

This Way

ConTEXT magazine #2 (MkIV)

Februari 2003

Page Ranges

Hans Hagen

PRAGMA ADE

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 1
\prevsubpage  1
\nextsubpage  0
\lastsubpage  0
\nofsubpages  0
```

There are several ways to access those numbers:

```
\lastpage 16
\subpageno 0
\pageno    1
\realpageno 2
```

```
\firstsubpage  first real pagenumber in range
\prevsubpage   previous real pagenumber in range
\nextsubpage   next real pagenumber in range
\lastsubpage   last real pagenumber in range
```

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

smooth, chunk, average, approximate, cluster, aggregate, outline, summarize, itemize, review, dip into, flip through, browse, glance into, leaf through, skim, refine, enumerate, glean, synopsisize, 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, synopsisize, 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, synopsisize, 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, synopsisize, 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, synopsisize, winnow the wheat from the chaff and separate the sheep from the goats.

<code>\firstsubpage</code>	1
<code>\prevsubpage</code>	2
<code>\nextsubpage</code>	3
<code>\lastsubpage</code>	3
<code>\nofsubpages</code>	3
<code>\lastpage</code>	16
<code>\subpageno</code>	3
<code>\pageno</code>	4
<code>\realpageno</code>	5

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>	1
<code>\prevsubpage</code>	1
<code>\nextsubpage</code>	2
<code>\lastsubpage</code>	2
<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 T_EX 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` 1
`\prevsubpage` 1
`\nextsubpage` 2
`\lastsubpage` 9
`\nofsubpages` 9

16 The separation of any of these four components would have hurt T_EX significantly.
 1 If I had not participated fully in all these activities, literally hundreds of improve-
 7 ments would never have been made, because I would never have thought of them or
 8 perceived why they were important.

`\lastpage`
`\subpage`
`\page`
`\realpage`

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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

<code>\firstsubpage</code>	1
<code>\prevsubpage</code>	1
<code>\nextsubpage</code>	3
<code>\lastsubpage</code>	9
<code>\nofsubpages</code>	9
<code>\lastpage</code>	16
<code>\subpageno</code>	2
<code>\pageno</code>	8
<code>\realpageno</code>	9

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.

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.

`\firstsubpage` 1
`\prevsbpage` 2
`\nextsubpage` 4
`\lastsubpage` 9
`\nofsubpages` 9
`\lastpage` 16
`\subpageno` 3
`\pageno` 9
`\realpageno` 10

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.

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.

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.

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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

The separation of any of these four components would have hurt T_EX 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.

<code>\firstsubpage</code>	1
<code>\prevsubpage</code>	3
<code>\nextsubpage</code>	5
<code>\lastsubpage</code>	9
<code>\nofsubpages</code>	9
<code>\lastpage</code>	16
<code>\subpageno</code>	4
<code>\pageno</code>	10
<code>\realpageno</code>	11

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.

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.

`\firstsubpage` 1
`\prevsubpage` 4
`\nextsubpage` 6
`\lastsubpage` 9
`\nofsubpages` 9

`\lastpage` 16

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

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.

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.

source code of this document

```
% language=uk

% author      : Hans Hagen
% copyright   : PRAGMA ADE & ConTeXt Development Team
% license     : Creative Commons Attribution ShareAlike 4.0 International
% reference   : pragma-ade.nl | contextgarden.net | texlive (related) distributions
% origin      : the ConTeXt distribution
%
% comment     : Because this manual is distributed with TeX distributions it comes with a rather
%              liberal license. We try to adapt these documents to upgrades in the (sub)systems
%              that they describe. Using parts of the content otherwise can therefore conflict
%              with existing functionality and we cannot be held responsible for that. Many of
%              the manuals contain characteristic graphics and personal notes or examples that
%              make no sense when used out-of-context.

\usemodule[mag-01]

\startbuffer[abstract]
  Subpage numbers can save you some messing around with page references. Here
  we show some basics.
\stopbuffer

\startdocument
[title={Page Ranges},
author=Hans Hagen,
affiliation=PRAGMA ADE,
date=Februari 2003,
number=2 (MkIV)]

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
\setupsubpagenumber
[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

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
```

source code of this document

```

\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]}]

\chapter{Tufte} \dorecurse{15}{\input tufte }
\chapter{Zapf} \dorecurse{10}{\input zapf }
\chapter{Knuth} \dorecurse{20}{\input knuth }

\stopdocument

```

source code of this document

