


```

81 \advance\count0by1\relax\xdef
82 \aeb@image@cnt{\the\count0 }}%
83 \edef\IAKVfamily@name{aebImage\aeb@image@cnt}%
84 \PackageWarning{icon-appr}{%
85 The 'name' key is not specified,\MessageBreak
86 will assign a name of '\IAKVfamily@name'\MessageBreak
87 for the icon #1}}

```

Requirements of package not met. This version makes a necessary definition to avoid stopping the tex engine.

```

88 \newcommand{\IA@embedIcon@null}[2] []{%
89 \begingroup
90 \setkeys*{IAKVfamily}{#1}%
91 \ifx\IAKVfamily@name\empty\IA@handle@name@empty\fi
92 \x@namedef{\IAKVfamily@name widthOf}{Opt}%
93 \x@namedef{\IAKVfamily@name heightOf}{Opt}%
94 \x@namedef{\IAKVfamily@name}{null}%
95 \endgroup}
96 \let\IA@embedEPS@null\IA@embedIcon@null
97 \ifundefined{aeb@image@cnt}{\def\aeb@image@cnt{0}}{}
98 \ifluatex

```

The lualatex driver. The two lualatex commands `\saveboxresource` and `\lastsavedboxresourceindex` are used.

```

99 \protected\def\pdfnames{\pdfextension names }
100 \newcommand{\IA@embedIcon}[2] []{\begingroup
101 \setkeys*{IAKVfamily}{#1}%
102 \ifx\IAKVfamily@name\empty\IA@handle@name@empty{#2}\fi
103 \toks@={\setbox\@tempboxa\hbox\bgroup\includegraphics}%
104 \edef\x{\the\toks@[IAKVfamily@hyopts]{#2}\egroup}\x
105 \x@namedef{\IAKVfamily@name widthOf}{\the\wd\@tempboxa}%
106 \x@namedef{\IAKVfamily@name heightOf}{\the\ht\@tempboxa}%
107 \immediate\saveboxresource\@tempboxa
108 \x@namedef{\IAKVfamily@name}
109 {\the\lastsavedboxresourceindex}%

```

(2020/06/05) Entry in the icons array

```

110 \ifx\IA@Icons\empty
111 \g@addto@macro\IA@Icons{\begin{sortedlist}}\fi
112 \protected@edef\x{\noexpand\g@addto@macro\noexpand
113 \IA@Icons{\protect\IA@sortitem{IAKVfamily@name}}}\x
114 \endgroup}
115 \else\ifpdf

```

The pdflatex driver. The pdflatex commands `\pdfxform` and `\pdflastxform` are used.

```

116 \newcommand{\IA@embedIcon}[2] []{\begingroup
117 \setkeys*{IAKVfamily}{#1}%
118 \ifx\IAKVfamily@name\empty\IA@handle@name@empty{#2}\fi
119 \toks@={\setbox\@tempboxa\hbox\bgroup\includegraphics}%
120 \edef\x{\the\toks@[IAKVfamily@hyopts]{#2}\egroup}\x

```

```

121 \x@namedef{\IAKVfamily@name widthOf}{\the\wd\@tempboxa}%
122 \x@namedef{\IAKVfamily@name heightOf}{\the\ht\@tempboxa}%
123 \immediate\pdfxform\@tempboxa
124 \x@namedef{\IAKVfamily@name}{\the\pdflastxform}%

```

(2020/06/05) Entry in the icons array

```

125 \ifx\IA@Icons\@empty
126   \g@addto@macro\IA@Icons{\begin{sortedlist}}\fi
127 \protected@edef\x{\noexpand\g@addto@macro\noexpand
128   \IA@Icons{\protect\IA@sortitem{\IAKVfamily@name}}}\x
129 \endgroup}
130 \else\ifxetex

