

# 1.8.0 Release Notes

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## Important links

### Downloads:

- [i2b2 Download Page](https://www.i2b2.org/software/index.html) (binaries and virtual machine): <https://www.i2b2.org/software/index.html>
- [i2b2 - New Web client with redesigned user interface](#) (source code) [i2b2/i2b2-webclient](#): [Source code for the i2b2 Web Client \(github.com\)](#)

- i2b2 GitHub (source code): [i2b2 Foundation \(github.com\)](https://github.com/i2b2)

#### Documentation:

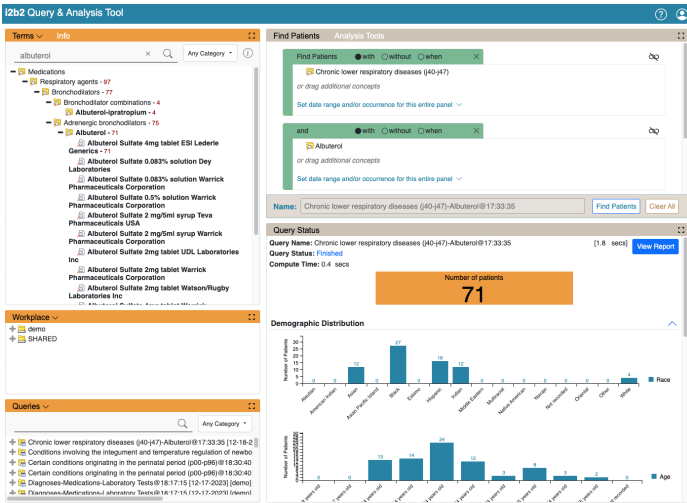
- i2b2-omop install: [i2b2-on-OMOP With ENACT-OMOP Ontology v4.1](#)
- totalnum counting scripts: [Patient Counting Scripts \("totalnum"\)](#)
- New Web client reference: [New Web Client 1.8.0 Install Guide](#)

## 1.8.0 Release Notes

i2b2 1.8.0 Release introduces two major improvements to the platform that enhance usability and applicability: a redesigned and completely rewritten i2b2 Web Interface to improve the user experience, and core support for the OMOP data model on MSSQL and Oracle databases. These changes represent a major step forward in i2b2.

## Highlight of Features

### Top New Features

Description		
New Web client User Interface	 <p>The screenshot displays the i2b2 Query &amp; Analysis Tool interface. On the left, there's a 'Terms' panel with a hierarchical list of medical terms under 'Medications'. The main area shows a 'Find Patients' section with filters for 'Chronic lower respiratory diseases (J40-J47)' and 'Abutanol'. Below this, the 'Query Status' section indicates the query name and execution time. The 'Demographic Distribution' section features two bar charts: one for 'Race' and one for 'Age', showing the distribution of patients across different demographic groups.</p>	<p>The completely rewritten web client represents a major step forward for i2b2 that features an improved layout, greater visual customization, and a new plugin architecture. The new web client version eliminates usage of YUI and uses the latest versions of jQuery, Bootstrap 5 and Golden-Layout libraries, which will ensure maintainability far into the future.</p>

i2b2 on OMOP for MSSQL and Oracle databases		<p>The core i2b2 platform now supports the OMOP data model, which is queryable through the comprehensive ENACT-OMOP Ontology. (MSSQL and Oracle are supported. Postgres support will be added in 1.8.1.)</p>
Bug fixes		<p>Bug fixes are included that are needed for OMOP support and for long-running breakdowns.</p>

### Community-Contributed Features

Contribution	Contributor	Description
ACT-OMOP design and ontology	<b>Michele Morris</b> (University of Pittsburgh)	The ENACT-OMOP Ontology powers the i2b2 queries against OMOP data, and the design of the database views enables the queries to run.

1.8.1 will be released In April 2024 and will add Postgres support for OMOP , Snowflake database support, SQL job scheduling, and improved data export.

### Detailed Documentation on New Features

#### New Web client User Interface

The new Web Client modernizes the i2b2 query tool, and features:

- Removal of antiquated support libraries.
- Creation of new compartmentalized plugin execution environment with support for legacy plugins.
- Drag and Drop system reworked to use browser-native operations.

