determined by the density index. All thin objects will plot using the first color entry, all normal objects will plot with the second color entry, and all thick objects will plot in the third color entry, etc.

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## UF\_CGM\_export\_reason\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_export_reason_t`
- `UF_CGM_export_reason_p_t`

### Overview

#### CGM EXPORT REASONS

Applications can implement callback functions to monitor CGM export operations in order to control whether/how application-specific geometry is recorded in the CGM file.

To support this monitoring, a "reason" is specified for each CGM

export operation, so an application can evaluate the reason in deciding whether/how to respond to the operation. For example, an application might generate application geometry differently during plotting than during CGM export operations for non-plotting reasons (File->Export->CGM, File->Print, export operations invoked programmatically by applications, etc.).

Enumerated type `UF_CGM_export_reason_t` enumerates symbols/codes that represent the possible reasons for a CGM export operation.

Code `UF_CGM_plot_reason` is specified for CGM export operations invoked by plotting functionality, including File->Plot and corresponding NX Open and GRIP functionality.

Code `UF_CGM_export_reason` is specified for CGM export operations invoked by File->Export->CGM and can be used by `UF_CGM_export_cgm`.

Code `UF_CGM_print_reason` is specified for CGM export operations invoked by File->Print and can be used by `UF_CGM_export_cgm`.

Code `UF_CGM_copy_display_reason` is specified for CGM export operations invoked by Edit->Copy Display can be used by `UF_CGM_export_cgm`.

Code `UF_CGM_pdf_reason` can be used by `UF_CGM_export_cgm` when the CGM is to be used to create a PDF.

Code `UF_CGM_pdf_hidden_text_reason` is specified for File->Export PDF and can be used by `UF_CGM_export_cgm`. Note that using this reason will generate a non-standard CGM file if you also request Text as Text. The CGM file will only be properly interpreted by the `cgm2pdf` executable. The NX text will be both stroked and added as hidden text for the PDF. The visible stroked text will render the text as seen in NX, and the hidden text will give searchable text in the PDF file.

Code `UF_CGM_misc_appl_reason` is specified for CGM export operations invoked programmatically by an application unless an application-specific reason code is defined.

## Data Members

### **`UF_CGM_plot_reason = 0`**

Plotting either interactive, NXOpen or Grip

### **`UF_CGM_export_reason`**

CGM Export either interactive or NXOpen

### **`UF_CGM_print_reason`**

File->Print either interactive or NX Open

### **`UF_CGM_copy_display_reason`**

Edit->Copy Display

### **`UF_CGM_pdf_reason`**

CGM is for a PDF

### **`UF_CGM_misc_appl_reason`**

All other CGM Export operations

### **`UF_CGM_pdf_hidden_text_reason`**

File->Export PDF

### **`UF_CGM_vised_hidden_text_reason`**

Visual Editor

## UF\_CGM\_max\_reasons

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## UF\_CGM\_export\_source\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_export_source_t`
- `UF_CGM_export_source_p_t`

### Overview

The values of enumerated type `UF_CGM_export_source_t` identify the content or source for a CGM export operation, so applications can determine whether the source is relevant. The following values can be specified.

`UF_CGM_drawing_sheet`: specified when exporting a drawing sheet by tag (e.g. non-NULL drawing tag).

`UF_CGM_current_display_is_drawing_sheet`: specified when exporting the current display/layout, but the current layout represents a drawing sheet. Also specified when exporting an expanded member view of a drawing sheet.

`UF_CGM_current_display_is_modeling_layout`: specified when exporting the current display/layout, but the current layout represents a modeling layout.

### Data Members

`UF_CGM_drawing_sheet`

`UF_CGM_current_display_is_drawing_sheet`

`UF_CGM_current_display_is_modeling_layout`

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## UF\_CGM\_fonts\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_fonts_t`

### Overview

Enumerated data type `UF_CGM_fonts_t` defines symbols to specify how text fonts are recorded in the CGM file. The fonts field of the `UF_CGM_export_options_t` structure is set to one of these symbols.

## Data Members

### UF\_CGM\_1\_CALS\_FONT

Map all NX fonts to CALS font Hershey Simplex Roman.

### UF\_CGM\_4\_CALS\_FONTS

Map NX fonts 1 through 4 to CALS fonts as follows:

- 1: Hershey Simplex Roman
- 2: Hershey Cartographic Roman
- 3: Hershey Simplex Script
- 4: Hershey Complex Italic

Map all other NX fonts to CALS font Hershey Simplex Roman.