```

The xelatex driver. The xelatex `\specials` `bxobj`, `image`, and `exobj` are used. The `image` syntax does not support the concept of page for a PDF file, consequently, it always reads the first page.

```

131 \newcommand{\IA@embedIcon}[2][\begingroup
132   \setkeys*{\IAKVfamily}{#1}%
133   \ifx\IAKVfamily@name\@empty\IA@handle@name@empty{#2}\fi
134   \toks@={\setbox\@tempboxa\hbox\bgroup\includegraphics}%
135   \edef\x{\the\toks@[ \IAKVfamily\hyopts]{#2}\egroup}\x
136   \x@namedef{\IAKVfamily@name widthOf}{\the\wd\@tempboxa}%
137   \x@namedef{\IAKVfamily@name heightOf}{\the\ht\@tempboxa}%
138   \x@namedef{\IAKVfamily@name}{@ \IAKVfamily@name}%
139   \@pdfm@mark{bxobj @ \IAKVfamily@name \space
140     width \the\wd\@tempboxa \space
141     height \the\ht\@tempboxa \space}%
142   \@pdfm@mark{image width \the\wd\@tempboxa \space
143     height \the\ht\@tempboxa \space (#2)}%
144   \@pdfm@mark{exobj}%

```

(2020/06/05) Entry in the icons array

```

145 \ifx\IA@Icons\@empty
146   \g@addto@macro\IA@Icons{\begin{sortedlist}}\fi
147 \protected@edef\x{\noexpand\g@addto@macro\noexpand
148   \IA@Icons{\protect\IA@sortitem{\IAKVfamily@name}}}\x
149 \endgroup}
150 \else

```

If not any of the previously discussed drivers, it must a **pdfmark**-type driver.

```

151 \@ifpackageloaded{aeb_pro}{%

```

For success in this case, we require the `aeb_pro` package; Acrobat needs to load and save the newly created PDF, created by either `distiller` or `ps2pdf`. The `aeb_pro` command `\declareImageAndPlacement` is used for this purpose. The command `\IA@EndEmbedding@aebpro` is redefined to input an `execJS` environment, which will get things going.

```

152 \newcommand{\IA@embedIcon}[2][1]{\begingroup
153   \declareImageAndPlacement{path=#2,#1}\endgroup}

```

When `aeb_pro` is loaded and a `pdfmark`-type driver is used, `\embedIcon` uses `\declareImageAndPlacement` from `aeb_pro` (see documentation of that package). JavaScript methods embed the graphics files.

```

154 \def\IA@EndEmbedding@aebpro{\@bEmbedfalse\beginngroup
155 \IfFileExists{\jobname-exec.cut}{%
156 {\immediate\openout\@auxout \jobname-exec.cut
157 \immediate\write\@auxout{\string\begin{execJS}{IAexec}^^J%
158 \string\insertPreDocAssembly^^J%
159 \string\end{execJS}}}%
160 \InputIfFileExists{\jobname-exec.cut}{-}{-}%
161 \endgroup}%
162 }%

```

The final case, we `\let \IA@embedIcon to \IA@embedIcon@null` to let the document compile. A warning message is written to the log.

```

163 \let\IA@embedIcon\IA@embedIcon@null
164 }
165 \fi\fi\fi

```

4.3 The `\embedEPS` command

`\embedEPS[{KVPairs}]{{path}}` When a `pdfmark`-type driver is being used, `\embedEPS` is `\let` to `\IA@embedEPS`. This command is used to embed EPS files.

```

166 \newcommand\IA@embedEPS[2] []{\ifx\IA@Icons@pdfmark@Names\@empty
167 \global\let\IA@Icons@pdfmark@Names\@gobble\fi
168 \global\@EmbedEPSUsedtrue
169 \beginngroup\let\x\noexpand
170 \setkeys*{IAKVfamily}{#1}%\XKV@rm has remaining keys
171 \ifx\IAKVfamily@name\@empty\IA@handle@name@empty\fi
172 \edef\@tmpexp{\x
173 \IA@embedEPS@save[\XKV@rm]{embed\IAKVfamily@name}{#2}}\@tmpexp
174 \edef\@tmpexp{\x\begin{createImage}{\x
175 \bboxOf{embed\IAKVfamily@name}}{\IAKVfamily@name}
176 \ifx\IAKVfamily@presp\@empty\else\IAKVfamily@presp\space\fi
177 \IA@mark{embed\IAKVfamily@name} /SP pdfmark
178 \ifx\IAKVfamily@postsp\@empty\else\space\IAKVfamily@postsp\fi
179 \x\end{createImage}}%
180 \toks@=\expandafter{\@tmpexp}%
181 \edef\@tmpexp{\x\g@addto@macro\x
182 \IA@CreateImage@xsp{\the\toks@}}\@tmpexp

