

ADASS XII Meeting Web Site

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Abstract. We present the architecture, design, and implementation details of the ADASS XII web site. The web site was implemented in Zope, a high-performance application server, web server, and content management system rolled into one. Zope includes a robust, scalable object database, web services architecture, and powerful programming capabilities. The web site was built to conform to HTML, CSS, and accessibility standards as adopted by the W3C. This dynamic web site also taps into a back-end Sybase database while requiring a minimal amount of coding. We offer this site as a prototype web site suitable for reuse in supporting future ADASS meetings.

1. Sitemap

The ADASS sitemap was an integral part of the web development. The sitemap was created in the beginning to organize the constantly flowing and changing information of web sites. As developers began to construct each page of the ADASS site, the sitemap assisted them in building a navigation scheme that can easily and effectively display differing types of content. The sitemap helped developers align user-friendly navigation with effective content management.

2. Design

The design of the ADASS web site promotes usability and aesthetic harmony. At the top, the heading is composed of the ADASS title and logo. STScI graphic artists designed the logo more than a year ago. The logo places an image of a crab on the Crab Nebula. The left-sided navigation bar sits below the heading. The navigation bar uses colors that match the colors on the logo. The rest of web site remains white to convey clarity and simplicity.

3. Implementation

The ADASS site was built using Zope, a dynamic content management application. Given the nature of the conference, all collected information was divided into events, people, and instructions categories:

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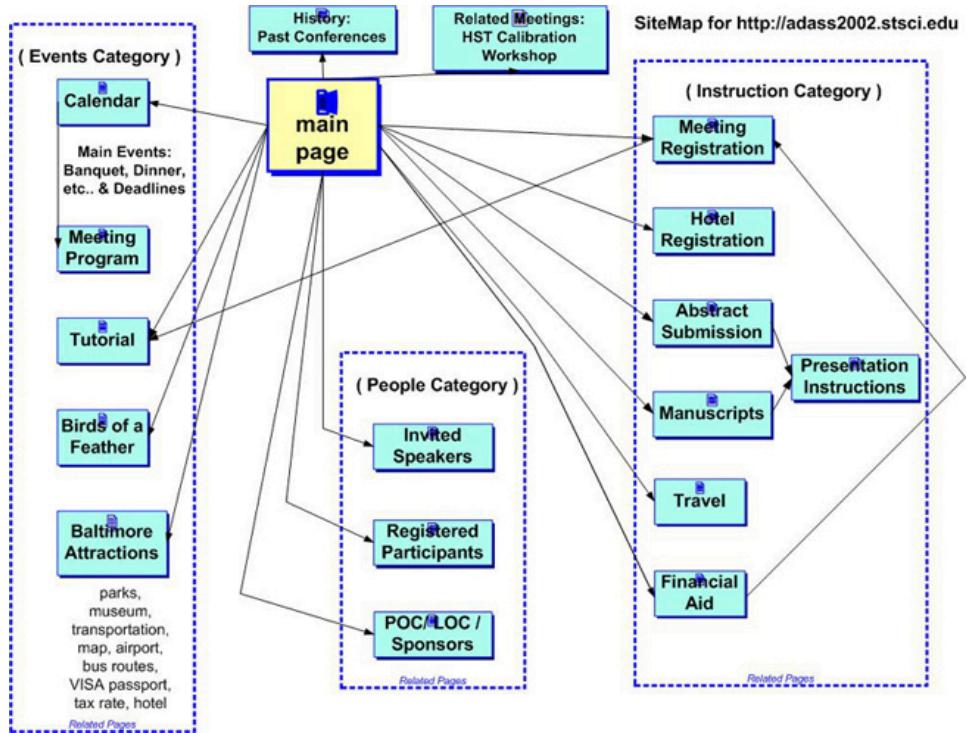


Figure 1. Sitemap of ADASS web site.

- The events category stored data that was relevant to the four-day conference such as the meeting program, calendar, BoF, and city attractions.
- The people category stored information on invited speakers, participants, and the organizing committees.
- The last category instructed users on conference, hotel, financial aid registration, travel options, and instructions for abstract submissions.

Each category folder contains the HTML pages that are retrieved by Zope to display. The navigation items are stored in Zope's tiny tables and are linked to the corresponding HTML page.

