



# BSIS V1.1.0 Release Notes

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# New Features

## 1. Donations

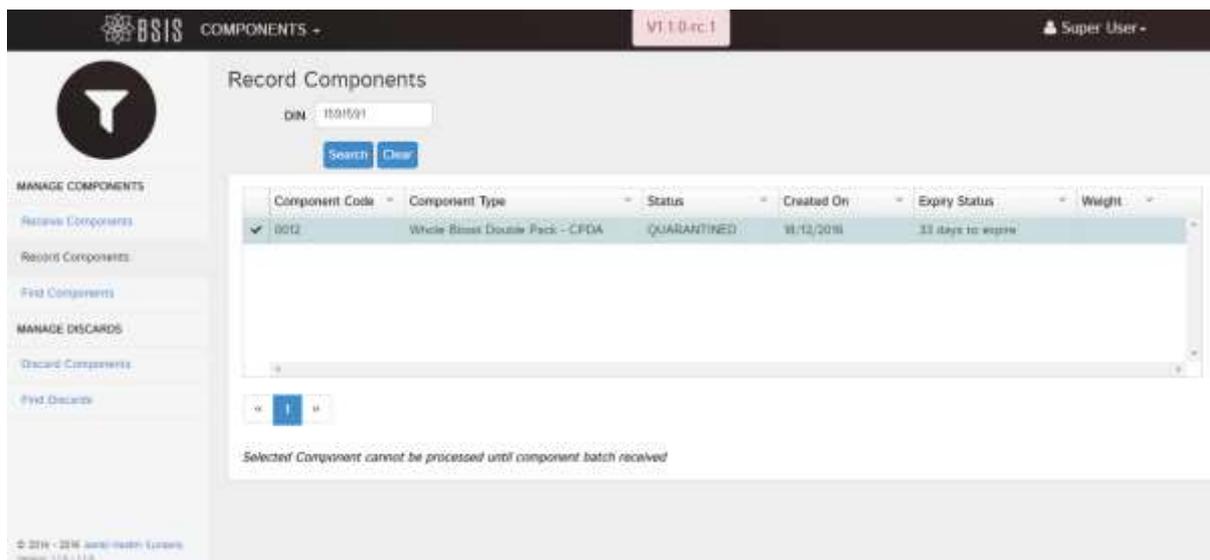
### 1.1. Historical Donation Batch Date

When selecting a historical donation batch date as a donor staff user, the user is prompted to select a date less than or equal to today's date before creating the donation batch. The system will now prompt the user to select a donation batch date upon checking the Historical Batch checkbox instead of defaulting to the current date. This has been introduced to try and minimise the entry of incorrect dates when capturing historical donation batches during back entry of data.

## 2. Components

### 2.1. Components Received Before processing

In order to be able to track the processing site where the component is being processed, the user must first receive the component batch prior to component production. If this is not done, then the user will see the following message when attempting to process a component.



## 3. TTI & ABO/RH Testing

### 3.1. System to flag component with plasma if POS ABR

If the anti-body screening test for a sample is POS the system must flag all components containing plasma as UNSAFE. This means that these components will not be able to have pack labels printed and can only be discarded. If the blood service is not doing antibody screening currently and is entering a value of NT (Not Tested) then the system does not perform this check.

### 3.2. Display Info Alert for Pending TTI or ABO/RH tests

The pending TTI alert message is shown only when there are pending repeat and/or confirmatory test outcomes. The pending blood group serology message is shown only when there are repeat ABO Rh test outcomes still pending.

This improvement makes it clearer for the user to see when there are still TTI or ABO Rh tests pending and requiring data entry before the sample can be released.

### 3.3. Process & Un-process 2<sup>nd</sup> round components

It is now possible to record a second round of processing, if the appropriate component combinations have been configured in Settings. For example, it is possible to record the processing of cryoprecipitate from fresh frozen plasma. It is also possible to unprocess the second round component as long as it has not yet been either labelled or discarded. This unprocessing step is only intended to be used to correct data entry errors.

The screenshot shows the 'Record Components' interface. At the top, there is a search bar with 'DIN: 234567' and 'Search' and 'Clear' buttons. Below this is a table with the following data:

Component Code	Component Type	Status	Created On	Expiry Status	Weight
9013	Whole Blood Triple Pack - CPDA	PROCESSED	13/12/2016	28 days to expire	482
3011	Packed Red Cells - SAGM	QUARANTINED	18/12/2016	35 days to expire	
3001	Fresh Frozen Plasma - Whole Blood	PROCESSED	18/12/2016	358 days to expire	
808	Cryoprecipitate	EXPIRED	15/12/2016	Already expired	

Below the table, there are navigation controls and a prompt: 'Select a component to process'.