See [i2b2 Web Client Install](#) for installation instructions.


The Admin functionality is still supported through the classic web client. See [i2b2 Administration Module Install](#) for more information. In particular, pay attention to the configuration file change in [6.4 Configuration](#) which enables an admin-only version of the classic webclient.

### ACT i2b2 on OMOP for MSSQL and Oracle databases

ACT i2b2 on OMOP functionality uses ACT Ontology in the front-end and enables the i2b2 Software to run against a database that uses the OMOP CDM architecture.

Documentation on loading the OMOP metadata, CRC tables, and CRC OMOP Views required to query the OMOP tables can be found here: [i2b2-on-OMOP With ENACT-OMOP Ontology v4.1](#)

For historical reference on old 2018 OMOP installation , refer to [OMOP Home on i2b2 Community Wiki](#)

 For enabling use of an OMOP database with i2b2, follow the instructions in the install guide for a new install of i2b2 using the i2b2-OMOP install option. The documentation here will guide you through this process. [i2b2-on-OMOP With ENACT-OMOP Ontology v4.1](#)

## ACT OMOP Totalnum Scripts

Totalnum Scripts (patient counting scripts) have been updated with bugfixes, and the MSSQL version has been rewritten and is 5x faster.

[Patient Counting Scripts \("totalnum"\)](#)

## Changelog

### Database Drivers

The JDBC drivers were updated to the following versions.

Server Type	oracle	Postgresql	mssql
Driver Version	ojdbc8.jar	postgresql-42.2.14.jar	mssql-jdbc-9.2.0.jre8.jar

### Supported Db Server versions

Server Type	SQL Server	Oracle	PostgresSQL
Supported Version/s	2012+ (tested with up to 2019)	12g+ and 21c	9 to 14

### Supported software versions

Application Type	Java	Wildfly	Apache HTD	Apache Ant	Apache Axis2	PHP
Supported Version/s	8 or 11	17.0.1Final	2.0 (RHEL 6) and 2.2 ( RHEL 7)	1.9.6	1.7.1	7.2.27 or higher

### Supported Operating Systems

Rocky linux 8 and 9, CentOS versions 7

Windows 2016 -2019

- There is a new PHP install process for IIS in the i2b2 install guide: [2.5.3.2 PHP for Windows](#)

Unofficially, MacOS and other flavors of Linux are likely to work.

## i2b2 Server and Client Changes

### New Features and Improvements

Web client
<a href="#">WEBCLIENT-360</a> New web client User Interface
<a href="#">WEBCLIENT-359</a> classic webclient - configurable for Admin functionality
Core-server
<a href="#">CORE-426</a> running i2b2 on OMOP data model
<a href="#">CORE-433</a> i2b2 on Rocky Linux 9 (CentOS 7 hits EOL 6 /2024)

## i2b2 Database Changes

### New Features and Improvements

<a href="#">DATA-16</a> I2b2 on OMOP- SQL Server and ORACLE
<a href="#">DATA-23</a> Support for multiple crc zip file extraction using databuld.xml
<a href="#">DATA-33</a> MSSQL Version of Faster Patient Counting Scripts

## Bug Fixes

Core-server / Data
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[CORE-440](#) Queries from queue are not processing and returning back

[CORE-441](#) DB Locking issue- can't show previous query when a query is running

[CORE-442](#) Get\_children doesn't work on Modifier folders

[CORE-444](#) Breakdowns for non-Patient\_dimension views - don't work

[CORE-443](#) Breakdown queueing

[CORE-445](#) java code folder structure for 1.7 should be changed to refer to 1.8

[CORE-446](#) php install process on IIS has changed; documentation needs to be update

[DATA-36](#) Wrong driver version jdbc 10.2 vs 9.2 in default datasource for MSSQL

## Notes for Developers

For Java 11 install, if you change the xsd (REST API message definitions), then you will need to regenerate gensrc via JAXB in Java 8. In the i2b2-core cell directory for which you're regenerating the XSD-Java, run the ant target "jaxb\_gen" on Java 8 and then build as usual using Java 11.

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