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Co-maintaining cairo: cool community cool code

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Intro

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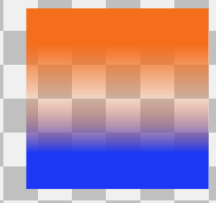
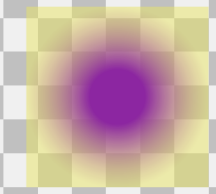
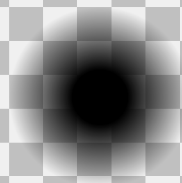
Rendering model

source IN mask OVER dest







source

mask

source
IN mask
OVER dest

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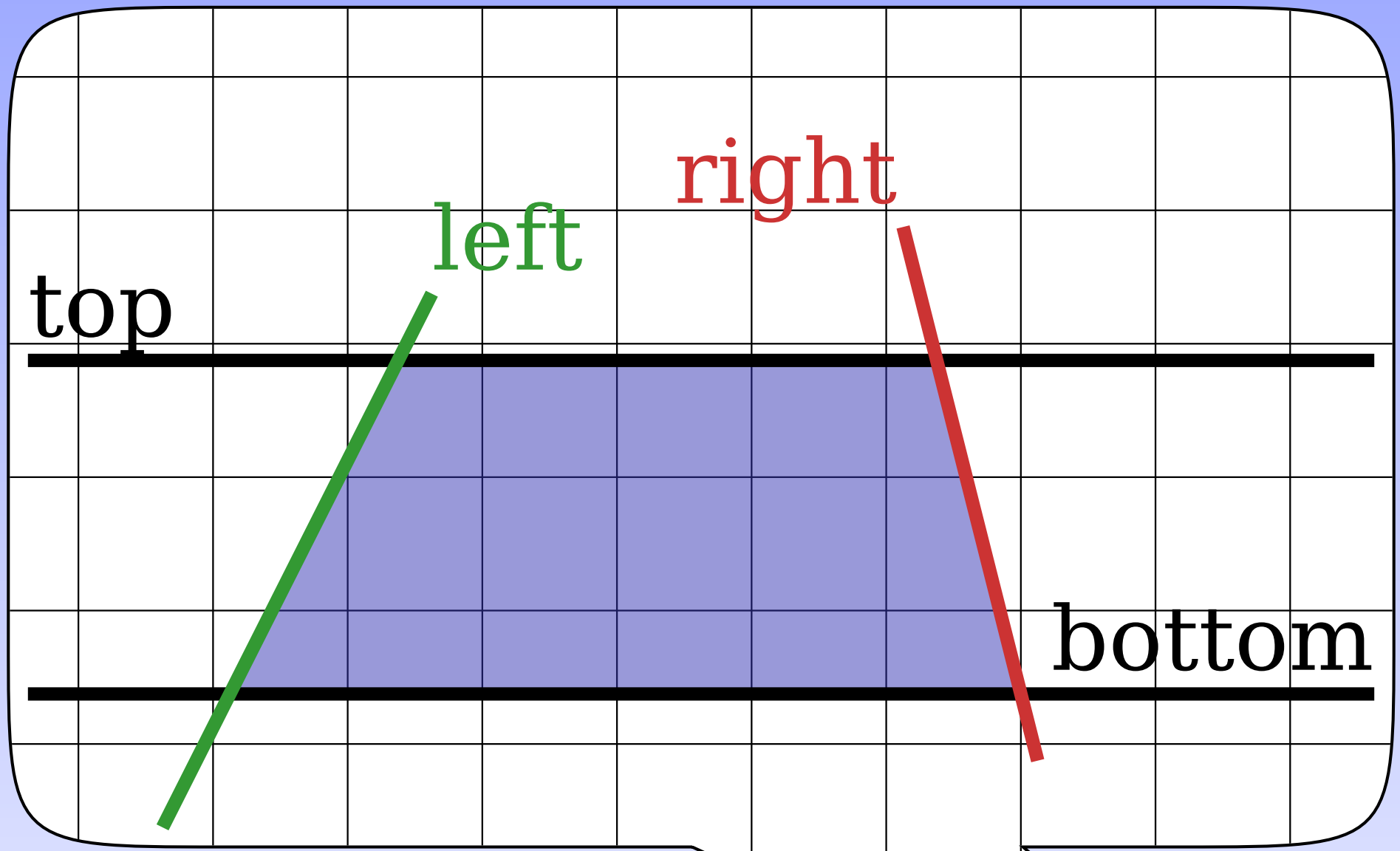
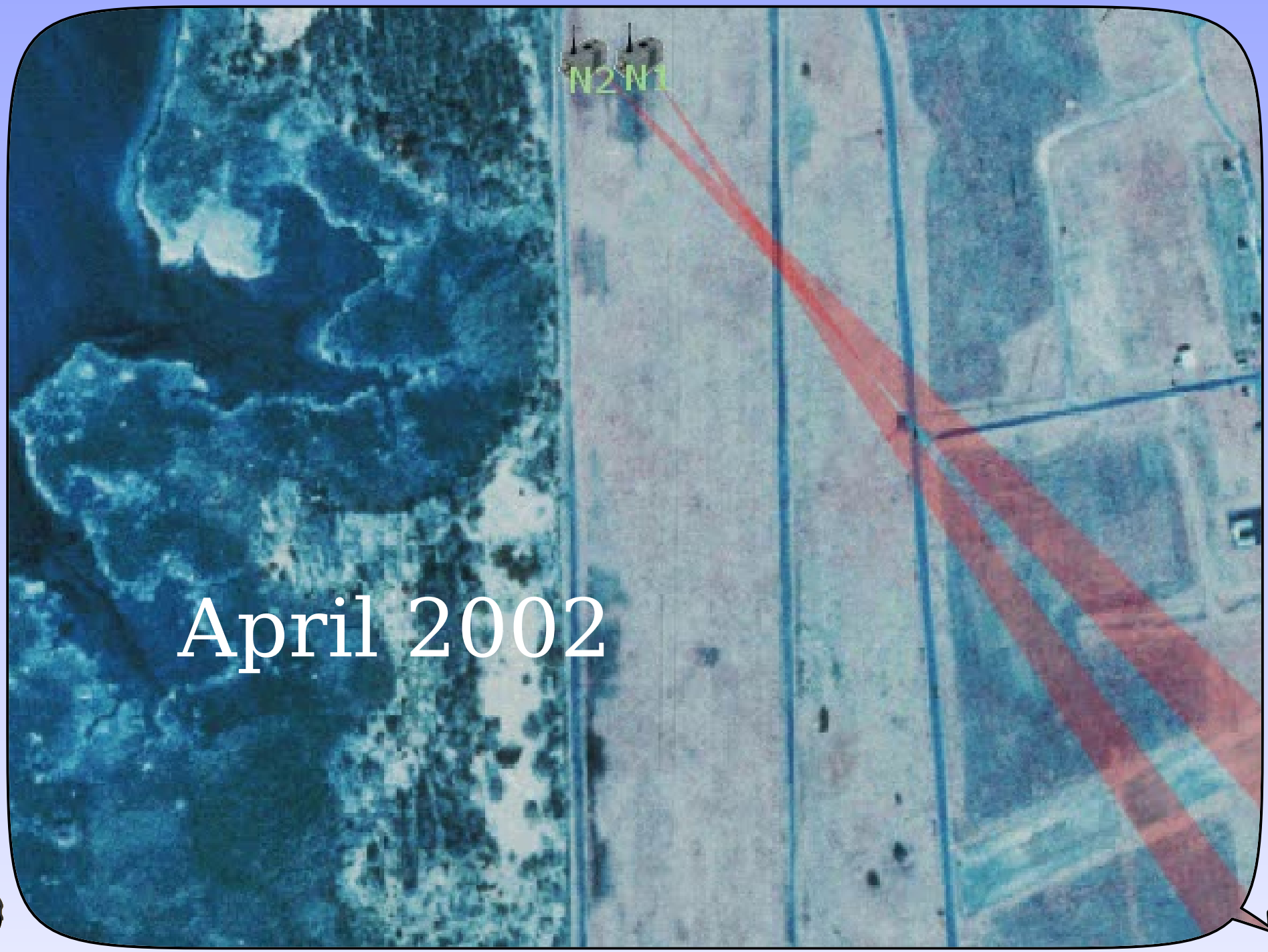
History


