Notebook (*Text Properties*)

Notebook text property parameters

This section of Notebook relates to setting the text properties of the current selection in the notebook.

font="*fontName*" *"fontName"* is the name of the font. Use `"default"` to specify the paragraph's ruler font.

If you specify an unavailable font, it does nothing. This is so that, when you share procedures with a colleague, using a font that the colleague does not have will not cause your procedures to fail. The downside of this behavior is that if you misspell a font name you will get no error message.

fSize=*fontSize* Text size from 3 to 32000 points.

Use -1 to specify the paragraph's ruler size.

fStyle=*fontStyle* A binary coded integer with each bit controlling one aspect of the text style as follows:

Bit 0:	Bold
Bit 1:	Italic
Bit 2:	Underline
Bit 4:	Strikethrough

Use -1 to specify the paragraph's ruler style. To set bit 0 and bit 1 (bold italic), use $2^0+2^1 = 3$ for *fontStyle*. See **Setting Bit Parameters** on page IV-12 for details about bit settings.

syntaxColorSelection=*n*

Use *n*=1 to syntax-color the selected text in the notebook. This is the equivalent of selecting Notebook→Syntax Color Selection. Other values of *n* are reserved for future use.

To remove syntax coloring, use the textRGB keyword to set the selected text to a specified color.

The syntaxColorSelection keyword was added in Igor Pro 9.00.

textRGB=(*r*,*g*,*b*[,*a*]) Specifies text color. *r*, *g*, *b*, and *a* specify the color and optional opacity as **RGBA Values**. The default is opaque black.

vOffset=*v* Sets the vertical offset in points (positive offset is down, negative is up). Use this to create subscripts and superscripts. vOffset is allowed for formatted text files only, not for plain text files.

Notebook (*Writing Graphics*)

Writing notebook graphics parameters

This section of Notebook relates to inserting graphics at the current selection in the notebook.

These graphics keywords are allowed for formatted text files only, not for plain text files.

convertToPNG=*x* Converts all pictures in the current selection to cross-platform PNG format. If the picture is already PNG, it does nothing.

x is the resolution expansion factor, an integer from 1 to 16 times screen resolution. *x* is clipped to legal limits.

frame=*f*

Sets the frame used for the picture and insertPicture keywords.

f=0: No frame (default).

f=1: Single frame.

f=2: Double frame.

f=3: Triple frame.

f=4: Shadow frame.

insertPicture={*pictureName*, *pathName*, *filePath*, *options*}

Inserts a picture from a file specified by *pathName* and *filePath*. The supported graphics file formats are listed under **Inserting Pictures** on page III-13.

pictureName is the special character name (see **Special Character Names** on page III-14) to use for the inserted notebook picture or $"" to automatically assign a name.

pathName is the name of an Igor symbolic path created via **NewPath** or $"" to use no path.

filePath is a full path to the file to be loaded or a partial path or simple file name relative to the specified symbolic path.

If *pathName* and *filePath* do not fully specify a file, an Open File dialog is displayed from which the user can choose the file to be inserted.

options is a bitwise parameter interpreted as follows:

Bit 0: If set, an Open File dialog is displayed even if the file is fully specified by *pathName* and *filePath*.

Bit 1: Determines what to do in the event of a name conflict. If set, the existing special character with the conflicting name is overwritten. If cleared, a unique name is created and used as the special character name for the inserted picture.

All other bits are reserved and must be set to zero.

See **Setting Bit Parameters** on page IV-12 for details about bit settings.

The variable V_flag is set to 1 if the picture was inserted or to 0 otherwise, for example, if the user canceled from the Open File dialog.

The string variable S_name is set to the special character name of the picture that was inserted or to "" if no picture was inserted.

The string variable S_fileName is set to the full path of the file that was inserted or to "" if no picture was inserted.

picture={*objectSpec*, *mode*, *flags* [, *expansion*]}

Inserts a picture based on the specified object.

objectSpec is usually just an object name, which is the name of a graph, table, page layout, Gizmo plot, or picture from Igor's picture gallery (Misc→Pictures). See further discussion below.

mode controls what happens when you insert a picture of a graph, table or page layout window. It does not affect insertions of pictures from the picture gallery.

mode specifies the format of the picture as follows:

mode	Macintosh	Windows
-9	SVG	SVG
-8	Igor PDF	Igor PDF
-7	TIFF	TIFF
-6	JPEG	JPEG
-5	PNG	PNG
-4	4X PNG	Device-independent bitmap
-2	8X PDF	8X Enhanced metafile
-1	8X PDF	8X Enhanced metafile
0	8X PDF	8X Enhanced metafile
1	1X PDF	8X Enhanced metafile
2	2X PDF	8X Enhanced metafile
4	4X PDF	8X Enhanced metafile
8	8X PDF	8X Enhanced metafile

Modes -6, -7, -8, and -9 require Igor Pro 7.00 or later.

