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NIST Health Care Standards Landscape Project

ANSI HITSP Meeting

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Tom Rhodes – Project Lead

Information Technology Laboratory

Software Diagnostics & Conformance Testing Division

Health Care Standards Landscape (HCSL)

- Background
  - The Health Care Standards Landscape was developed as part of the NIST Information Technology Laboratory's Health Information Technology (HIT) project, which pursues measurements, standards, and technology to improve the quality, safety and cost-effectiveness of healthcare delivery systems and processes.
  - The HCSL or “Landscape” is prototype capability jointly funded by NIST and AHRQ.

Health Care Standards Landscape
Motivation

- Standards are key to open, interoperable healthcare systems and the deployment of the NHIN.
- Knowledge of the healthcare standards' landscape is essential to informed adoption, deployment, and use.
- But, we have issues…
  - Multiple standards – which standards exist or are being developed? What do they do? Where are they used?
  - Who's on first? Who's developing standards? Who's using them? What profiles or portfolios of compatible standards are being used and by whom?
  - Monitoring the evolving standards' landscape is an arduous and labor-intensive effort. How can this be facilitated?
- The HCSL or Landscape is intended to address these issues.

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Health Care Standards Landscape
Purpose

- Provide a Web-based capability for publishing and discovering information on healthcare standards, organizations, applications, and related information that enable developers and stakeholders to share information that can improve awareness, development, coordination, adoption and use of compatible standards and tools.

Note: *the Landscape does not contain actual standards, but provides information about healthcare standards, and other related information, and links to where standards can be obtained.*

Health Care Standards Landscape
Features

- Users may publish, search, and manage information related to healthcare standards.
- All users can browse and query DB as ‘Guests.’
  - Boolean Query using Indexed Data Fields
  - Search String-based Query on Name or Keyword
- Users may register to use a login name and password, and may change their password.
- Registered users with administrative permissions can add, update and delete content and manage associations between content.
- Landscape content can link to other Web resources.

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Health Care Standards Landscape
Features - continued

- User Guide can be downloaded (PDF)
  - User Guide as NIST report and Web pages (HTML) soon.
- Detailed Landscape FAQ
- Extensive list of healthcare-related acronyms and links.
- Data content may be entered or updated through screen-forms or imported using XML files.
- Data content may be formatted using HTML tags (HTML Editor included).

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Health Care Standards Landscape
Database Content

- The Landscape DB contains content about:
  - Documents: e.g. standards, reports, position papers, policy, terminology, rules, etc.
  - Organizations: e.g. SDOs, consortia, government agencies, companies, non-profits, etc.
  - Portfolios (Standards Profile): e.g. CHI, C-f-H, HL7, NCVHS…
- And about 'Associations' (relationships) that exist among these entities:
  - Document - Document
  - Document - Organization
  - Document - Portfolio
  - Organization - Organization
  - Organization - Portfolio
  - Portfolio - Portfolio

