inlinegraphicx

Includegraphics, with an automatic inline positioning.

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https://github.com/cpierquet/latex-packages/tree/main/inlinegraphicx

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Inline insertion, [16×10] with automatic adjustments.

Inline insertion, [16×10] with automatic adjustments.

Inline insertion, [16×10] with automatic adjustments but without depth.

Inline [16×10] proof with small resizing.

Inline insertion, ([16×10]) 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 $\boxed{qH}$ in the current font ;

- depth is given by depth of $\boxed{qH}$ in the current font.

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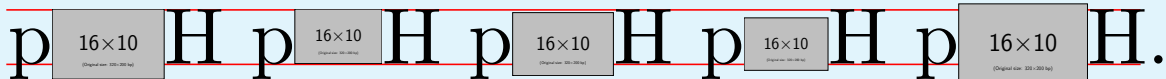
3 The macro

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

```
0.20a: Bugfix with gset (tks to D. Bitouze)
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}{2026-02-20}{0.20a}{Insert inline graphicx with LaTeX3}

%====HISTORY
% v 0.20a  Bugfix with gset + l3 improvements
% v 0.2.0  LaTeX3 conversion
% v 0.1.1  Alt options for includegraphics
% v 0.1.0  Initial version

%====PACKAGE
\RequirePackage { graphicx }

%====VARIABLES  (toutes \l_ = locales au groupe de la macro)
\dim_new:N \l_totheight_inlinegraphicx_dim
\dim_new:N \l_depth_inlinegraphicx_dim
\dim_new:N \l_raisebox_inlinegraphicx_dim
\fp_new:N  \l_scale_inlinegraphicx_fp
\fp_new:N  \l_invscale_inlinegraphicx_fp
\tl_new:N  \l_strut_inlinegraphicx_tl

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

%====MAIN MACRO
\NewDocumentCommand \inlinegraphics { s O { } D < > { } m }
{
  \group_begin:

  \keys_set:nn { inlinegraphics } { scale = { 1.0 } , strut = { qH } }
  \keys_set:nn { inlinegraphics } { #2 }
  % ---
  \bool_if:NTF #1
  {
    % --- Mode étoilé : hauteur = hauteur de la capitale du strut
    \hbox_set:Nn \l_tmpa_box { \tl_use:N \l_strut_inlinegraphicx_tl }
    \dim_set:Nn \l_totheight_inlinegraphicx_dim { \box_ht:N \l_tmpa_box }
    \includegraphics
      [
        height =
        {
          \fp_eval:n
          {
            \l_scale_inlinegraphicx_fp * \l_totheight_inlinegraphicx_dim
          }
          pt
        },
        #3
      ]
      { #4 }
  }
  {
    % --- Mode normal : hauteur totale (ht+dp) du strut avec alignement vertical
    \hbox_set:Nn \l_tmpa_box { \tl_use:N \l_strut_inlinegraphicx_tl }
    \dim_set:Nn \l_totheight_inlinegraphicx_dim
      { \box_dp:N \l_tmpa_box + \box_ht:N \l_tmpa_box }
    \dim_set:Nn \l_depth_inlinegraphicx_dim
      { \box_dp:N \l_tmpa_box }
    \fp_set:Nn \l_invscale_inlinegraphicx_fp
      { 0.5 * ( 1.0 - \l_scale_inlinegraphicx_fp ) }
    \dim_set:Nn \l_raisebox_inlinegraphicx_dim
      {
        \l_depth_inlinegraphicx_dim
        -
        \fp_eval:n
        {
          \l_invscale_inlinegraphicx_fp * \l_totheight_inlinegraphicx_dim
        }
        pt
      }
```

```
      \raisebox { - \dim_use:N \l_raisebox_inlinegraphicx_dim }
        {
          \includegraphics
            [
              height =
              {
                \fp_eval:n
                {
                  \l_scale_inlinegraphicx_fp * \l_totheight_inlinegraphicx_dim
                }
                pt
              },
              #3
            ]
            { #4 }
        }
  }
  \group_end:
}

\endinput
```