

# Welcome to the i2b2 Community Wiki

- i2b2 is an open-source clinical data warehousing and analytics research platform used at over 250 locations worldwide. i2b2 enables sharing, integration, standardization, and analysis of heterogenous data from healthcare and research.
- The i2b2 Community is a life-sciences-focused open-source, open-data community. This wiki is the central place for the i2b2 Community to communicate and share projects with other users. Here you will find the latest information on the i2b2 Software, what others in the community are doing, and find resources to help answer any questions you may have about the i2b2.
- i2b2 is part of the [i2b2 tranSMART Foundation](#), which brings together an NIH-funded enterprise clinical research platform (i2b2) and pharma-developed software for translational research studies (tranSMART).

[Project Management](#)

[Ontology Management](#)

[Data Repository \(CRC\)](#)

[File Repository \(CRC\)](#)

[Workflow Framework](#)

[Identity Management](#)

[i2b2 Web Client Application](#)

[i2b2 Workbench Application](#)

## i2b2 Hive

Older, unsupported add-ons are on the [Archived Optional Components](#) page.

- **Project Management**
- *Core Server Side i2b2 Cell*
- This cell is used to provide user authentication and manage group and role information. It also keeps track of what cells are part of the hive.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Design Document](#)
- [Go to Download](#)
- **Ontology Management**
- *Core Server Side i2b2 Cell*
- This cell manages the terminology and knowledge information typically used in the hive. It is contacted for, or distributes knowledge to, cells during most of the hives transactions.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Design Document](#)
- [Architecture Document](#)
- [Go to Download](#)
- **Data Repository (CRC)**
- *Core Server Side i2b2 Cell*
- This cell holds the phenotypic and genotypic data of the hive in a structured format. Data queries and visualizations are available through this cell.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Design Document](#)
- [Architecture Document](#)
- [Plugin Analysis Document](#)
- [Go to Download](#)
- **Workplace Framework**
- *Core Server Side i2b2 Cell*
- This cell is used to process information in steps through various parts of the hive. Most processed information will come to reside in the Data Repository Cell or as a display to the user.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Design Document](#)
- [Architecture Document](#)
- [Go to Download](#)
- **i2b2 Web Client**
- The i2b2 Web Client is a collection of client-side components designed as an YUI AJAX-based plug-ins that communicate with i2b2 Cells and allow the investigator to query and display the data of the hive.
- [Install Guide](#)
- [Project Request Guide](#)
- [Go to Download](#)
- **i2b2 Hive**
- The Hive is a collection of software modules that create a system to allow the use of patient data for research.
- [i2b2 Hive Introduction](#)
- [i2b2 Message Wrapper](#)
- [i2b2 Patient Data Object](#)
- **i2b2 Workbench**
- The i2b2 Workbench is a collection of client-side components designed as Eclipse-based java plug-ins that communicate with i2b2 Cells and allow the investigator to query, analyze, and display the data of the hive, generally in greater depth than the web client.
- [Installation Guide](#)
- [Tutorial Document](#)
- [Developer's Guide](#)
- [Go to Download](#)
- [Go to Download Source](#)
- **File Repository**
- *Core Server Side i2b2 Cell*

- This cell holds large files of data including radiological images and genetic sequences. The files are generally referenced from the Data Repository Cell.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Architecture Document](#)
- [Go to Download](#)
- **Identity Management**
- *Core Server Side i2b2 Cell*
- This cell is used to manage a patient's protected health information in a manner consistent with the HIPAA privacy rule. Patient data is available only as a HIPAA defined "Limited Data Set" to most of the hive.
- [Installation Guide](#)
- [Messaging Guide](#)
- [Design Document](#)
- [Architecture Document](#)
- [Go to Download](#)

