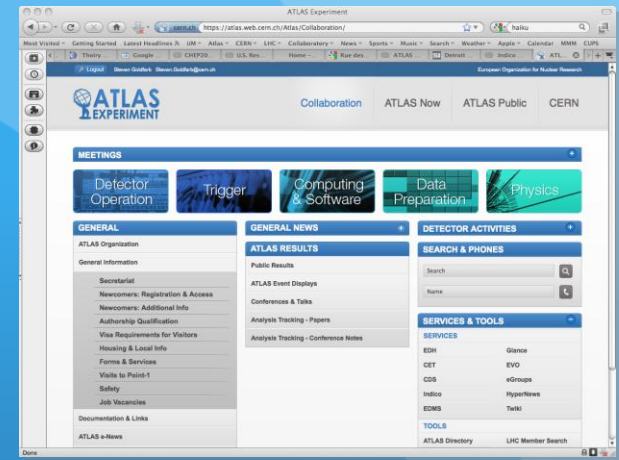# CERN Content Management System Support
ATLAS Requirements

S. Goldfarb – *19 May 2010*
(On behalf of the ATLAS Collaboration)

ATLAS Web Usage

- Internal Collaboration Pages
  - News, Meetings, Announcements, Results
  - Operation Pages
  - Project Coordination Sites
  - Analysis Discussion and Document Sharing, Tracking
  - Communication via Text, Image, Video, Webcast
  - Varying Levels of Authorization (By E-Group)

- Outreach Pages
  - Multimedia Serving, News Feeds, Blogs, Announcements

- Database Interfaces
  - Typically Python, PHP, Perl on Oracle, MySQL

ATLAS Web Environment

- Multi-Platform Development
  - Linux, Mac, Windows
  - Web-Based, Dedicated Editor, Application
  - Coding in html/css
  - TWiki Pages
  - SharePoint Sites

- Cross-Browser Usage
  - Firefox (Mozilla), Safari, Internet Explorer

- A Few ATLAS Statistics
  - Web: 1100 html, 132 php, 70 py
  - Public TWiki: 8712 topics, 51,871 attachment
  - Protected TWiki: 2931 topics, 24,745 attachm
  - SharePoint: 99 sites, 36,689 items

ATLAS EXPERIMENT

Problems We Are Trying To Solve

- Development & Maintenance
  - Professionals now trained to develop with CMS
    - ~ 1kCHF to develop site using templates
    - ~ 10kCHF to develop site using html/css
  - Maintenance by Conveners, Coordinators, Users
    - Changes to Content & Design
    - Variety of Platforms & Browsers
    - Need Web-Based Development Tools

Problems We Are Trying To Solve (2)

- Missing or Partial Functionality
  - Searchability, Findability & Navigability
  - RSS Capability
  - Consistent Authorization Handling
  - Database Interfaces

- Improved Web Management
  - Consolidation of Existing Sites
  - Creation of Consistent, Common Environment
  - Reduction of Data, Information Replication
  - Identification, Removal of Stale Content

Content Management Systems

- What Is A CMS To ATLAS?
  - Collaborative Web Development & Maintenance
  - Tools For Data & Information Sharing
  - Tools For Collaborative Communication
  - Tools For Workflow Management

- What Should A CMS Do For ATLAS
  - Facilitate Maintenance
  - Reduce Content Replication
  - Provide Platform & Browser Independence
  - Create Clean, Standard-Compliant (xhtml) Web Pages
  - Improve Searchability, Findability, Navigability
  - Provide Forward Compatibility
  - Help Us To Catch Up With The Rest Of The World

Constraints Of Existing Systems

- What Must Be Supported (And Improved)
  - Interfaces to Oracle
  - Interfaces to CDS (Or Equivalent System)
  - Interfaces to Indico
  - Interfaces to TWiki (Or Means To Migrate)
  - Information Protection Via E-Groups (Or Equivalent System)

Expectations From CERN Infrastructure

- Support LAMP (Linux, Apache, MySQL, PHP)
  - This Forms Basis For Installation Of A CMS
    (already in place for TWiki)

- Install & Support One OpenSource CMS
  - Install Some Basic Interfaces
    - SSO, CDS, Indico, Oracle
  - Create Some Example Templates
  - Provide Expertise, Backups
  - Provide Means To Migrate SharePoint, Replace TWiki
  - Potential OpenSource xhtml-compliant Candidates:
    - Joomla! (Possible Oracle Problem), Drupal, Plone (Python, PHP)

References

- ATLAS Web Pages
  - Home Page (New Design)
    http://cern.ch/atlas
  - Outreach Site (Maintained at LBNL)
    http://atlas.ch
  - Collaborative Tool SharePoint Site
    http://cern.ch/atlas-collaborative-tools
  - ATLAS Live Webcast SharePoint Site
    http://cern.ch/atlas-live

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