The ADASS developers use a Sybase connection to display a listing of registered participants and oral abstracts. Zope's built-in database connections have the ability to initiate SQL queries and display the query results.

4. Zope Standards

The ADASS web site was developed using Zope, a web building application that includes a built-in server, management interface, scripting language support, and relational database integration. The web-based server allows users to access and save files in Zope via the Internet. The content management tool allows users to organize information into a hierarchy of folders. One of the advantages of Zope is that it allows information from different folders to be retrieved and

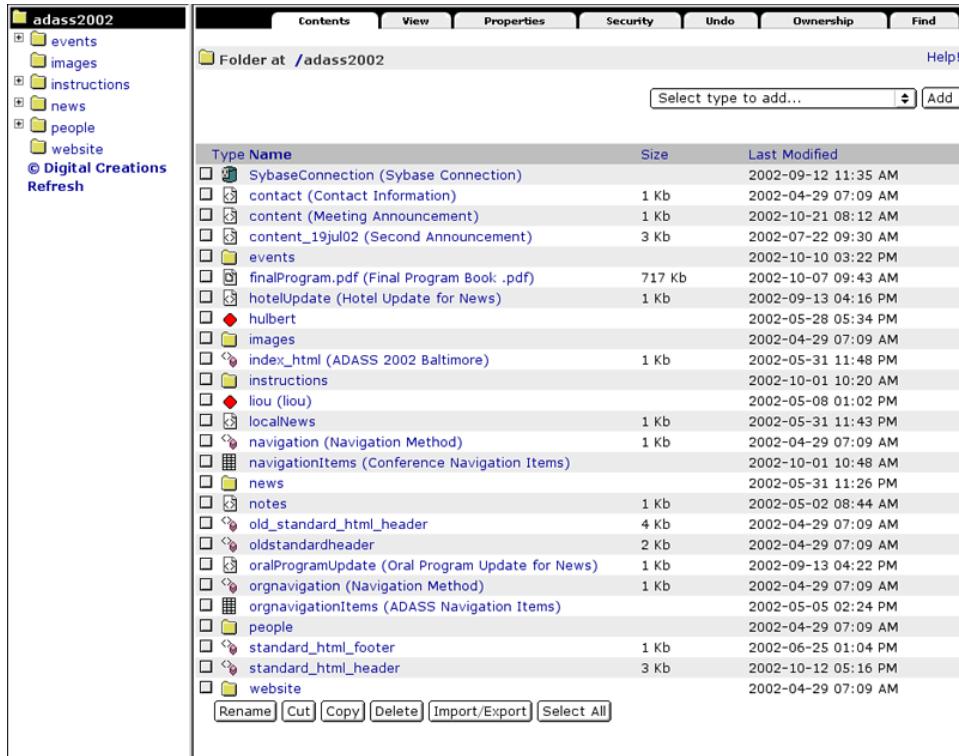


Figure 2. Glimpse into Zope.

displayed on the same web page. For example, the ADASS page that displays Baltimore Attractions is retrieving information from three different sources:

- The heading lives in the root folder object `standard_html_header`.
- The navigation information lives in both the `navigationItems` object and the `index_html` object.
- The content on Baltimore Attractions is stored in objects in the subfolder `/events/attractions/content`.

Zope's unique management environment allows users to manage the site's data, logic, and presentation right on the Web browser. Zope also offers powerful built-in tools such as a search engine, database connectivity, security, and site management tools. Zope supports a diverse range of standard including SQL, ODOC, XML, DTML, FTP, HTTP, CGI, and more.

5. Accessibility

The ADASS web site conforms to the specifications for HTML 4.01 Transitional, Cascading Style Sheet, and Level A of the Web Content Accessibility Guidelines 1.0. One of the primary goals for the ADASS web site is to promote accessibility and to make Web content more available to all users. Following these guidelines allows the ADASS users to find information on the Web more quickly.

Future ADASS Conferences

Place Title Here

Place Date Here



Figure 3. The ADASS web site serves as a prototype for future conferences.

6. Prototype

The ADASS web site is designed as a prototype for future ADASS conferences. The unique Zope content management application divides web content from the site design. This division allows developers to easily locate and change content.

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References

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