Designing the SLAC Information Architecture

A Workplace for Users

InterLab ‘96

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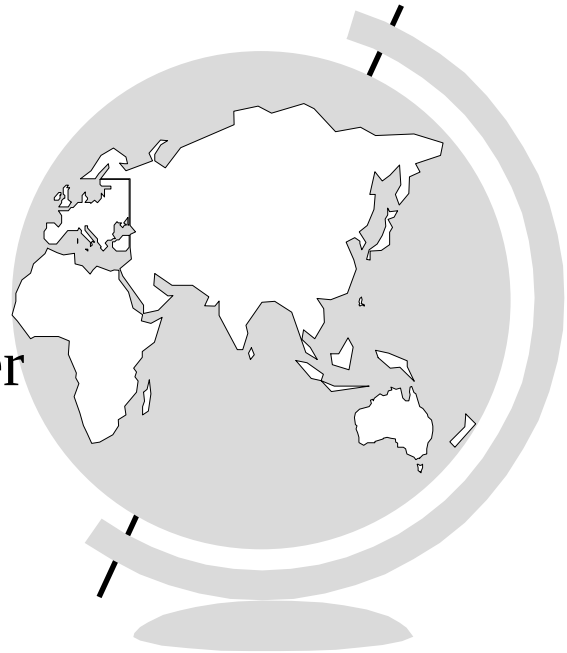
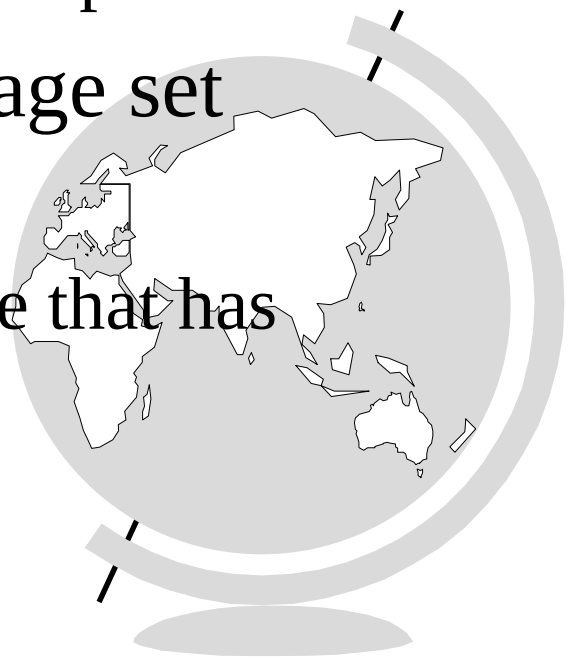
21 Aug 1996



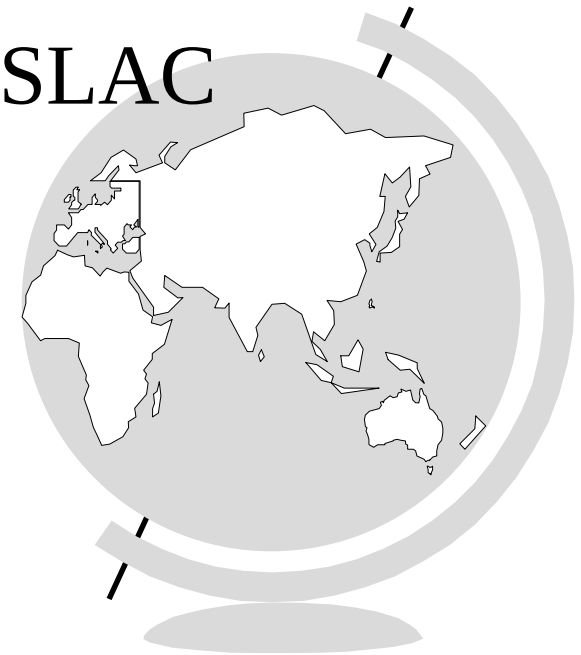
SLAC on the Web

- First WWW server in US in Fall, 1991
- SPIRES HEP Preprints first production application
  - Soon running thousands of accesses per month
- First production SLAC Home Page set installed November, 1993
  - Started an information architecture that has proven robust and extensible



