1.4.00 Release Notes

Release Notes for i2b2 Version 1.4

These release notes address issues found and information about the i2b2 version 1.4. Unless otherwise specified, these notes apply to the following operating systems:

- Apple Macintosh OS x 10.4/5
- Apple Macintosh OS x 10.6 (Snow Leopard)
- Microsoft Windows XP Professional
- Microsoft Windows Vista Professional
- Microsoft Windows 7
- Microsoft Windows Server 2003

Additional Information

Included in this document are the following sections:

Section	**Includes**
Installation	Information related to installing the release.
Third Party Software	Software that is utilized by i2b2 but is owned, maintained and licensed by other companies is referred to as "Third Party Software". Any version changes made or needed to be made to the users system will be noted in this section.
New Features	A list of new enhancements will be included in this section. A brief description and a reference to the specification will be provided.
Updates	Any changes that are not considered an enhancement will be included in this section. This may be a fix for a problem found or it may be a change to existing code but not related to a problem.
Licensing	i2b2 licensing information
Trademarks	Trademark information

Installation

This release note applies to you if you are upgrading to 1.4 from a computer running an earlier version of the i2b2 workbench. This release contains server changes so it is important to update both the client and the server.

If you are installing 1.4 from a computer running the i2b2 workbench, ensure that the workbench and all eclipse applications are closed prior to installing this release.

WHERE DO I START?

Prior to setting up the i2b2 server, workbench or VM Image it is highly recommended that you read one of the following documents located in the documentation folder.

1. Hive_Installation_Guide_1-4.pdf	Use for new installations
2. Hive_Upgrade_Guide_1-4.pdf	Use for upgrading existing environment to 1.4
3. i2b2Workbench_Install_Guide_1-4.pdf	Use for installing the i2b2 Workbench (Client)
4. vmware_Install_Guide_1-4.pdf	Use for installing the VM Image

All of these documents will explain what needs to be done during the setup and in what order.

IMPORTANT INFORMATION REGARDING CHANGE TO PM

Although the PM Cell itself has not changed, the PM services have been modified and a new client has been developed. Gridsphere is no longer the client used to setup hives, projects and users. The new client resides within the i2b2 web client and can be found under the heading of "Admin". Further information regarding the changes can be found in one of the following documents.

1. PM messaging document
2. PM install document

IMPORTANT CHANGES TO i2b2 VMWARE IMAGE INSTALLATION

The VMware image of the i2b2 server no longer uses Gridsphere or Tomcat. The IP address will be displayed on the console once the i2b2 server is started.

Third Party Software

No changes to third party software are required for release 1.4.

New Features

i2b2 release 1.4 contains new features that have been outlined below.

Plug-ins Packaged as "Features"

The i2b2 plug-ins will now be grouped together into an Eclipse feature. The plug-ins that comprises the i2b2 Workbench will be packaged together as the i2b2 core features. The core features include the following views in the i2b2 workbench.

• Analysis • Find Terms • Help • Navigate Terms	• Previous Query • Query Tool • Timeline • Workplace

Optional plug-ins will be packaged as features and will be posted to an update site on the i2b2 web page. Users will have the ability to easily add features (optional plug-ins) from within the i2b2 workbench by going to the help menu and selecting Add new features.

Tooltips Enhanced (Navigate Terms)

The tooltips that appear in Navigate Terms view have been enhanced to allow users to select whether or not they want to display the concept code in the tooltip and/or use the short tooltip.

Analysis View

A new Analysis view has been created that will allow users to view a breakdown of the data in a bar chart.
Detailed information regarding the functionality of the Analysis plug-in and view can be found in the Analysis documentation included in this release.
Provided below is an outline of some key features of the Analysis View.

1. Breakdown of patients by Age, Gender, Race and Vital Status.
2. Able to save an image of the graph showing the breakdown.

Export Data View

The new export data view will enable users to export data from one of the following tables.

- Patient Dimension
- Concept Dimension
- Visit Dimension
- Provider Dimension
- Observation Fact
- Encounter Mapping
- Patient Mapping

Detailed information regarding the functionality will be provided in other documentation.