## 4. Reports

### 4.1. New Report – Component Produced Report

A new report is added whereby the components produced are aggregated according to blood type and component type per venue or all venues.

### 4.2. New Report – Discards Summary Report

A new report is added whereby a summary of the discards is aggregated according to the venue where the component was discarded, the date that the component was discarded and categorised by component type and discard reason.

### 4.3. New Report – Donor Adverse Reasons Report

A new report is added whereby a summary of the donors adverse events is aggregated within a selected date range, according to the venue where the adverse event occurred (not necessarily the same as the donor's venue), and categorised by adverse event reasons.

### 4.4. New Report – Mobile Clinic Export

The Donor clinic supervisor now has access to a Mobile Clinic Export feature. This operational data export is intended to be used to provide a CSV file of all donors who belong to either a selected venue or ALL venues listing their eligibility status at the selected clinic date.

The file can be uploaded into Excel on a laptop and can then be used at mobile clinics to look up the donors when they register to check if they are actually eligible to donate. Because this report can be run for all venues, it can be a very large report so it cannot be printed to PDF. It may also affect the performance of the system so should only be run after hours or when minimal data entry is happening so as not to impact other users on the system. Whereas the Mobile Clinic Look Up report only lists donors who belong to one venue, this Mobile Clinic Export lists donors for ALL venues I.E.

the full donor database. Therefore if a donor from a different venue arrives at the clinic to donate, their eligibility status can be verified.

## 5. Settings

### 5.1. Manage Divisions.

Permissions and functionality has been added allowing the administrator to add and update divisions based on 3 levels (First, Second, Third) to which a location can then be assigned. Divisions are used primarily to provide a hierarchical structure for reporting purposes. Typically, divisions will consist of the following:

- First Level – Provincial or Regional Level e.g. Western Cape
- Second Level – District Level e.g. City Of Cape Town Metropolitan
- Third Level – Ward or Town e.g. Tokai

Locations, such as Venues or Processing Sites, are then assigned to the appropriate Third Level division.

### 5.2. Customizable Report Headers (Left & Right)

A general configuration has been added allowing the administrator to upload BASE64 text in order to generate the desired report logo according to blood centre. Please see the appendix for steps on how to upload the report logo.

### 5.3. Email Properties added as General Configurations

Email properties have been added to the settings so that the Administrator can configure an email client through the application and not during server install – SMTP, PORT, USERNAME, and PASSWORD.

### 5.4. New Password Data Type

When selecting a password data type in the general configurations the value is hidden: this is used for the email properties to ensure password privacy.

### 5.5. Export CSV Files of BSIS

Administrators are able to export a zipped file containing time-stamped CSV files for the following records: donor, donations, post-donation counselling, deferrals, test outcomes and components. Each sheet is ordered by that date the record was created (createdDate (ascending)).

The data export is intended to be means of extracting raw data from BSIS for further analysis.

### 5.6. Add & Update Component Types

Administrators are now able to manage and create new component types as required by the blood service. Administrators can specify the following:

- the component name
- the unique component code
- whether or not the component can be issued
- whether or not the component type contains plasma
- the expiry period in days
- the storage, transportation and preparation information that should be printed on the component's pack label

**Please note that this configuration is critical to the safety of the system and should only be edited during the Operational Qualification phase of the implementation with the assistance of the Jembi Support Team and fully tested prior to Go Live.**

#### 5.7. Add & Update Component Type Combinations

Administrators are now able to manage and create new component type combinations as needed by the blood service. This allows for changing what components can be processed out of each pack type. . **Please note that this configuration is critical to the safety of the system and should only be edited during the Operational Qualification phase of the implementation with the assistance of the Jembi Support Team and fully tested prior to Go Live.**

#### 5.8. Add & Update Blood Tests

Blood tests can be edited and update through the settings as needed by the service, for example: a new blood test for TB may be defined. . **Please note that this configuration is critical to the safety of the system and should only be edited during the Operational Qualification phase of the implementation with the assistance of the Jembi Support Team and fully tested prior to Go Live.**

#### 5.9. Add & Update Blood Testing Rules

By specifying the blood tests, the user can use the blood test rule engine to determine the outcome and if pending or repeat tests are required. I.e. A user may specify a TB blood rule test, so that in the case that the donor tests POS for the TB result, the TB Blood Test Rule can be configured to trigger a pending TB test so that a Repeat 1 and 2 or even a confirmatory test can be added. **Please note that this configuration is critical to the safety of the system and should only be edited during the Operational Qualification phase of the implementation with the assistance of the Jembi Support Team and fully tested prior to Go Live.**

## Improvements & Updates

### 1. Donations

#### 1.1. Update Rules for editing a pack type:

Pack types can now be edited after the donation has been added – but only whilst components haven't been processed. This is used to correct data entry errors.