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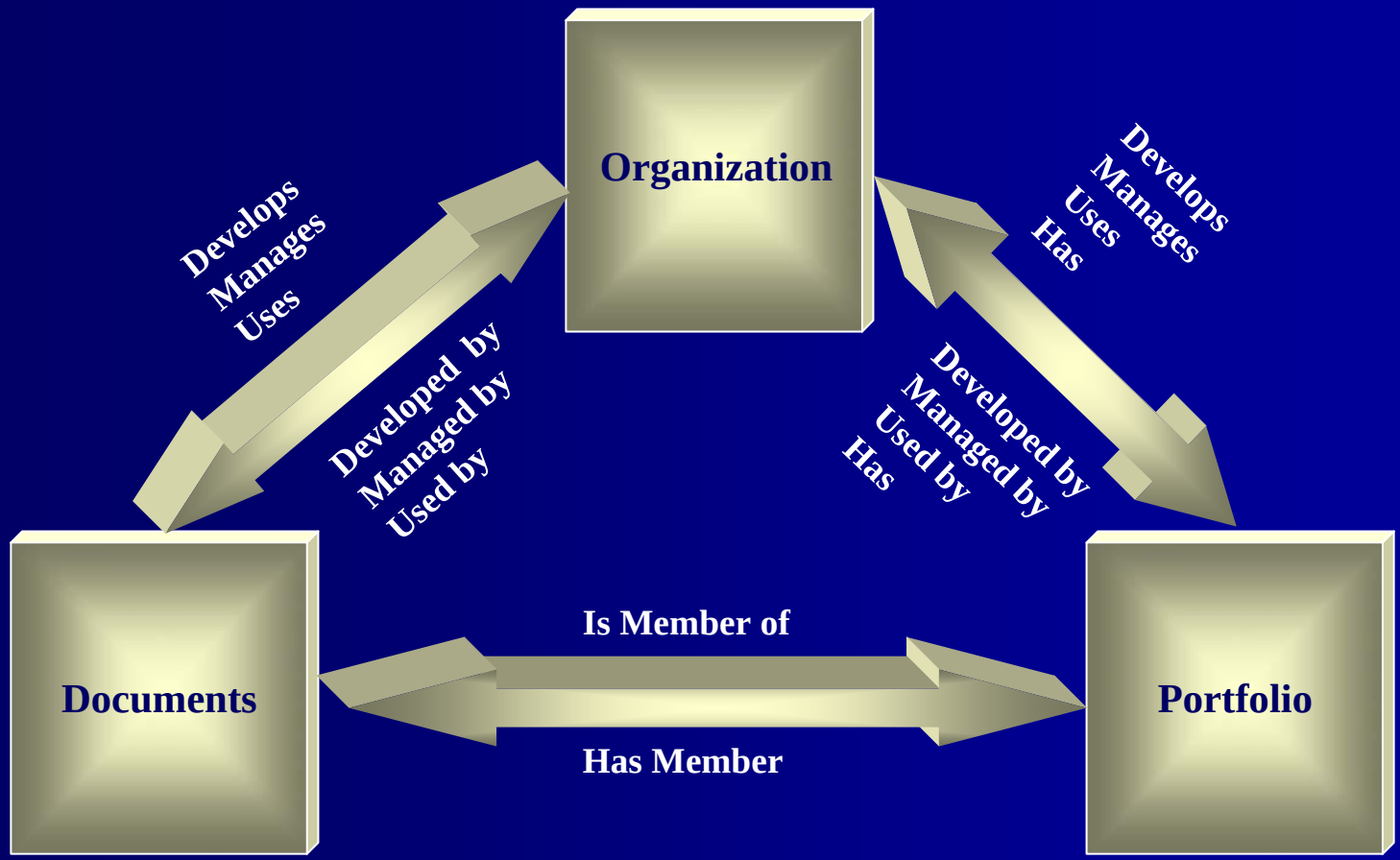
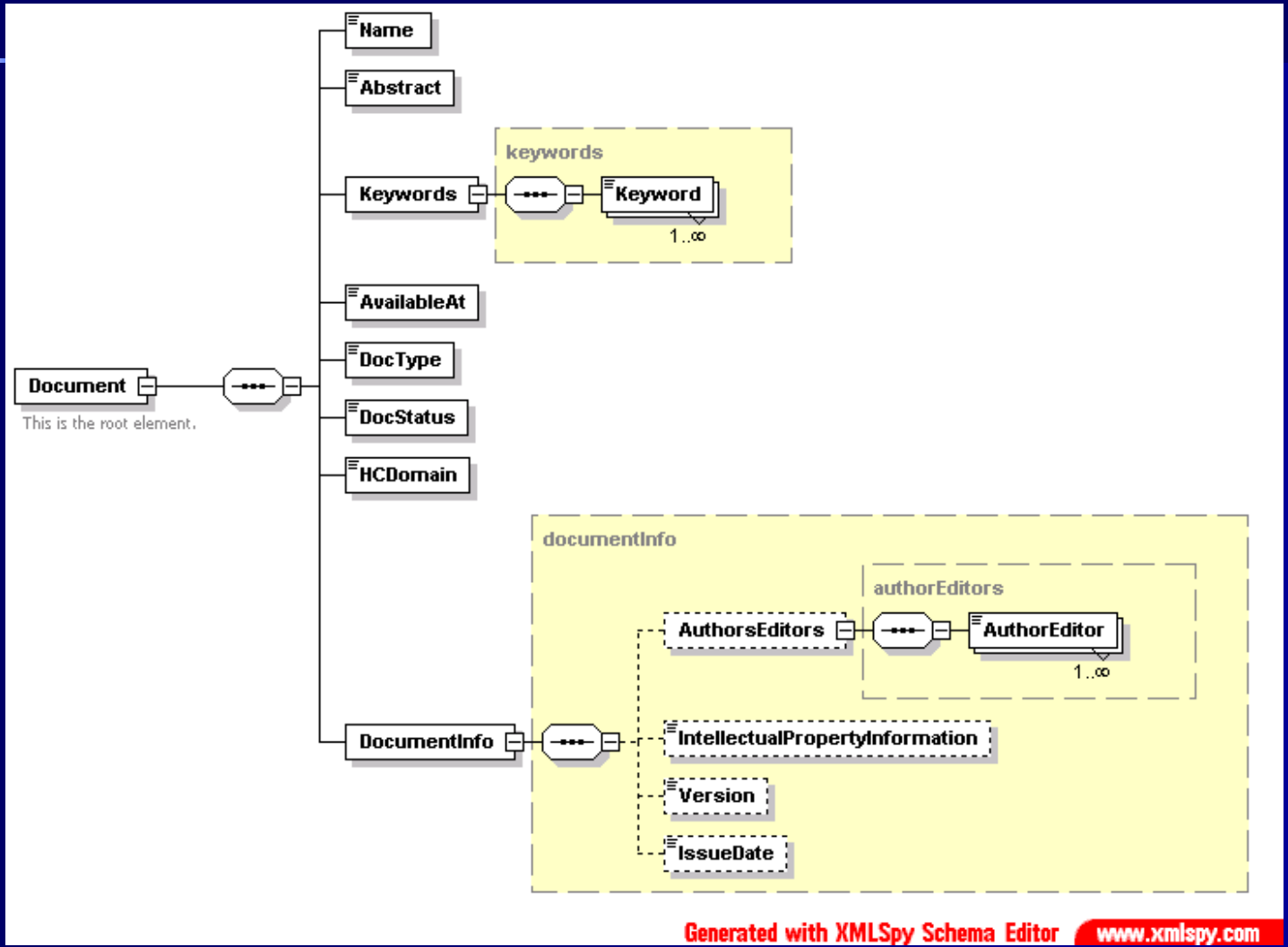
