

# GDI + 1.0

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FontFamily Class

### General.

Our GDI+ FontFamily class is housed within the "gdiPlus\_FontFamilyClass.pbi" source file.

The class contains elements of the following c/c++ classes :

### **FontFamily**

This is not a *helper-class* (containing just simple macros etc.) but a full OOP class.

### A note on 'font design units'.

Some FontFamily class methods return values in 'font design units', units which have meaning only for the font design itself and cannot be used when referring to any kind of physical quantity.

You cannot even compare these values between two different font families because they may well refer to different resolutions etc.

The key if wishing to convert to device units in some situation is in knowing that the font design units remain proportional to any physical font.

For example, a physical font's height property will be directly proportional to it's associated font family's line-spacing property (reported in design units). We can use this implied ratio to subsequently convert other quantities (such as cell ascent) to device units when appropriate.

Contrast this with GDI where we are easily able to secure information on font metrics etc. when a logical font has been selected into a suitable DC.

Note also that GDI+ supports OpenType fonts only.

### Interface / base-class.

Our font family class exposes a single **interface** with the name `gdiPlus_FontFamily`.

This interface extends our `gdiPlus_BaseClass` interface which exposes a single method :

### **`GetGdiPlusHandle.i()`**

which can be used to retrieve the FontFamily handle used natively by GDI+.

### 'gdiPlus\_FontFamily' constructors.

The following all return (if successful) instances of our `gdiPlus_FontFamily` class whose methods are listed in the following section. These more or less correspond to constructors from the appropriate c/c++ wrapper class and so the reader is advised to look on the appropriate MSDN pages for detailed descriptions.

### **`gdiPlus_CreateFontFamily(name$, *fontCollection)`**

### **`gdiPlus_GenericMonospace()`**

## ***gdiPlus\_GenericSansSerif()***

## ***gdiPlus\_GenericSerif()***

### ***'gdiPlus\_FontFamily' methods.***

Unless specified otherwise, the following all return a gdiPlus status code (beginning with *#Ok*).

All of these methods correspond to methods from the appropriate c/c++ wrapper classes and so the reader is advised to look on the appropriate MSDN pages for detailed descriptions.

## ***Destroy()***

## ***Clone.i()***

Returns, if successful, a new *gdiPlus\_FontFamily* object containing an exact copy of the original object.

## ***GetCellAscent.i(fontStyle=#FontStyleRegular)***

Returns the cell ascent, in **font design units**, when the font family is given the specified style.

fontStyle = FontStyle constant, e.g. *#FontStyleRegular*.

## ***GetCellDescent.i(fontStyle=#FontStyleRegular)***

Returns the cell descent, in **font design units**, when the font family is given the specified style.

fontStyle = FontStyle constant, e.g. *#FontStyleRegular*.

## ***GetEmHeight.i(fontStyle=#FontStyleRegular)***

Returns the EM height of the font family, in **font design units**, when given the specified style.

fontStyle = FontStyle constant, e.g. *#FontStyleRegular*.

## ***GetFamilyName.s(langID=#LANG\_NEUTRAL)***

## ***GetLineSpacing.i(fontStyle=#FontStyleRegular)***

Returns the line spacing of the font family, in **font design units**, when given the specified style. The line spacing is the vertical distance between the base lines of two consecutive lines of text.

fontStyle = FontStyle constant, e.g. *#FontStyleRegular*.

## ***IsStyleAvailable.i(fontStyle=#FontStyleRegular)***

fontStyle = FontStyle constant, e.g. *#FontStyleRegular*.

Returns *#True* if the underlying font family supports the style specified.