### 2. Reports

#### 2.1. Update Mobile Clinic Lookup

Mobile Clinic Lookup now shows a % of donors eligible for donation according to venue and date of mobile clinic to make it easier to evaluate the feasibility of the planned clinic.

#### 2.2. Summary Section for All Venues

When selecting a PDF printout, if more than one venue is selected, a summary section is added to the report export that totals the values for all venues selected.

### 3. TTI & Serology Testing

#### 3.1. TTI can record Repeat and Confirmatory outcomes on separate forms

The screen for recording TTI outcomes have been re-designed to make it easier to see what test outcomes have been added and what tests are still pending.

The confirmatory outcomes link will display on a separate line. Another screen has been added specifically for the confirmatory outcomes for easier use.

#### 3.2. Links to record test outcomes remain enabled

After completing testing, the TTI or ABO serology staff may still view and change the test results after they have entered in the confirmed outcome. Re-Entering the initial values will trigger pending tests again: this is intended to be used to correct data entry errors by the user.

#### 3.3. New released status column added to test batch overview

A new column has been added to the test batch overview screen showing the status of whether or not a component has been released. Column will display values Y or N.

### 4. Settings

#### 4.1. Assign Locations to Administrative Divisions

With the inclusion of administrative divisions, the user can now assign locations to their desired Division.

#### 4.2. Update & Clear Data types

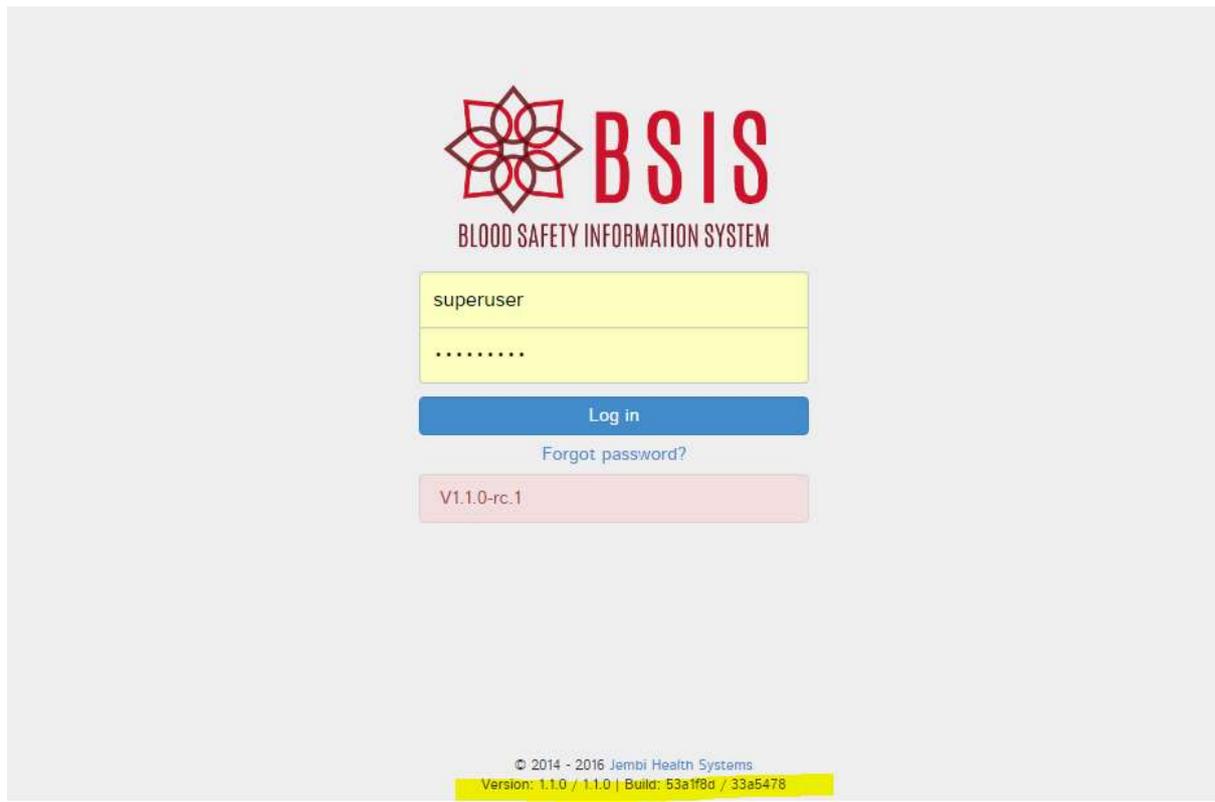
When changing the data type of a general configuration, the value field clears the previous value.

