https://www.i2b2.org/software

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New Features in 1.4

- CRC Server-side Analysis plug-ins
- Patient breakdowns can be viewed for children of any parent term
- Role based access and compete patient query auditing
- Obfuscation of aggregate patient numbers for certain roles
- Security tokens with limited lifetimes replace password
- Full support of Patient Identifier encryption management
- Paging of Patient Data Object
- Export Tools – raw and patient oriented
- Eclipse Plug-in distribution and install automation
- Replacement of Gridsphere with web services and AJAX client
- Microsoft Active Directory integration
CRC Server-side Analysis Plug-ins

Run on server of CRC Patient Database
Use same input and output tables as regular queries
Started from client or as scheduled daemon
Independently developed programs
Accommodates any command-line or remotely executed program
CRC Server-side Analysis Plug-ins

- Breakdowns of patient attributes
- Two group comparisons
- Many potential future analyses offerings
Patient Counts Plug-in - Patient breakdowns can be viewed for children of any parent term
Patient Counts Plug-in - Patient breakdowns can be viewed for children of any parent term
Each user has at least two roles per project, a role that determines data access rights, and a role that determines project management rights. Other roles may be freely created which are delivered by the PM cell web service.

Implementation of access restrictions for custom roles can be checked in key locations of optional cells.
Obfuscation of aggregate results
Security tokens and timeout of logon
Session Token

- Saved in Database
- Timeout set by client
- <security>
  <domain>HarvardDemo</domain>
  <username>i2b2</username>
  <password token_ms_timeout="1800000" is_token="true">SessionKey:CLCD6cVHLvXEOOb3kuyHy</password>
</security>
Exporting Data and paging of Patient Data Object

Select Data

Determine Output Format

Select columns And table
New PM in webclient

- Adding and Deleting Projects
New PM in webclient

- Adding and Deleting Users

![i2b2 Query & Analysis Tool](image_url)
New PM in webclient

- Adding and Deleting Cells
Active Directory Setup

- Can be Global for everyone or specific per user
- Set in User Params or Hive Params

- Param_name_cd
  authentication_method VALUE NTLM
  domain {Your pdc domain}
  domain_controller {Your ip/host for domain controller}
Eclipse plug-in distribution with automated upload and install
Towards completion of Version 1 = August 2010

- Enterprise features
  - Data mart request form
- Note annotation
- Further examples of CRC analyses plug-in support
- Terminology support
  - Small, hand created terminologies
  - Large, enterprise supported terminologies
- Fully expressive data model
  - Queries within other dimensions
  - Same instance and visit queries
  - Patient sets within queries and queries within queries
- Derived values
  - From natural language processing
  - Support for temporal queries
Set of patients is selected through Enterprise Repository and data is gathered into a data mart
Data mart request form
Note annotation
Text Analyzer Plug-in
Terminology support - Small, hand created terminologies
Focus of version 2

- Specific focus for analyses plug-ins
  - Genomic correlations with phenotypes
  - Comparative Effectiveness Analyses

- Methods to perform distributed analyses using plug-ins

- Import of standard terminologies in collaboration with NCBO

- Methods to support Natural Language Processing

- Connection to PHI
  - Identity management cell modeled after CRC to manage PHI
  - Enterprise services driven by requests containing PHI
Version 2 - Looking for Community Contributions

- Connections to caBIG
- Connections to BIRN
- Loading data from HL7
- Contributed Data Visualizations
- Contributed Data analyses
- Ties to bio-specimens
- LDAP integration with project management
- Integration of Master Patient Index
Version 2 - Tools for Community

- JIRA Bug Tracking
- Web site for i2b2 distribution and documentation
- Source Code Subversion Repository
- Shared Wiki Documentation
- Open forum software
Version 2 – Value to i2b2 implementations

- Product Management
- VM Distributions
  - Support for self-configuring distributions
  - Built-in security for distribution
  - Ability to deploy to enterprise ESX servers

Workbench on Local clients

i2b2 Virtual Machine

DB’s on Local Servers
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