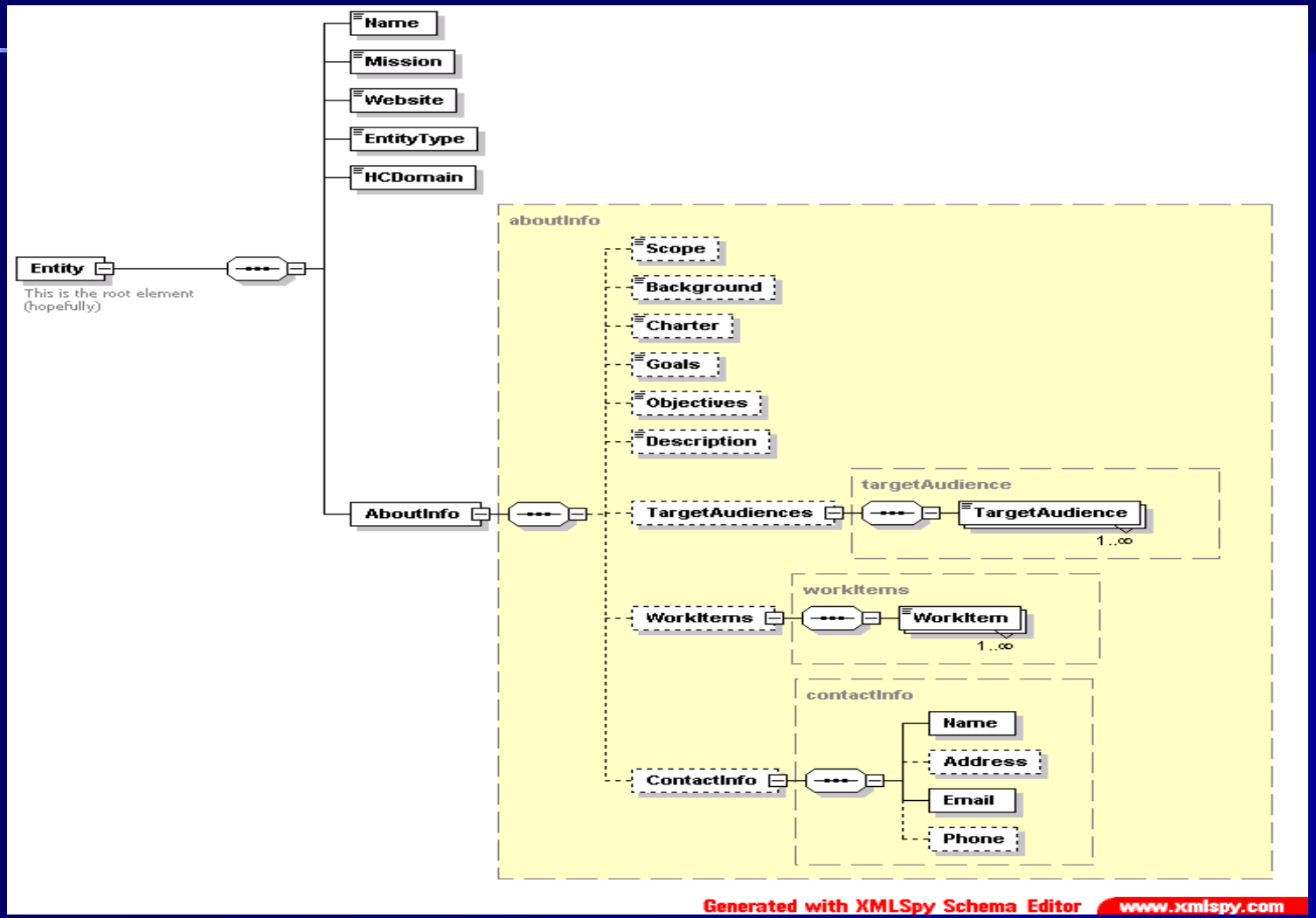
Health Care Standards Landscape
Content Types and Sample Associations