### UF\_CGM\_NX\_FONTS

Record the names of NX fonts in the CGM.

### UF\_CGM\_DEFAULT\_FILE\_FONTS

Record fonts according to text font mapping keywords specified in the CGM Defaults File (cgmdef.txt).

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## UF\_CGM\_size\_mode\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_size_mode_t`

## Overview

Enumerated data type `UF_CGM_size_mode_t` defines symbols to indicate how the size of CGM geometry is specified. The mode field of the `UF_CGM_size_t` structure is set to one of these symbols.

## Data Members

### UF\_CGM\_SIZE\_BY\_SCALE

Specify size as a scale factor.

### UF\_CGM\_SIZE\_BY\_DIMENSIONS

Specify size as dimensions.

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## UF\_CGM\_text\_mode\_e [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_text_mode_t`

## Overview

Enumerated data type `UF_CGM_text_mode_t` defines symbols to specify how text is represented in the CGM file. The `text_mode` field of the `UF_CGM_export_options_t` structure is set to one of these symbols.

## Data Members

### `UF_CGM_TEXT_AS_POLYLINES`

Record text as CGM polyline elements.

### `UF_CGM_TEXT_AS_CHARACTERS`

Record text as as CGM text elements.

### `UF_CGM_TEXT_BEST_FIT`

Record standard fonts as CGM text elements,  
record NX fonts as CGM polyline elements

### `UF_CGM_TEXT_RESERVED1`

RESERVED - internal use only

### `UF_CGM_TEXT_RESERVED2`

RESERVED - internal use only

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## `UF_CGM_units_e` ([view source](#))

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_units_t`

## Overview

Enumerated data type `UF_CGM_units_t` defines symbols to indicate the units of dimensions that specify the size of CGM geometry. The `units` field of the `UF_CGM_dimensions_t` structure is set to one of these symbols.

## Data Members

### `UF_CGM_MILLIMETERS`

### `UF_CGM_INCHES`

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## `UF_CGM_vdc_mode_e` ([view source](#))

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_vdc_mode_t`

## Overview

Enumerated data type `UF_CGM_vdc_mode_t` defines symbols to specify how coordinates are represented in the CGM file. The `vdc_mode` field of the `UF_CGM_export_options_t` structure is set to one of these symbols.

## Data Members

### `UF_CGM_INTEGER_VDC`

Use 16-bit integer coordinates.

### `UF_CGM_REAL_VDC`

Use 32-bit real coordinates.

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## `UF_CGM_width_single_e` [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_width_single_t`

## Overview

ENUMERATED: `UF_CGM_width_single_t`

DESCRIPTION: This enumerated type specifies the source of a single width is, one of the standard widths, one of custom widths, or a user-defined width.

## Data Members

### `UF_CGM_width_std`

single width, standard

### `UF_CGM_width_custom`

single width, custom

### `UF_CGM_width_user`

single width, user-defined

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## `UF_CGM_width_use_e` [\(view source\)](#)

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_width_use_t`

## Overview

ENUMERATED: `UF_CGM_width_use_t`

DESCRIPTION: This enumerated type specifies the primary selection of width assignment, a single width, the custom widths, or by color.

## Data Members

### UF\_CGM\_width\_single

single width

### UF\_CGM\_width\_by\_width

custom widths by width index

### UF\_CGM\_width\_by\_color

custom widths by color index

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## UF\_CGM\_widths\_e ([view source](#))

Defined in: `uf_cgm_types.h`

Also known as:

- `UF_CGM_widths_t`

## Overview

Enumerated data type `UF_CGM_widths_t` defines symbols to specify the line widths applied to geometry recorded in exported CGM files. The widths field of the `UF_CGM_export_options_t` structure is set to one of these symbols.

## Data Members

### UF\_CGM\_STANDARD\_WIDTHS

Apply the fixed line widths.

### UF\_CGM\_SINGLE\_WIDTH

Apply the single line width defined in the session custom widths.

### UF\_CGM\_CUSTOM\_3\_WIDTHS

Apply custom widths per-width index, as defined in the session custom widths.

### UF\_CGM\_CUSTOM\_PALETTE\_WIDTHS

Apply custom widths per-color index, as defined in the session custom widths.

### UF\_CGM\_DEFAULT\_FILE\_WIDTHS

Apply line width settings specified in the CGM Defaults File (`cgmdef.txt`).

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