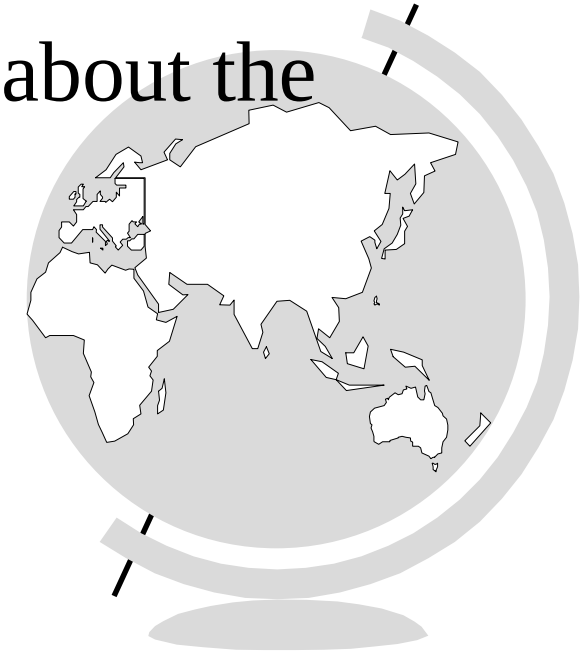
Goal A

- To make a WWW workplace that is
  - powerful
  - robust
  - comfortable
- For the diverse members of the SLAC working community
- Anyplace in the world.



Goal B

- To provide an introduction to SLAC that is
  - readily accessible
  - informative
  - polished
- For those interested in learning about the Laboratory



Goal C

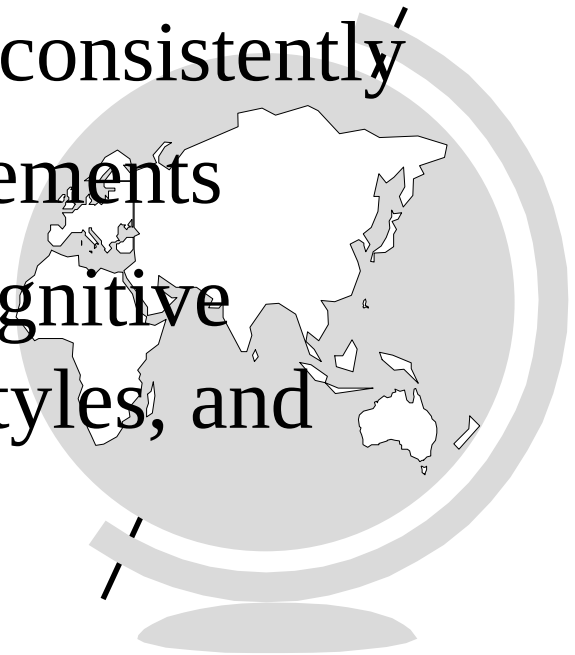
- To create a common information space
  - accessible to authors
  - maintainable by space owners

Major Aspects of Information Architecture

- **Page Architecture**: What's on which page and the relationships among pages
- **File Architecture**: The organization of the file space holding the pages

SLAC Page Architecture

- Layout broad categories as soon as uncovered
  - The trunk of the tree is much harder to change than the leaves or branches
- Use cross-links judiciously and consistently
- Promote a few standard page elements
- Provide for users in different cognitive states with different purposes, styles, and pre-existing knowledge

