## Handling conceptual links with generic hooks

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The basic command hyperref uses to create an internal document link (a "GoTo" link in PDF speech) has a quite unknown first argument which can be used to differentiate the links. Only two values for this argument are currently in use: cite used by various citation commands and link used for everything else. The actual effect of the argument is quite restricted in older hyperref versions: It only calls \csname @#1color\endcsname at some point, so it simply selects a color.

In the new hyperref driver which is used when the pdfmanagement is active this argument has been connected with a generic hook,  $hyp/link/\langle name \rangle$ . This hook is executed at the begin of the link command, outside the actual link but inside a group.

Packages or code which create links which are used for a specific concept, like e.g. citations, or acronyms, or glossary terms, or links to an author list can make use of this to make the links customizable by the user. They only need to create the link with hyper@linkstart and hyper@linkend with a suitable first argument (both commands are official interfaces of hyperref for links) and to activate the relevant hook (for cite the hook is already declared, hyperref uses it to reimplement the citecolor keys. So it can be used directly). For other types (including the default type link) the hooks must be activated first. This can be done with ActivateGenericHook.

The hook can e.g. change colors with \hypersetup or add some text before the link. The color of a internal link is stored in hyp/color/link, using \colorlet to change it is possible too, but this method is less clean: it relies a bit on some knowledge about the internal processing, and doesn't work for border colors which are set differently to text colors.

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Example with the predefined hook for the keyword "cite"

\makeatletter
\hyper@linkstart{cite}{some-target}1234\hyper@linkend

\AddToHook{hyp/link/cite}
{Cite:~\hypersetup{linkcolor=blue,linkbordercolor=yellow}}

\hyper@linkstart{cite}{some-target}1234\hyper@linkend

1234
Cite: 1234
```

## Activation of a new keyword \ActivateGenericHook{hyp/link/acro} \AddToHookNext{hyp/link/acro}{Acro:~\colorlet{hyp/color/link}{blue}\sffamily} \makeatletter \hyper@linkstart{acro}{some-target}acronym\hyper@linkend\ more text \makeatother Acro: acronym more text

## Activation of the existing keyword "link"

 $\label{link} $$ \addToHook\{hyp/link/link\}{Link: $$ \addToHook\{hyp/link/link\}{orange} \addToHook\{hyp/link/link\}$$ $$ \addToHook\{hyp/link/link\}$$$ 

\makeatletter

 $\label{link} $$ \displaystyle 1\displaystyle \frac{1}{\ensuremath{\mbox{numerat}}} = 1\displaystyle \frac{1}{\ensuremath{\mbox{numerat}}} $$$ 

\hyperlink{some-target}{see 2}

Link: see 1 Link: see 2

## keyword without hook activation

\hypersetup{linkcolor=brown,linkbordercolor=red}

\AddToHook{hyp/link/unknown}{Blub??}

\makeatletter

\hyper@linkstart{unknown}{some-target}acronym\hyper@linkend\ more text
\makeatother

acronym more text