

ConTEXt

Specials

category: ConTEXt Support Macros

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1 \unprotect

This module implements some `\special` manipulation macros. I needed these when I implemented the code that handles the conversion of TPIC specials to PDF code.

2 \writestatus{loading}{Context Support Macros / Specials}

When interpreting specials we need to do some basic scanning. For the moment we distinguish between three cases. We need

```
\special{tag: arguments}
\special{tag arguments}
\special{tag}
```

We cannot be sure that the first case isn't

```
\special{tag:arguments}
```

So we have to take care of that one too.

\redefines.. Specials that are to be interpreted are defined with commands like:

```
\redefinespecial a: \using#1\endspecial%
{let's execute special 'a:' using '#1'}

\redefinespecial a \using#1\endspecial%
{let's execute special 'a' using '#1'}

\redefinespecial a \using#1\endspecial%
{let's execute special 'a' using nothing}
```

The first two always take an argument, the last one not. The definition of this redefinition macro is not that complex. The names are internally tagged with `\@rds@` which saves both time and space.

3 \def\@rds@{\@rds@}

4 \def\redefinespecial #1 %
{\setvalue{\@rds@#1}}

\mimmicks.. Mimmicking specials is activated by saying:

```
\mimmickspecials
```

This commands redefines the PLAIN T_EX primitive `\special`.

5 \def\mimmickspecials%
{\let\special=\domimmickspecial}

The special mimmicking macro first looks if it can find an colon terminated tag, next it searches for a tag that end with a space. If both cannot find, the tag itself is treated without argument.

6 \def\domimmickspecial#1%
{\domimmickcolonspecial#1:\relax/:relax/\end}

7 \def\domimmickcolonspecial#1:#2#3:\relax/#4\end%
{\ifx#2\relax
\domimmickspacestpecial#1 \relax/ \relax/\end
\else
\domimmickspecial#1:\using#2#3\endspecial
\fi}

Specials

```
8 \def\domimmickspecial#1 #2#3 \relax/#4\end%
  {\ifx#2\relax
   \dodomimmickspecial#1\using\endspecial
  \else
   \dodomimmickspecial#1\using#2#3\endspecial
  \fi}

9 \def\dodomimmickspecial#1\using#2\endspecial%
  {\expandafter\ifx\csname@rds@#1\endcsname\relax % \doifdefinedelse
   \defaultspecial{#1 #2}%
  \else
   \%message{\mimick special #1 with #2#3}%
   \.getvalue{\@rds@#1}\using#2\endspecial
  \fi}
```

Now let's show that things work the way we want, using the previous definitions of tag a.

```
\mimmickspecials
\special{a: 1 2 3 4 5}
\special{a: 1 2 3 4 5}
\special{a}
```

Which results in:

```
let's execute special 'a:' using '1 2 3 4 5'
let's execute special 'a:' using '1 2 3 4 5'
let's execute special 'a' using nothing
```

\mimmickspecials .. When needed, one can call a mimicked special directly by saying for instance:

```
\mimmickspecial a: \using...\endspecial
```

This can be handy when specials have much in common.

```
10 \def\mimmickspecial #1 %
  {\.getvalue{\@rds@#1}}
```

\normalspecial .. Unknown specials are passed to the default special handler. One can for instance ignore all further specials by saying \normalspecial:

```
\def\defaultspecial#1{}
```

But here we default to idle.

```
11 \let\normalspecial =\special
\let\defaultspecial=\special

12 \protect

13 \endinput
```

```
\defaultspecial 2          \normalspecial 2
\mimickspecial 2          \redefinespecial 1
\mimickspecials 1
```