| Documentation  | Get Software  |                    |         | Announcements |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |
|--|---|--------------------|---------|---------------|------------------------------|---------------------|--------------------|----------------------------|---------------------|--------------------|-----------------|---------------------|--------------------|--------------------|---------------------|--|---|
| <p><b>Getting Started</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Installation Guide</a></li> <li>• <a href="#">Upgrade Guide</a></li> <li>• <a href="#">Videos and Tutorials</a></li> <li>• <b>NEW</b> - <a href="#">i2b2 Common Data Model Guide</a></li> <li>• <b>NEW</b> - <a href="#">Bundle Install Guides (beta version!)</a></li> </ul> <p><b>For Developers</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Server-side Messaging</a></li> <li>• <a href="#">Server Architecture</a></li> <li>• <a href="#">Server-side Design</a></li> <li>• <a href="#">Web Client Design</a></li> <li>• <a href="#">Release Notes</a></li> </ul> <p><b>For End Users</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Web Client Help</a></li> <li>• <a href="#">Workbench User Guide</a></li> </ul> | <table border="1"> <thead> <tr> <th data-bbox="446 680 578 730">Software</th> <th data-bbox="578 680 695 730">Version</th> <th data-bbox="695 680 831 730"></th> </tr> </thead> <tbody> <tr> <td data-bbox="446 730 578 884">i2b2 Core Server Source Code</td> <td data-bbox="578 730 695 884">1.7.12a (May, 2020)</td> <td data-bbox="695 730 831 884"><a href="#">Do</a></td> </tr> <tr> <td data-bbox="446 884 578 1037">i2b2 Core Data Source Code</td> <td data-bbox="578 884 695 1037">1.7.12a (May, 2020)</td> <td data-bbox="695 884 831 1037"><a href="#">Do</a></td> </tr> <tr> <td data-bbox="446 1037 578 1190">i2b2 Web Client</td> <td data-bbox="578 1037 695 1190">1.7.12a (May, 2020)</td> <td data-bbox="695 1037 831 1190"><a href="#">Do</a></td> </tr> <tr> <td data-bbox="446 1190 578 1344">i2b2 Documentation</td> <td data-bbox="578 1190 695 1344">1.7.12a (May, 2020)</td> <td data-bbox="695 1190 831 1344"></td> </tr> </tbody> </table> | Software           | Version |               | i2b2 Core Server Source Code | 1.7.12a (May, 2020) | <a href="#">Do</a> | i2b2 Core Data Source Code | 1.7.12a (May, 2020) | <a href="#">Do</a> | i2b2 Web Client | 1.7.12a (May, 2020) | <a href="#">Do</a> | i2b2 Documentation | 1.7.12a (May, 2020) |  | <p style="text-align: center;"><b>i2b2 Log4j Vulnerability Update</b></p> <p>None of the versions of i2b2 are using the affected (vulnerable) version of Log4j. <a href="#">A patch is available</a> to remove the features in Log4j with security flaws. i2b2 1.7.13, to be released this spring, will be upgraded to the latest version of Log4J.</p> <p style="text-align: center;">If you have questions <a href="#">contact us here</a>.</p> <hr/> <p style="text-align: center;"><b>Consortium for Clinical Characterization of Covid-19 by EHR (4CE)</b></p> <p style="text-align: center;"><b>4CE is an international consortium for electronic health record (EHR) data-driven studies of the COVID-19 pandemic. The goal of this effort—led by the <u>i2b2 international academics users group</u>—is to inform doctors, epidemiologists and the public about COVID-19 patients with data acquired through the health care process.</b></p> <p style="text-align: center;"><b>CLICK HERE FOR MORE INFORMATION</b></p> <hr/> <ul style="list-style-type: none"> <li>• <a href="#">Release 1.7.13</a> planned for <b>March 2022!</b></li> <li>• <b>6/2020: i2b2 Release 1.7.12a</b> available! <ul style="list-style-type: none"> <li>• Easier i2b2 install</li> <li>• Redesigned FindTerms</li> <li>• REDCAP import to i2b2</li> <li>• ACT Ontology</li> <li>• ... and much more!</li> </ul> </li> </ul> |
| Software   | Version   |                    |         |               |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |
| i2b2 Core Server Source Code   | 1.7.12a (May, 2020)   | <a href="#">Do</a> |         |               |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |
| i2b2 Core Data Source Code   | 1.7.12a (May, 2020)   | <a href="#">Do</a> |         |               |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |
| i2b2 Web Client  | 1.7.12a (May, 2020)   | <a href="#">Do</a> |         |               |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |
| i2b2 Documentation   | 1.7.12a (May, 2020)   |                    |         |               |                              |                     |                    |                            |                     |                    |                 |                     |                    |                    |                     |  |   |

|   |                                 |  |      |
|---|---------------------------------|--|------|
|   |                                 |  | R    |
|   |                                 |  | U    |
|   |                                 |  | Inst |
| i2b2<br>VMWare<br>Server<br>/Client<br>Demo | 1.7.12a<br>(May,<br>2020)       |  | Do   |
| i2b2<br>Workbench                           | 2.0.01<br>(October<br>17, 2017) |  | Do   |

## Important links:

- [i2b2 tranSMART Working Groups](#)
- New Project: [i2b2 on OMOP](#)
- New Project: [i2b2 on Genomics Data](#)

## New i2b2 Community Projects

### [Accrual to Clinical Trials](#)

The Accrual to Clinical Trials (ACT) project goal is to create a federated network of National Clinical and Translational Science Award (CTSA) Consortium institutions to significantly increase participant accrual to the nation's highest priority clinical trials.

### [Multi-fact Table](#)

The multi-fact table project is a new feature introduced in 1.7.09 that enables the i2b2 to query more than one fact table. This new feature empowers the i2b2 to adapt to the needs of such projects as the Patient Centered Outcome Research Institute (PCORI) network and the Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM). It can also be used for sites that want to be able to query both genomic and phenotype data but don't want the data to reside in a single table.

#### [OMOP](#)

The legacy i2b2 data model is comprised of a central fact table (observation\_fact) surrounded by multiple dimension tables (star schema). In the Observational Medical Outcomes Partnership (OMOP) Clinical Data Model (CDM) rather than a central fact table, we have a collection of them distinguished by domain: procedures, condition, drug, measurement, observation, etc. In this project, we modify the CRC to run queries against multiple domain fact tables as dictated by the metadata.

#### [i2b2 Workbench](#)

The i2b2 Workbench is one of two i2b2 clients available to the i2b2 community. It is a collection of client-side components that communicate with i2b2 cells and help aggregate their functionality in the the i2b2 Hive. Each workbench component is designed as an Eclipse-based plug-in that interacts with a hive cell; collectively these plugins provide a cohesive entity to tie all the i2b2 cells together.

#### [i2b2 on Genomics Data](#)

This community project extends the current i2b2 query functionality by providing the ability to query for genotyped subjects by specific annotations related to genetic variants. Also, new query widgets have been built in the i2b2 web client that leverages existing i2b2 infrastructure for querying large strings of text stored in the observation\_blob field of the observation\_fact table.

[See All Community Projects](#)