#### 4.3. Update Export CSV

The deferrals CSV export now includes the deferral reason as specified by the user.

#### 4.4. Include Version Number for Implementers and Users

BSIS software versions are now visible to implementers and users of the system. This information is important to refer to when reporting bugs or requesting help from the Jembi Support team, enabling a quicker response. The Version and Build Number are shown on the footer and left menu bar. I.e. Version: 1.1.0 / 1.1.0 | Build: 0674142 / b1aa198.



## Fixes

### 1.1. Fix Inventory Sorting on Expiry Status

When sorting inventory via the expiry status the column now correctly sorts the components based on the expiry time

### 1.2. Fix Components Sorting on Expiry Status

When sorting components via expiry status the column should correctly sort the components on the remaining expiry time

### 1.3. Add Character Length Validation on Blood Tests

When specifying an outcome for a blood test the max length of an outcome can only be 10 characters long, this is to ensure that test result options display on the screen and

### 1.4. Extra Validation to Reports

Validation has been added to reports in order to ensure that the user selects valid dates when entering search criteria by period, ensuring that the data set matches the dates selected by the user.

## Appendix – How to upload the Report Header Logo

The PDF Report header can be configured to display the brand/logo of the blood service on the PDF report printouts. Please see instructions below on how to configure a report header logo.

There are 2 general configurations **ui.report.base64headerLogo1** and **ui.report.base64headerLogo2** which are left and right logos respectively.

1. Login with administrator/superuser in order to get access to the general configurations
2. Navigate to the general configurations, ensure the config **ui.report.base64headerLogo** is **visible**



Name	Description	DataType	Value
smtp.port	Smtp port	integer	25
smtp.auth.username	Smtp username	text	testbsis@jembi.org
smtp.auth.password	Smtp password	password	
ui.report.base64headerLogo	Report header logo in base64	text	data:image/jpeg;base64,/9j/4AAQSkZJRgABA...

3. Click on the general config property, ensure the following displays
  - a. Name : ui.report.base64headerLogo
  - b. Description : Report Header Logo in Base64 format
  - c. Data Type : Text
  - d. Value : Text format for image converted into base 64 format

#### 4. Select Image for Display

1. Find an Image that meets the following requirements, test with various sizes  
Create a logo image (JPG or PNG) that has a DPI of at least 150, a width of 105 points and a height of 54 points.

This should result in an image with a size of at least 219 x 113 pixels (438x225 pixels is better) and should be 50K or less in file size.

2. We have selected an Image of 250X133 pixels



#### 5. Upload Image to Base 64 format

1. Upload the image to <https://www.base64-image.de/> to convert the image into a base 64 string
2. Copy the Base 64 output String

3. Ensure character count does not exceed 65,635 - you can use <http://www.charactercountonline.com/> to check



#### 6. Copy BASE64 text string

1. Click on Show Code on the right of the Encoding window
2. Click on Copy to Clipboard



7. Upload text into general config : Paste the BASE64 format string into the Value Text field, replace any text that was originally there to replace the image

## Manage Configuration

Name	<input type="text" value="ui.report.base64headerLogo1"/>
Description	<input type="text" value="First report header logo in base64"/>
Data Type	<input type="text" value="text"/>
Value	<pre>ccwyPfeUIR8nxxfJ5yVf/L9cmxY489vfLFrj8diyV gCSID9YP3e7eErd0BpJrCVFBcMGizZfIRIsZ4Z0 Tl4I3Evz45ua25B3ntDuGCfg73kJljl2VGyV69EV 5wx/lAdmHYCSjKM7NtrF6k8F8HNwCuGnwsRd 3TaJoll9LjBxW0aDHpzYNnfczDZ46IEV8QO2irG wsdcBhVu4p4tJq!4dVRFuoMSXRE7xD1W1aqM KIViQXinkKNCia445yCGKhjVcsOfXxN6J8M7FU p0xVkGGuumwyW0XQmuRFcoFEp0hUKhRFco FEp0hUKhRFcoFEp0hUKJrIAolOgKhUKJrIAolO gKhUKJrIAolOgKhUKJrIAovlh+WMdBoTircZhE3 2bv6vrRj37Ozs+2/wPJAXSBJkuuwwAAAABJRU 5ErkJggg==</pre>
<input type="button" value="Save Configuration"/> <input type="button" value="Cancel"/>	

- Click on Save Configuration and run a report, ensure that the logo displays as expected



**ABO Rh Blood Group**  
Date Period: 14/12/2016 to

Venue	Gender	A+	A-	B+	B-
Central Blood Service	female	0	0	0	0
	male	0	0	0	0