***Note**: This new view is an optional plug-in which can be added using the new "features" enhancement.*

Replacement of Gridsphere

In version 1.4 the gridsphere is replaced with an admin component in the i2b2 Web Client.
Detailed information regarding the functionality of the replacement of the gridsphere and changes to the PM services can be found in one of the following documents.

1. PM_design_1-4 (*will be included in a future release candidate*)
2. PM_Installation_1-4.pdf
3. PM_Messaging_1-4.pdf

Roles Based Access

Roles based access has been added to the i2b2 Workbench. Users will be allowed to perform specific tasks based upon their associated role. For instance, only users who have the role of DATA_DEID will be able to see de-identified data.
Detailed information regarding the functionality of roles based access can be found in the PM design documentation which will be provided in an upcoming release candidate.

Active Directory Service (ADS)

In the new admin tool (PM) users can now choose whether or not they want to use ADS to authenticate against the active directory.
Detailed information regarding the ADS can be found in the PM design documentation which will be provided in an upcoming release candidate.

Server Side Plug-in

A plug-in on the server has been added that will assist users in setting up custom plug-ins to work with the CRC.
Detailed information regarding the functionality of the new server side plug-in can be found in one of the following documents:

1. CRC Architecture_1.4.pdf
2. CRC Installation_1.4.pdf
3. CRC Message_1.4.pdf

Analysis Breakdown in Ontology

Users will be able to view an analysis breakdown of the concepts in Ontology by toggling on/off the count in Navigate Terms View.
Detailed information regarding the functionality of the new server side plug-in can be found in one of the following documents:

1. Ontology Architecture_1.4.pdf
2. Ontology Installation_1.4.pdf
3. Ontology Message_1.4.pdf

Obfuscation

The roles that are given to a user may determine that they are only allowed to view obfuscated (statistically anonymized) data. The patient counts that are returned to the client no longer represent true counts, but are "blurred" by a random amount. If the same query is performed multiple times (perhaps to average the blurring effect) the patient is locked out of the system.

Paging

The XML representing the patient data object (PDO) may be very large in some types of requests. If the server determines that the entire PDO cannot be served back due to resource limitations on the server-side, the server returns the largest number of patients it can satisfy, and information for the client to page through the remaining requests is included in the response.

Updates

Documentation:

The 1.4 release documentation can be found in a zip file located on the i2b2 web page. This file includes documentation for the following:

- Hive installation documents
- Messaging, install and design documents for all the core cells have been updated to 1.4
- PM messaging and design documents have been updated to 1.4
- VM Install document

Fixes:

The following fixes were added to this release.

Query with text value constraint returns zero patients

Zero patients will be returned when you run a query in which one of the concepts has a value constraint associated to one of the concepts. This problem only occurs if the type of value is a text value like "POSITIVE", "NEGATIVE", "1+", "FEW", etc.. Queries will run correctly if the type of value is numerical or if the constraint is based on a flag such as "HIGH" or "LOW".
STATUS/RESOLUTION: *This issue has been resolved. All queries now return the appropriate patients.*

PM: Parameters are not saved

New parameters entered via Admin in the web client are not being saved to the database. This is happening for all parameters (Project, User, etc).
STATUS/RESOLUTION: *This issue has been resolved. Users can now save parameters.*

PM: Not all project information is saved

The "Project Description" and "Project Path" are not saved when entering a new project or editing an existing one.
STATUS/RESOLUTION: *This issue has been resolved. Project description and path are now saved.*

PM: Project key changes when saving a project

A new "Project Key" is assigned every time you save an edit to the project. This is a primary key and should not be edited.
STATUS/RESOLUTION: *This issue has been resolved. Edits to a project no longer change the key.*

PM: Project user roles only saves one role

When associating a user to a project you can select multiple roles. The problem is only one role is being saved even though several have been selected.
STATUS/RESOLUTION: *This issue has been resolved. Multiple roles can now be saved for a user.*

Licensing

The i2b2 source code is licensed under the i2b2 Software License 2.1. This includes but is not limited to all code in the edu.harvard.i2b2.* package namespace.

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