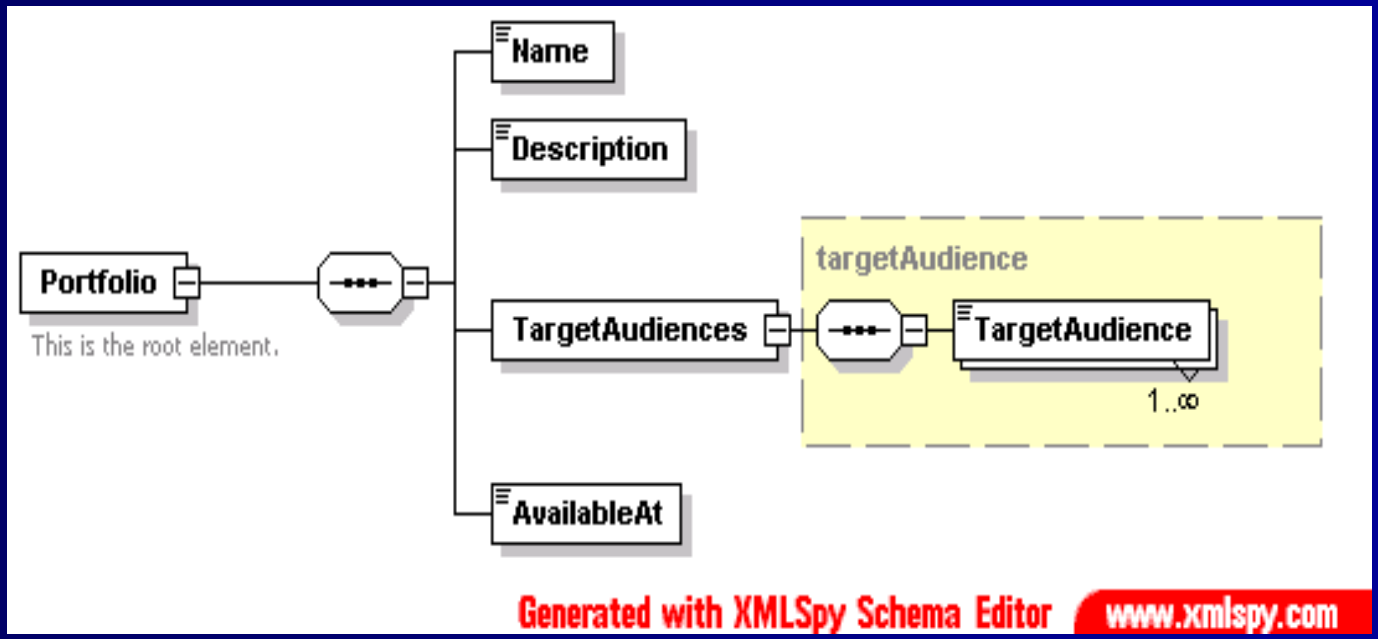
Health Care Standards Landscape
Document Model



