

This Way

ConTEXt magazine #2
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Page Ranges
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PRAGMA ADE

Subpage numbers can save you some messing around with page references. Here we show some basics.

This is a simple example of using subpage numbers. Subpage numbers are not automatically kept track of, so you first need to activate them:

```
\setupsubpagenumber
  [way=bychapter,
   state=start]
```

After activating this mechanism, you can access the numbers as follows. The numbers are synchronized in during page building, which means that they are correct when constructing headers and footers.

```
\setupheadertexts
  [\firstsubpage--\lastsubpage]
\firstsubpage 2
\prevsubpage 2
\nextsubpage 2
\lastsubpage 2
\nofsubpages 1
\lastpage 16
\subpageno 1
\pageno 1
\realpageno 2
\setupfootertexts
  [\pagenumber]
```

There are several ways to access those numbers:

<code>\firstsubpage</code>	1	first real pagenumber in range
<code>\prevsubpage</code>	1	previous real pagenumber in range
<code>\nextsubpage</code>	2	next real pagenumber in range
<code>\lastsubpage</code>		last real pagenumber in range

We will now generate a bunch of fake chapters to illustrate this feature.

catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats. We thrive in information-thick worlds because of our marvelous and everyday capacity to select, edit, single out, structure, highlight, group, pair, merge, harmonize, synthesize, focus, organize, condense, reduce, boil down, choose, categorize, catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats. We thrive in information-thick worlds because of our marvelous and everyday capacity to select, edit, single out, structure, highlight, group, pair, merge, harmonize, synthesize, focus, organize, condense, reduce, boil down, choose, categorize, catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats. We thrive in information-thick worlds because of our marvelous and everyday capacity to select, edit, single out, structure, highlight, group, pair, merge, harmonize, synthesize, focus, organize, condense, reduce, boil down, choose, categorize, catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats. We thrive in information-thick worlds because of our marvelous and everyday capacity to select, edit, single out, structure, highlight, group, pair, merge, harmonize, synthesize, focus, organize, condense, reduce, boil down, choose, categorize, catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats. We thrive in information-thick worlds because of our marvelous and everyday capacity to select, edit, single out, structure, highlight, group, pair, merge, harmonize, synthesize, focus, organize, condense, reduce, boil down, choose, categorize, catalog, classify, list, abstract, scan, look into, idealize, isolate, discriminate, distinguish, screen, pigeonhole, pick over, sort, integrate, blend, inspect, filter, lump, skip, smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsise, winnow the wheat from the chaff and separate the sheep from the goats.

<code>\firstsubpage</code>	3
<code>\prevsubpage</code>	4
<code>\nextsubpage</code>	5
<code>\lastsubpage</code>	5
<code>\nofsubpages</code>	3
<code>\lastpage</code>	16
<code>\subpageno</code>	3
<code>\pageno</code>	4
<code>\realpageno</code>	5

between good and bad typographic design. Many people are just fascinated by their PC's tricks, and think that a widely-praised program, called up on the screen, will make everything automatic from now on. Coming back to the use of typefaces in electronic publishing: many of the new typographers receive their knowledge and information about the rules of typography from books, from computer magazines or the instruction manuals which they get with the purchase of a PC or software. There is not so much basic instruction, as of now, as there was in the old days, showing the differences between good and bad typographic design. Many people are just fascinated by their PC's tricks, and think that a widely-praised program, called up on the screen, will make everything automatic from now on. Coming back to the use of typefaces in electronic publishing: many of the new typographers receive their knowledge and information about the rules of typography from books, from computer magazines or the instruction manuals which they get with the purchase of a PC or software. There is not so much basic instruction, as of now, as there was in the old days, showing the differences between good and bad typographic design. Many people are just fascinated by their PC's tricks, and think that a widely-praised program, called up on the screen, will make everything automatic from now on. Coming back to the use of typefaces in electronic publishing: many of the new typographers receive their knowledge and information about the rules of typography from books, from computer magazines or the instruction manuals which they get with the purchase of a PC or software. There is not so much basic instruction, as of now, as there was in the old days, showing the differences between good and bad typographic design. Many people are just fascinated by their PC's tricks, and think that a widely-praised program, called up on the screen, will make everything automatic from now on. Coming back to the use of typefaces in electronic publishing: many of the new typographers receive their knowledge and information about the rules of typography from books, from computer magazines or the instruction manuals which they get with the purchase of a PC or software. There is not so much basic instruction, as of now, as there was in the old days, showing the differences between good and bad typographic design. Many people are just fascinated by their PC's tricks, and think that a widely-praised program, called up on the screen, will make everything automatic from now on.

<code>\firstsubpage</code>	6
<code>\prevsubpage</code>	6
<code>\nextsubpage</code>	7
<code>\lastsubpage</code>	7
<code>\nofsubpages</code>	2
<code>\lastpage</code>	16
<code>\subpageno</code>	2
<code>\pageno</code>	6
<code>\realpageno</code>	7

3 Knuth

Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large-scale user; the designer should also write the first user manual.

