inlinegraphicx

Includegraphics, with an automatic inline positioning.

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Cédric Pierquet
c pierquet – at – outlook . fr
https://forge.apps.education.fr/pierquetcedric/packages-latex

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Inline insertion,  with automatic adjustments.

Inline insertion,  with automatic adjustments.

Inline insertion,  with automatic adjustments but without depth.

Inline  proof with small resizing.

Inline insertion, () with automatic adjustments and choice of optimal height.

Contents

1 Loading, useful packages

In order to load `inlinegraphicx`, simply use:

```
\usepackage{inlinegraphicx}
```

The only loaded package is `graphicx`, the rest of the code is in LaTeX3.

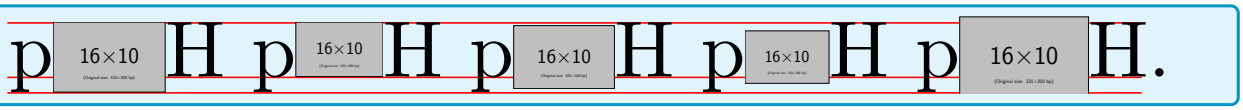
2 Usage

The purpose of this package is to provide command, based on `\includegraphics`, to insert graphic elements *inline*, with automatic positioning and scaling.

The code determines (total)height and, if necessary, depth of letters in the current font, in order to position the image correctly :

- (total)height is given by (total)height of `qH` in the current font ;
- depth is given by depth of `qH` in the current font.

In order to adjust manually size/positioning, `[keys]` are available.



3 The macro

3.1 Arguments

The macro for inline insertion is `\inlinegraphics`.

```
\inlinegraphics(*)[scale=...,strut=...]<includegraphics options>{image}
```

The starred version remove depth positioning, wheres normal version include depth.
Available keys are:

- `scale` : re-scaling of compute height (default `1`) ;
- `strut` : characters for height/depth (default `qH`).

3.2 Examples

```
Inline insertion, \inlinegraphics{example-image-16x10} with automatic adjustments.

Inline insertion, \inlinegraphics[scale=0.75]{example-image-16x10} with automatic
    adjustments and scaling.

Inline insertion, \inlinegraphics*{example-image-16x10} with automatic adjustments and
    without depth.
```

Inline insertion,  with automatic adjustments.
Inline insertion,  with automatic adjustments and scaling.
Inline insertion,  with automatic adjustments and without depth.

```
\scalebox{3}[3]{Inline (\inlinegraphics[strut={()}]{example-image-16x10})
    q\inlinegraphics{example-image-16x10}H insertion}.
```

Inline () q  H insertion.

```
\sffamily{\Huge Inline (\inlinegraphics[strut={()}]{example-image-16x10})
    q\inlinegraphics{example-image-16x9}H insertion}.
```

Inline () q  H insertion.

```
\ttfamily{\LARGE Inline (\inlinegraphics[strut={(É)}]{example-image-16x10}É)
    q\inlinegraphics{example-image-16x10}H insertion}.
```

Inline ( É) q  H insertion.

```
\ttfamily{\large Inline insertion,
    (\inlinegraphics[strut={()}]<angle=10>{example-image-16x10}) with option given to
    includegraphics.}
```

Inline insertion, () with option given to includegraphics.

4 History

0.2.0: LaTeX3 version of code
0.1.1: Pass option to includegraphics within the macro
0.1.0: Initial version

5 The code

```
% Author        : C. Pierquet
% licence       : Released under the LaTeX Project Public License v1.3c or later, see http://www.latex-project.org/lppl.txt

\NeedsTeXFormat{LaTeX2e}
\ProvidesExplPackage{inlinegraphicx}{2025-08-23}{0.2.0}{Insert inline graphicx with LaTeX3}

%====HISTORY
% v 0.2.0   LaTeX3 conversion
% v 0.1.1   Alt options for includegraphics
% v 0.1.0   Initial version

%====PACKAGE
\RequirePackage{graphicx}

%====VARIABLES
\dim_new:N \g_totheight_inlinegraphicx_dim
\dim_new:N \g_depth_inlinegraphicx_dim
\dim_new:N \g_inlinedepthgraphicx_scale_dim
\fp_new:N \g_inlinegraphicx_scale_fp
\fp_new:N \l_inlinegraphicx_invscale_fp
\tl_new:N \l_inlinegraphicx_strut_tl

%====KEYS
\keys_define:nn { inlinegraphics }
  {
    scale .fp_set:N = \g_inlinegraphicx_scale_fp,
    scale .initial:n = {1.0},
    strut .tl_set:N = \l_inlinegraphicx_strut_tl,
    strut .initial:n = {qH},
  }

%====MAIN MACRO
\NewDocumentCommand \inlinegraphics { s O{} D<>{} m }
  {
    \group_begin:
    \keys_set:nn { inlinegraphics } { #2 }
    \bool_if:NTF #1
      {
        \hbox_set:Nn \l_tmpa_box { \tl_use:N \l_inlinegraphicx_strut_tl }
        \dim_set:Nn \g_totheight_inlinegraphicx_dim { \box_ht:N \l_tmpa_box }
        \includegraphics[
          height={\fp_eval:n {\g_inlinegraphicx_scale_fp * \g_totheight_inlinegraphicx_dim}pt},
          #3
        ]{#4}
      }
      {
        \hbox_set:Nn \l_tmpa_box { \tl_use:N \l_inlinegraphicx_strut_tl }
        \dim_set:Nn \g_totheight_inlinegraphicx_dim { \box_dp:N \l_tmpa_box + \box_ht:N \l_tmpa_box }
        \dim_set:Nn \g_depth_inlinegraphicx_dim { \box_dp:N \l_tmpa_box }
        \fp_set:Nn \l_inlinegraphicx_invscale_fp { 0.5 * (1.0 - \g_inlinegraphicx_scale_fp) }
        \dim_set:Nn \g_inlinedepthgraphicx_scale_dim
          { \g_depth_inlinegraphicx_dim - \fp_eval:n {\l_inlinegraphicx_invscale_fp * \g_totheight_inlinegraphicx_dim}pt }
        \raisebox{-\dim_use:N \g_inlinedepthgraphicx_scale_dim}
          {
            \includegraphics[
              height={\fp_eval:n {\g_inlinegraphicx_scale_fp * \g_totheight_inlinegraphicx_dim}pt},
              #3
            ]{#4}
          }
      }
    \group_end:
  }

\ExplSyntaxOff

\endinput
```