Health Care Standards Landscape
Organization Model



Health Care Standards Landscape
Portfolio Model



HCSL Home Page

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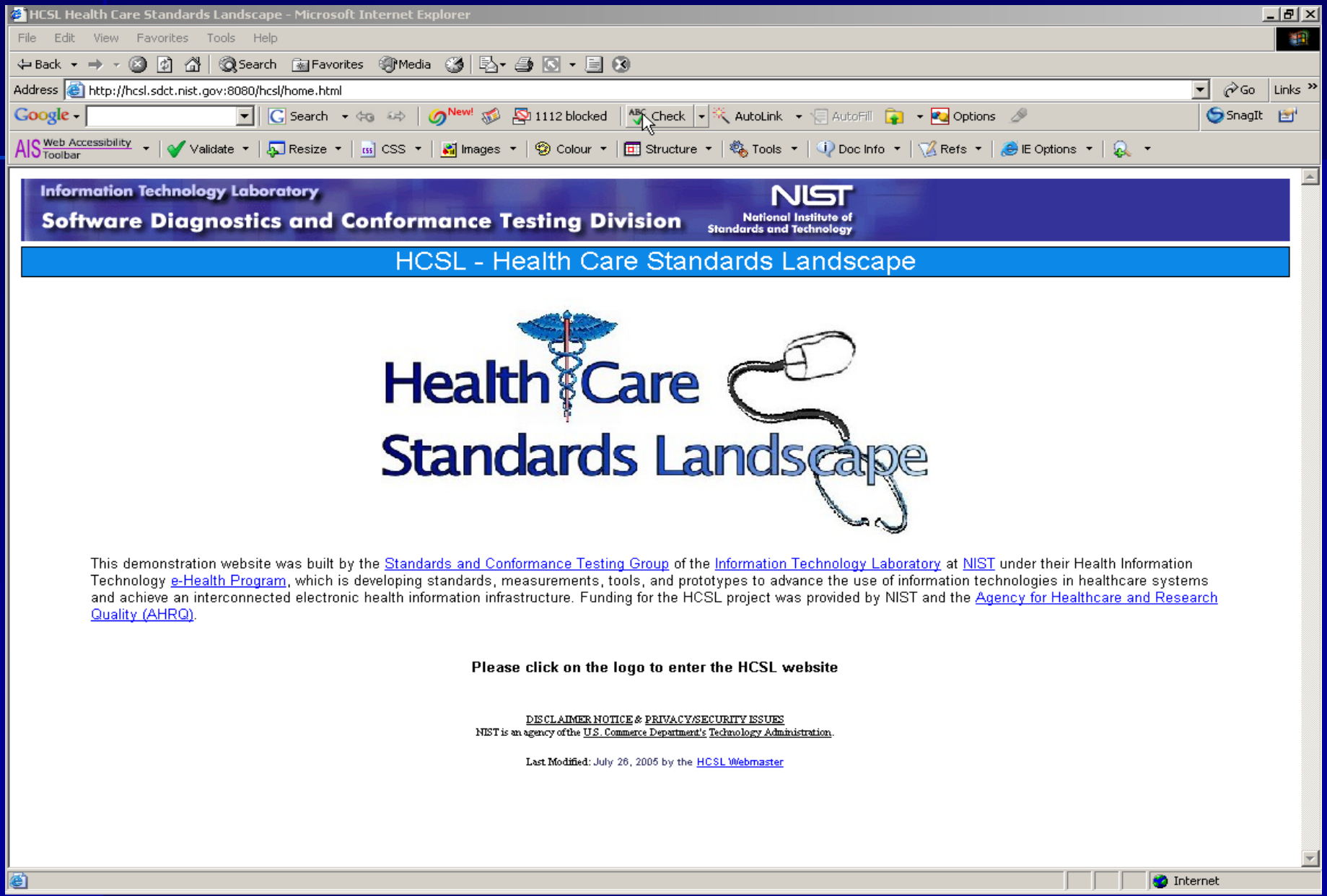
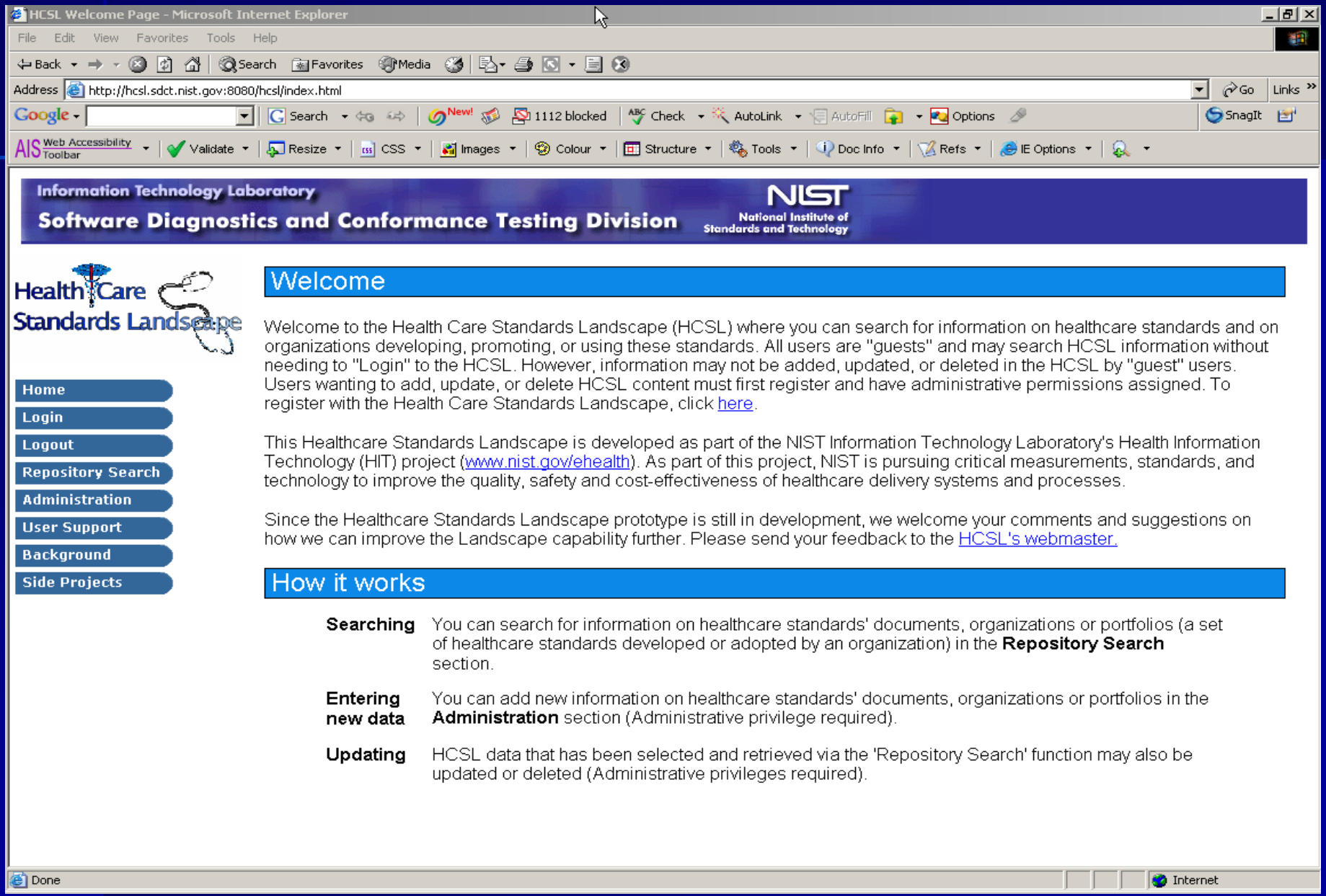