```

Create a list (`\IA@Icons@pdfmark@Names`) a list of all the names, this is used to create an array of icon names (see the end of the file). Also created is a token list of the icon names, this is employed in the definition of `\IA@makeHiddenIconFlds` at the end of this file.

```

183 \edef\y{\x\g@addto@macro\x
184 \IA@Icons@pdfmark@Names{"\IAKVfamily@name"}}\y
185 \edef\y{\x\g@addto@macro\x
186 \IA@Icons@pdfmark{\IAKVfamily@name}}\y

```

```
187 \endgroup
188 }
```

Some warning messages when things go wrong.

```
189 \def\IA@WarningMsgStr{%
190   A pdfmark driver used - dvips,\MessageBreak
191   something's not right however:
192   \if@EmbedIconUsed
193     \ifpackageloaded{aeb_pro}{\MessageBreak
194       Use of \string\embedIcon\space
195       requires the\MessageBreak aeb_pro package,
196       or possibly use\MessageBreak
197       a non-pdfmark driver}\fi
198   \if@EmbedEPSUsed
199     \ifpackageloaded{graphicxsp}{\MessageBreak
200       \string\embedEPS\space
201       requires the graphicxsp package}\fi
202   }
203 \def\IA@WarningMsg{\PackageWarningNoLine{icon-appr}{\IA@WarningMsgStr}}
204 \ifpdfmarkup
205   \AtBeginDocument{%
206     \if@EmbedIconUsed
207       \ifpackageloaded{aeb_pro}{\ifx\IA@WarningMsg\relax\else
208         \IA@WarningMsg\let\IA@WarningMsg\relax\fi}\fi
209     \if@EmbedEPSUsed
210       \ifpackageloaded{graphicxsp}{\ifx\IA@WarningMsg\relax\else
211         \IA@WarningMsg\let\IA@WarningMsg\relax\fi}\fi}%
212 \else
213   \AtBeginDocument{\if@EmbedEPSUsed
214     \PackageWarningNoLine{icon-appr}{The use of \string\embedEPS\space
215     not allowed\MessageBreak
216     with \ifluatex lualatex\else\ifpdf pdflatex\else xetex\fi\fi}
217   \fi}%
218 \fi
```

`\IA@makeHiddenIconFlds` There is a final case of the workflow, when `\embedEPS` is used instead of `\embedIcon`. For **pdfmark**, the user has Acrobat, I'm assuming, and is not using `ps2pdf` without Acrobat. Here, we create a series of hidden `\pushButtons` fields each referencing one of the EPS embedded with `\embedEPS`; the creation of these fields is encapsulated into the `\IA@makeHiddenIconFlds`.

```
219 \def\IA@makeHiddenIconFlds{\if@EmbedEPSUsed
220   \edef\x{\noexpand\@tfor\noexpand\iName:=\IA@Icons@pdfmark}\x\do{%
221     \smash{\rlap{\pushButton[BC]{BG}{F\FHidden\TP{1}\S{S}
222       \I{\csOf{\iName}}]{IAhidden.\iName}{Obp}{Obp}}}%
223   }%
224   \fi
225 }
```

Insert `\IA@makdHiddenIconFlds` at the beginning of the document.

```
226 \AtBeginDocument{\IA@makeHiddenIconFlds}
```


Finally, a document JavaScript is inserted into the document that gets each of the fields created by `\IA@makeHiddenIconFlds`, and uses `Doc.addIcon()` and `Field.buttonGetIcon()` to “register” these icons. We then delete the fields after we are finished with them. `\IA@Icons@pdfmark@Names` will be either empty (`\embedEPS` is not used) or expands to a list of icon names, for each use of `\embedEPS`.

```
227 \ifpdfmarkup
228 \begin{insDLJS}{aicons}{icon-appr: Add icons to Catalog > Names > AP}
229 var aIconNames= new Array(\IA@Icons@pdfmark@Names);
230 for (i=0; i< aIconNames.length; i++) {
231   var f=this.getField("IAhidden."+aIconNames[i]);
232   if (f!=null) {
233     try{ this.addIcon(aIconNames[i],f.buttonGetIcon());
234       this.removeField("IAhidden."+aIconNames[i]); }catch(e){};
235   }
236 }
237 \end{insDLJS}
238 \fi
239 \end{package}
```

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<code>embedding</code> : Entry in the icons array	Replaced <code>\ifpdfmarkup</code> with	
v1.2.1 (2020/06/13)	<code>\if@EmbedEPSUsed</code> . Code should only be	
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