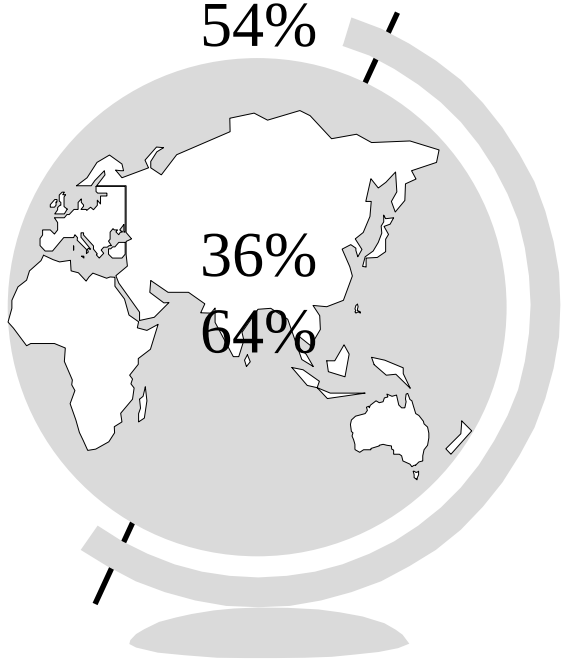


SLAC Three Core Page Model

- Welcome Page (default)
- Highlighted Home Page
- Detailed Home Page

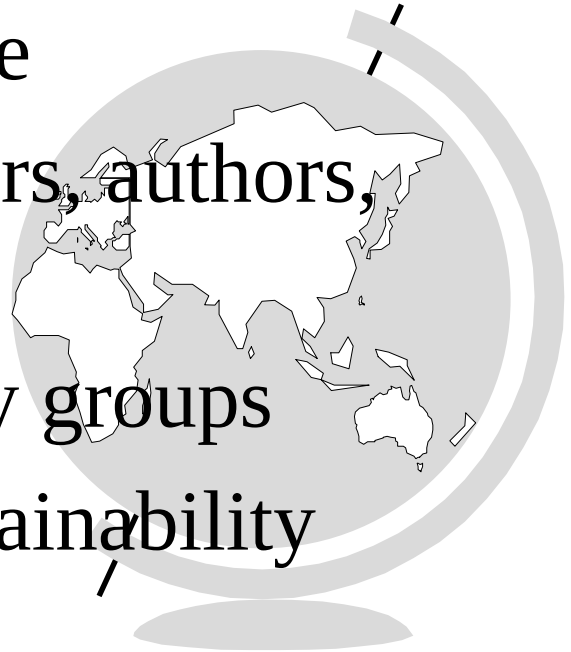
SLAC Home Page Usage Statistics

		April	July	August
All				
	Highlighted	54%	45%	46%
	Detailed	46%	55%	54%
slac.stanford.edu				
	Highlighted		37%	36%
	Detailed		63%	64%



SLAC File Architecture

- Provide one connected space
- Consider whether the information is "functional" or "organizational," *e.g.*, on HEP preprints or the Library group
- Consider whether the information should be globally or only locally available
- Choose names carefully, for users, authors, and area maintainers
- Create subdirectories for affinity groups
- Design for expansion and maintainability



SLAC High-Level Subdirectories

/afs/slac.stanford.edu/www

- /accel
- /archive
- /comp
- /discourse
- /esh
- /exp
- /grp
- /icon
- /pubs
- /slac
- /spires
- /welcome

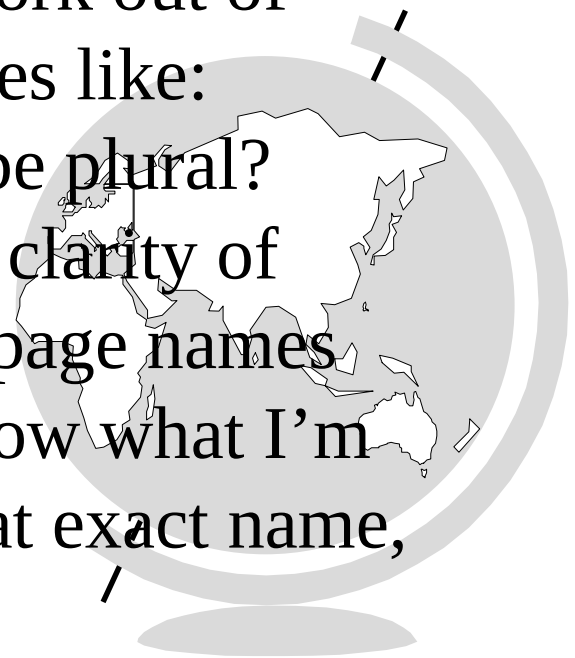
SLAC High-Level Sub-Subdirectories

/afs/slac.stanford.edu/www

- /comp
  - /c
  - /cernlib
  - /edu
  - /form
  - /mac
  - /net
  - /slacwide
  - /telecom
  - /unix
  - /winnt
- /grp
  - /ad
  - /arb
  - /bsd
  - /do
  - /kly
  - /pao
  - /scs
  - /techpubs
  - /th

A Developer's Feedback

– ... I noticed once again that I really appreciated certain conventions that you established and that we all follow quite consistently now, such [as] directory names in lowercase and singular. It really takes a lot of the guess work out of generating and remembering names like: should it be singular or should it be plural? Beyond that, I also appreciate the clarity of organization: grp and functional page names make a lot of sense to me: if I know what I'm looking for but not necessarily that exact name, I can usually find it.



Some Key Points

- Use one server with one primary production AFS file space
- Divide information into “functional” or “organizational” types
- Separate “workplace” from “introductory” information
- Anticipate the entire spread of information
- Obtain knowledgeable “owners” of pages and subject areas
- Make use of human factors research