HCSL Menu Page



HCSL Document Search Page

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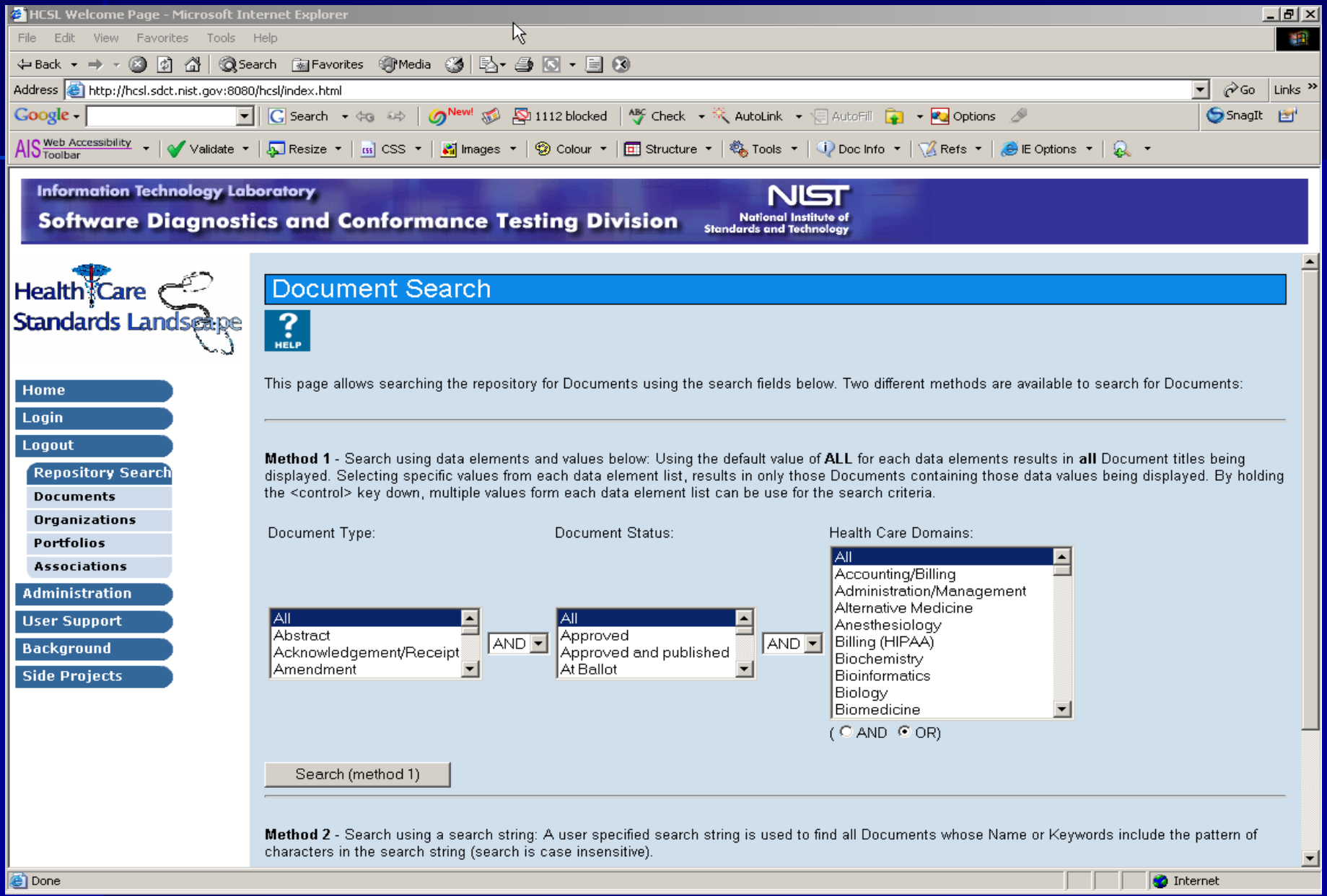

HCSL Document Search Results

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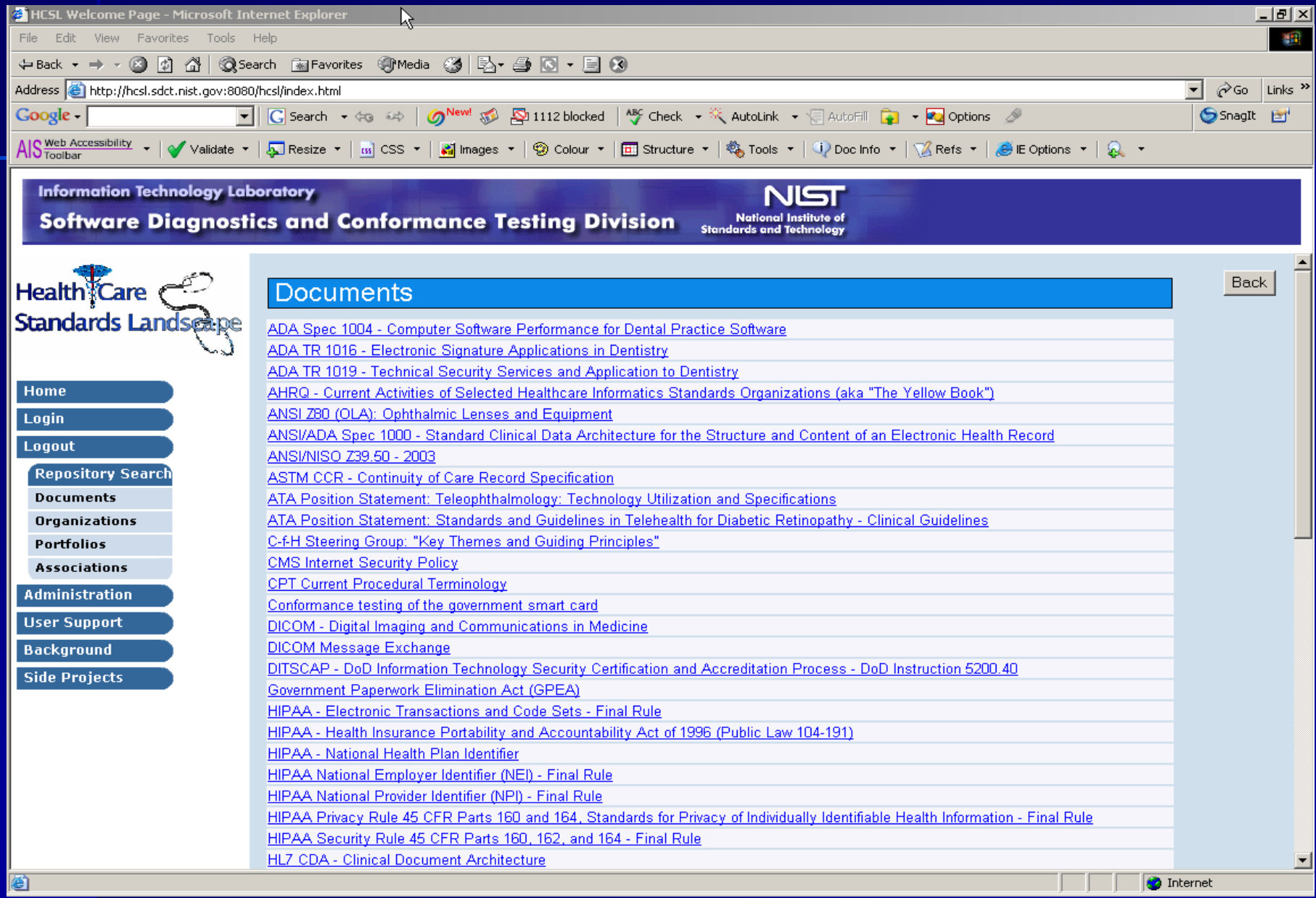