right
left
top
bottom



April 2002

Subject: Xr API strawman
To: Keith Packard <keithp@keithp.com>
Date: Tue, 4 Jun 2002 19:55:06 +0000

Hi Keith,

I read up a bit on PostScript. It's the obvious source of the proposals you were making.

I like it much better than GL as a model for Xr. It's cleaner in general, (IMHO). And PS has larger overlap with the primitives we want in Xr, (eg. bezier curves as opposed to just triangle meshes).

So, here's what I'm thinking of so far. This sticks fairly close to PostScript, (but with an explicit rather than an implicit state object).

Feedback welcome,

-Carl

```
 Opaque state structure */
ypedef struct _XrState XrState;

/* Functions for manipulating state objects */

/* XXX: Do we want to add `State' to any of these functions?
        eg. XrStateCreate, XrStateClone? */
XrState *XrCreate(void);
void XrDestroy(XrState *xrs);

void XrSave(XrState *xrs);
void XrRestore(XrState *xrs);

XrState *XrClone(XrState *xrs);

/* Modify state */
void XrSetPicture(XrState *xrs, XrPicture)
void XrSetColor(XrState *xrs, XrColor);

/* XXX: XrSetLineWidth, XrSetLineCap, XrSetLineJoin, XrSetDash, ... */

/* Path creation */

/* XXX: I'm thinking that it might make sense to do away with the
        notion of a "current path" in the state object and instead
        provide functions to manipulate an opaque XrPath object. This
        would add one more argument to XrStroke/XrFill, but it would
        unify support for PS "user paths" */

void XrNewPath(XrState *xrs);
void XrMoveTo(XrState *xrs, double x, double y);
void XrLineTo(XrState *xrs, double x, double y);
void XrClosePath(XrState *xrs);

/* XXX: XrRLineTo, XrArc, XrCurveTo, XrRCurveTo, ... */

/* Render current path */
oid XrStroke(XrState *xrs);
oid XrFill(XrState *xrs);
```

Committers

2002	2
2003	11
2004	12
2005	26
2006	54
2007	44

Backends

2002-06	Xlib
2003-02	image
2003-10	PostScript
2004-04	XCB
2004-09	glitz
2005-01	Win32
2005-01	PDF
2005-01	Quartz
2005-12	SVG
2005-12	BeOS
2005-12	directfb
2006-09	OS/2
2007-02	Quartz (*New!*)

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Bindings

C++
Common Lisp
D
Haskell
Java
.NET
Nickle
O'Caml
Perl
PHP
Python
Ruby
Scheme
Squeak

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News

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Mutex rework

GUADEC 2007, Birmingham, UK

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Error-handling

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Great malloc hunt

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PDF hotness

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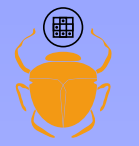

Xlib work queue

GUADEC 2007, Birmingham, UK

Lessons

If you don't *git* it,
you don't get it

If you don't *git* it,
you don't get it

It's the
Right Thing To Do

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Tiny commits

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Tiny commits

Earn points faster

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Tiny commits

Earn points faster

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Commit-access for everyone!

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Tricking others into doing *their* work

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Don't go AWOL

Why do we love cairo?

Why do *you* love cairo?