The separation of any of these four components would have hurt \TeX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important.

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments. Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large-scale user; the designer should also write the first user manual.

`\firstsubpage` 8
`\prevsubpage` 8
`\nextsubpage` 9
`\lastsubpage` 16
`\nofsubpages` 9

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`\lastpage` 16
`\subpageno` 1
`\pageno` 7
`\realpageno` 8

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<code>\firstsubpage</code>	8
<code>\prevsubpage</code>	8
<code>\nextsubpage</code>	10
<code>\lastsubpage</code>	16
<code>\nofsubpages</code>	9
<code>\lastpage</code>	16
<code>\subpageno</code>	2
<code>\pageno</code>	8
<code>\realpageno</code>	9

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`\firstsubpage` 8
`\prevsubpage` 9
`\nextsubpage` 11
`\lastsubpage` 16
`\nofsubpages` 9
`\lastpage` 16
`\subpageno` 3
`\pageno` 9
`\realpageno` 10

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<code>\firstsubpage</code>	8
<code>\prevsubpage</code>	10
<code>\nextsubpage</code>	12
<code>\lastsubpage</code>	16
<code>\nofsubpages</code>	9
<code>\lastpage</code>	16
<code>\subpageno</code>	4
<code>\pageno</code>	10
<code>\realpageno</code>	11

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`\firstsubpage` 8
`\prevsubpage` 11
`\nextsubpage` 13
`\lastsubpage` 16
`\nofsubpages` 9

`\lastpage` 16
`\subpageno` 5
`\pageno` 11
`\realpageno` 12

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source code of this document

```
\usemodule[mag-01]
```

```
\setvariables
```

```
[magazine]
[title={Page Ranges},
author=Hans Hagen,
affiliation=PRAGMA ADE,
date=Februari 2003,
number=2]
```

```
\startbuffer[abstract]
```

Subpage numbers can save you some messing around with page references. Here we show some basics.

```
\stopbuffer
```

```
\starttext \setups [titlepage] \setups [title] % \enablemode[frame]
```

This is a simple example of using subpage numbers. Subpage numbers are not automatically kept track of, so you first need to activate them:

```
\startbuffer
```

```
\setupsbypagenumber
```

```
[way=bychapter,
state=start]
```

```
\stopbuffer
```

```
\typebuffer \getbuffer
```

After activating this mechanism, you can access the numbers as follows. The numbers are synchronized in during page building, which means that they are correct when constructing headers and footers.

```
\startbuffer
```

```
\setupheadertexts
```

```
[\firstsubpage--\lastsubpage]
```

```
\setupfootertexts
```

```
[\pagenumber]
```

```
\stopbuffer
```

```
\typebuffer \getbuffer
```

source code of this document

There are several ways to access those numbers:

```
\starttabulate
\NC \type{\firstsubpage} \NC first real pagenumber in range \NC\NR
\NC \type{\prevsubpage} \NC previous real pagenumber in range \NC\NR
\NC \type{\nextsubpage} \NC next real pagenumber in range \NC\NR
\NC \type{\lastsubpage} \NC last real pagenumber in range \NC\NR
\stoptabulate
```

```
\startsetups [sub check]
```

```
\vfill
```

```
\setupbodyfont [8pt]
```

```
\startcolor [MyBlue]
```

```
\starttabulate [|l|r|]
```

```
\NC \type{\firstsubpage} \NC \firstsubpage \NC\NR
```

```
\NC \type{\prevsubpage} \NC \prevsubpage \NC\NR
```

```
\NC \type{\nextsubpage} \NC \nextsubpage \NC\NR
```

```
\NC \type{\lastsubpage} \NC \lastsubpage \NC\NR
```

```
\NC \type{\nofsubpages} \NC \nofsubpages \NC\NR
```

```
\TB
```

```
\NC \type{\lastpage} \NC \lastpage \NC\NR
```

```
\TB
```

```
\NC \type{\subpageno} \NC \number \subpageno \NC\NR
```

```
\NC \type{\pageno} \NC \number \pageno \NC\NR
```

```
\NC \type{\realpageno} \NC \number \realpageno \NC\NR
```

```
\stoptabulate
```

```
\stopcolor
```

```
\vfill \vfill
```

```
\stopsetups
```

We will now generate a bunch of fake chapters to illustrate this feature.

```
\setuptexttexts
```

```
[margin]
```

```
[] [\vbox to \textheight{\setups[sub check]}]
```

source code of this document

```
\chapter{Tufte} \dorecurse{15}{\input tufte }  
\chapter{Zapf} \dorecurse{10}{\input zapf }  
\chapter{Knuth} \dorecurse{20}{\input knuth }  
  
\page  
  
\setuptexttexts  
  [margin]  
  [] []  
  
\setups [listing] \setups [lastpage] \stoptext
```