HCSL Document Content

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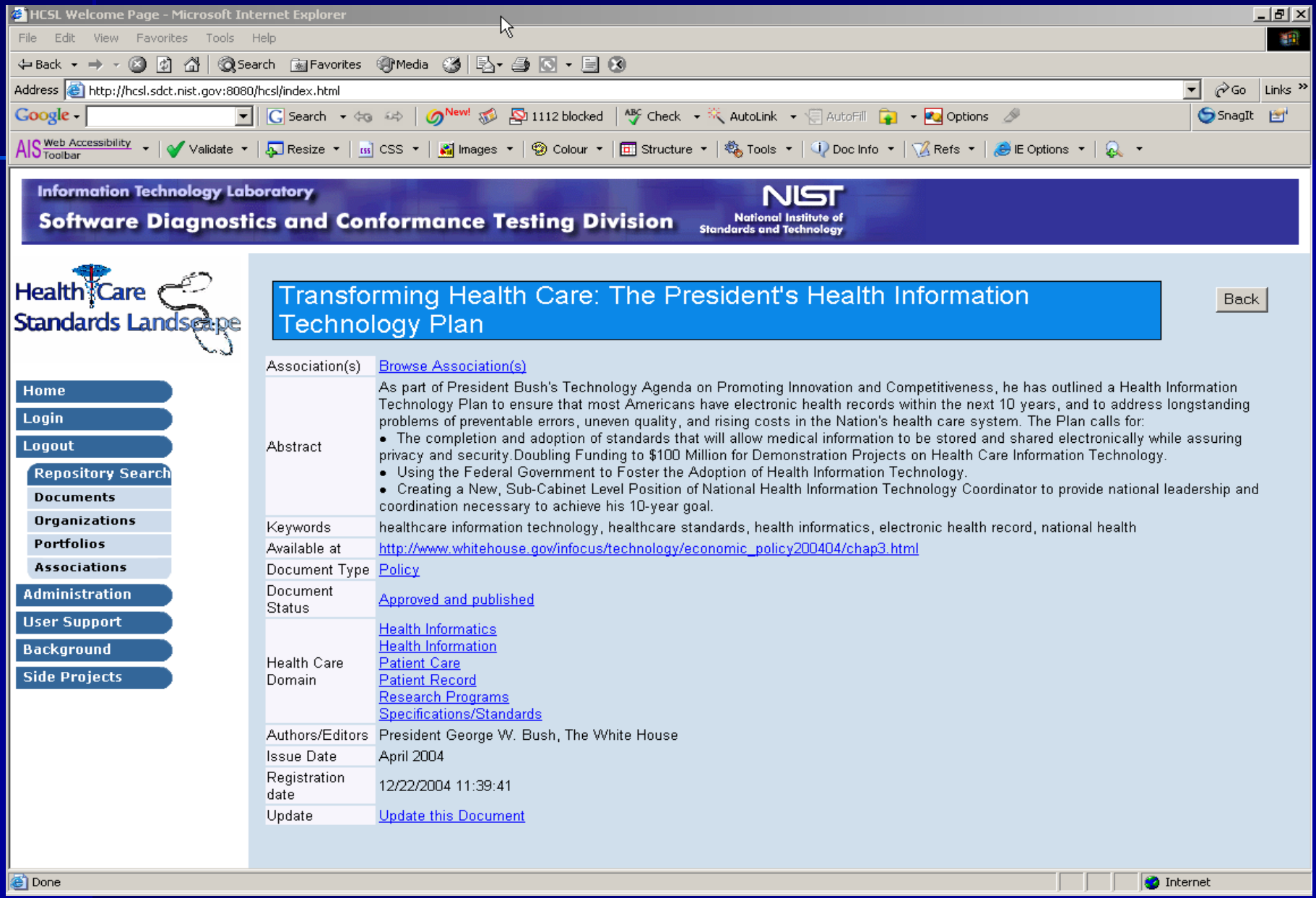
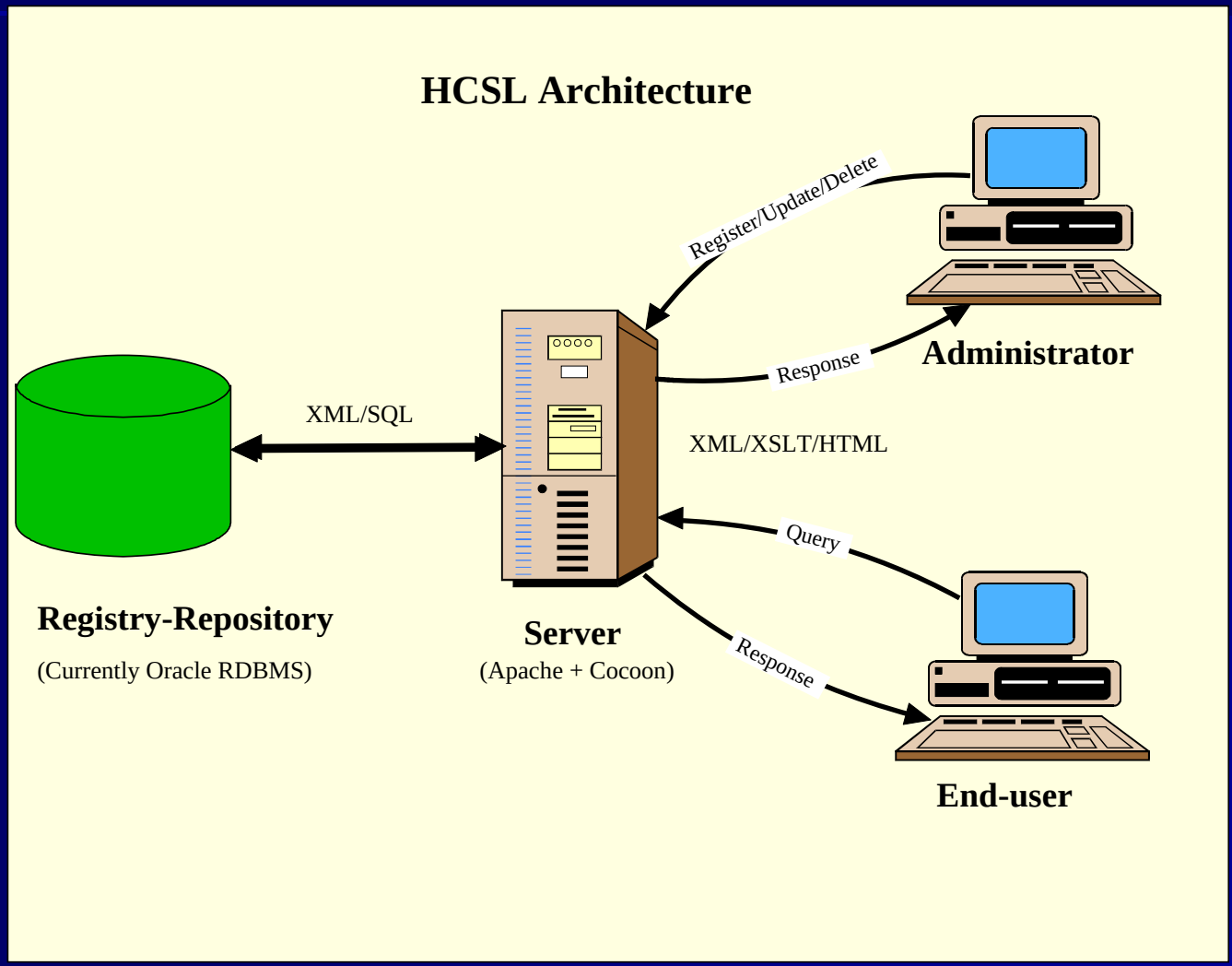