In Igor 7 and 8, mode=-8 produced PDF on Macintosh and EMF on Windows. As of Igor Pro 9.00, it produces PDF on both Macintosh and Windows. If you were using -8 for EMF on Windows, change your code to use -2.

Mode -2 (PDF on Macintosh, EMF on Windows) is recommended for platform-specific graphics. Mode -5 (PNG) is recommended for platform-independent bitmap graphics. Mode -8 (PDF) is recommended for platform-independent vector graphics but see the note above about -8 on Windows.

If *objectSpec* names a Gizmo window, only modes -5, -6, or -7 are allowed.

Modes -2 through 8 are supported for backward compatibility. In previous versions of Igor, they selected other formats that are now obsolete.

See Chapter III-5, **Exporting Graphics (Macintosh)**, Chapter III-6, **Exporting Graphics (Windows)**, and **Metafile Formats** on page III-102 for further discussion of these formats.

flags is a bitwise parameter interpreted as follows:

Bit 0: 0 for black and white, 1 for color.

All other bits are reserved and must be set to zero.

For color, set *flags* = 2^0 = 1.

See **Setting Bit Parameters** on page IV-12 for details about bit settings.

expansion is optional and requires Igor Pro 7.00 or later. It affects only modes -5, -6, and -7.

expansion sets the expansion factor over screen resolution. *expansion* must be an integer between 1 and 8 and is usually 1, 2, 4 or 8. The default value is 1.

scaling={*h*, *v*} Sets the horizontal(*h*) and vertical (*v*) scaling for the selected picture or the picture and insertPicture keywords. *h* and *v* are in percent.

When using the picture keyword, you may include a coordinate specification after the object name in *objectSpec*. For example:

```
Notebook Notebook1 picture={Layout0(100, 50, 500, 700), 1, 1}
```

The coordinates are in points. A coordinate specification of (0, 0, 0, 0) behaves the same as no coordinate specification at all.

If the object is a graph, the coordinate specification determines the width and height of the graph. If you omit the coordinate specification, Igor takes the width and height from the graph window.

If the object is a layout, the coordinate specification identifies a section of the layout. If you omit the coordinate specification, Igor selects a section of the layout that includes all objects in the layout plus a small margin.

For any other kind of object, Igor ignores the coordinate specification if it is present.

The scaling and frame keywords affect the selected picture, if any. If no picture is selected, they affect the insertion of a picture using the picture or insertPicture keywords. For example, this command inserts a picture of Graph0 with 50% scaling and a double frame:

```
Notebook Test1 scaling={50, 50}, frame=2, picture={Graph0, 1, 1}
```

If no picture is selected and no picture is inserted, scaling and frame have no effect.

InsertPicture Example

```
Function InsertPictureFromFile(nb)
   String nb           // Notebook name or "" for top notebook

   if (strlen(nb) == 0)
      nb = WinName(0, 16, 1)
   endif

   if (strlen(nb) == 0)
      Abort "There are no notebooks"
   endif

   // Display Open File dialog to get the file to be inserted
   Variable refNum     // Required for Open but not really used
   String fileFilter = "Graphics Files:.eps,.jpg,.png;All Files:.*;"
   Open /D /R /F=fileFilter refNum
   String filePath = S_fileName
   if (strlen(filePath) == 0)
      Print "You cancelled"
      return -1
   endif

   Notebook $nb, insertPicture={$"", $"", filePath, 0}
   if (V_flag)
      Print "Picture inserted"
   else
      Print "No picture inserted"
   endif

   return 0
End
```

Save notebook pictures to files

The savePicture keyword is allowed for formatted text files only, not for plain text files.

savePicture={*pictureName*, *pathName*, *filePath*, *options*}

Saves a picture from a formatted text notebook to a file specified by *pathName* and *filePath*.

pictureName is the special character name (see **Special Character Names** on page III-14) of the picture to be saved or $"" to save the selected picture in which case one picture and one picture only must be selected in the notebook.

pathName is the name of an Igor symbolic path created via **NewPath** or $"" to use no path.

filePath is a full path to the file to be written or a partial path or simple file name relative to the specified symbolic path.

If *pathName* and *filePath* do not fully specify a file, a Save File dialog is displayed in which the user can specify the file to be written.