Health Care Standards Landscape
System Configuration



Health Care Standards Landscape Status

- Landscape implemented and populated with sample data on standards, organizations, & standards portfolios.
- Available for use on public NIST Web Server.
- NIST currently maintaining Landscape and developing enhancements.

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Health Care Standards Landscape
Planned Enhancements

- Capability for named groups and sub-groups with their own administrators to manage group or subgroup membership and content.
- Capability for administrators and group members to control content use by other users.
- Capability for users to join multiple groups/subgroups.
- Capability for users to view groups/subgroups and switch between those of which they are members.
- Enhanced association-based searching
- New Help menus for Landscape features.

Health Care Standards Landscape Plans

- Work with partners to:
  - Identify new requirements and capabilities, e.g. features, data content, data structure, vocabularies, value-sets, etc...
  - Enhance Landscape schema, software, interface, and database capabilities as required.
  - Invite organizations to use and evaluate Landscape, and to add and manage their own content.
  - Maintain prototype Landscape operations and provide user support.
  - Explore future Landscape transition from NIST to external management and operation.

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Health Care Standards Landscape

- Contacts:
  - Tom Rhodes: 301 975-3295, trhodes@nist.gov
  - Lisa Carnahan: 301 975-3362, lcarnahan@nist.gov
  - Lynne Rosenthal: 301 975-3353, lrosenthal@nist.gov
- Project Information:
  - http://www.itl.nist.gov/div897/docs/hc_roadmap.html
  - http://www.nist.gov/ehealth
  - http://www.itl.nist.gov/div897/ctg/it_healthcare/index_ithc.html
- HCSL Web Page: http://hcsl.sdct.nist.gov

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Finale

- Demonstration
- Questions & Discussions