

Baobab LIMS

Baobab LIMS is a Laboratory Information Management System (LIMS) designed for the collection, processing and storage of human biospecimens. The system was designed *a priori* using the Standard operating procedures (SOPs) of the NHLS-Stellenbosch University Biobank. Baobab LIMS comprises modules for biospecimen kit assembly, biospecimen shipping, storage management, analysis requests, reporting and invoicing. Current developed SOPs define the biobanking activities of the Biobank and in an effort to extend the usability of the system, collaborations which incorporate SOPs generated by other Biobanking facilities, are ongoing. The figure demonstrates the workflow of the current system, deduced from SOPs.

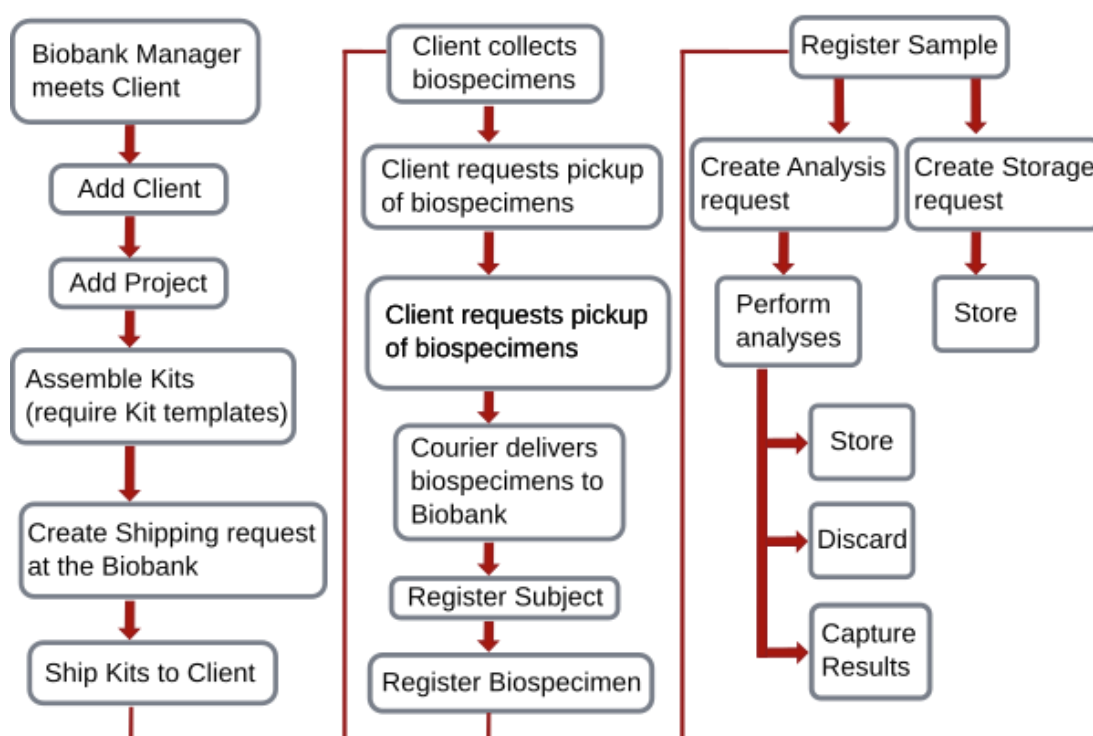


Figure 1: Flowchart of activities within the NSB biobank upon which the Baobab LIMS was designed.

Baobab LIMS is both Free and Open Source with some modules being inherited from Bika LIMS. Furthermore, Baobab LIMS can be customized to the specific needs of your laboratory.

Note: For more additional resources, use the following links

<https://github.com/SANBI-SA/baobab.lims>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5397207>

Install your Baobab Distribution

Go to https://<server IP address>/manage_main

Select 'Add Plone site'



Install a Baobab Distribution

Path identifier

The id of the site. This ends up as part of the URL.

No special characters are allowed.

IMPORTANT: Don't use "Baobab", "BAOBAB", "Bika" or "BIKA" as the instance name, this is a reserved namespace. If you get "Site Error" citing "AttributeError: adapters", this is the most likely cause.

Plone

Select the site name

Title

A short title for the site. This will be shown in the title of the browser window on each page.

Baobab

Language

The main language of the site.

English

Select the language

Add-ons

Select one of the following configurations. You can also de/activate the add-ons once the site has been created from the Plone's add-ons setup view

☐ **Baobab LIMS**

Baobab extension profile for Bika LIMS

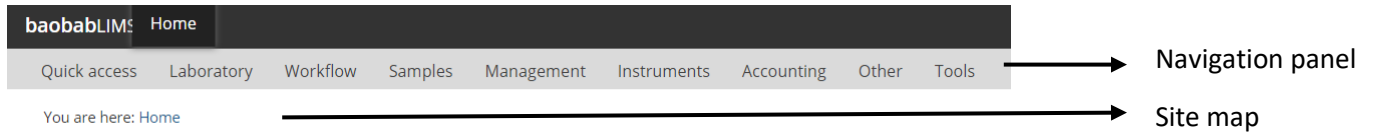
Check box

Install

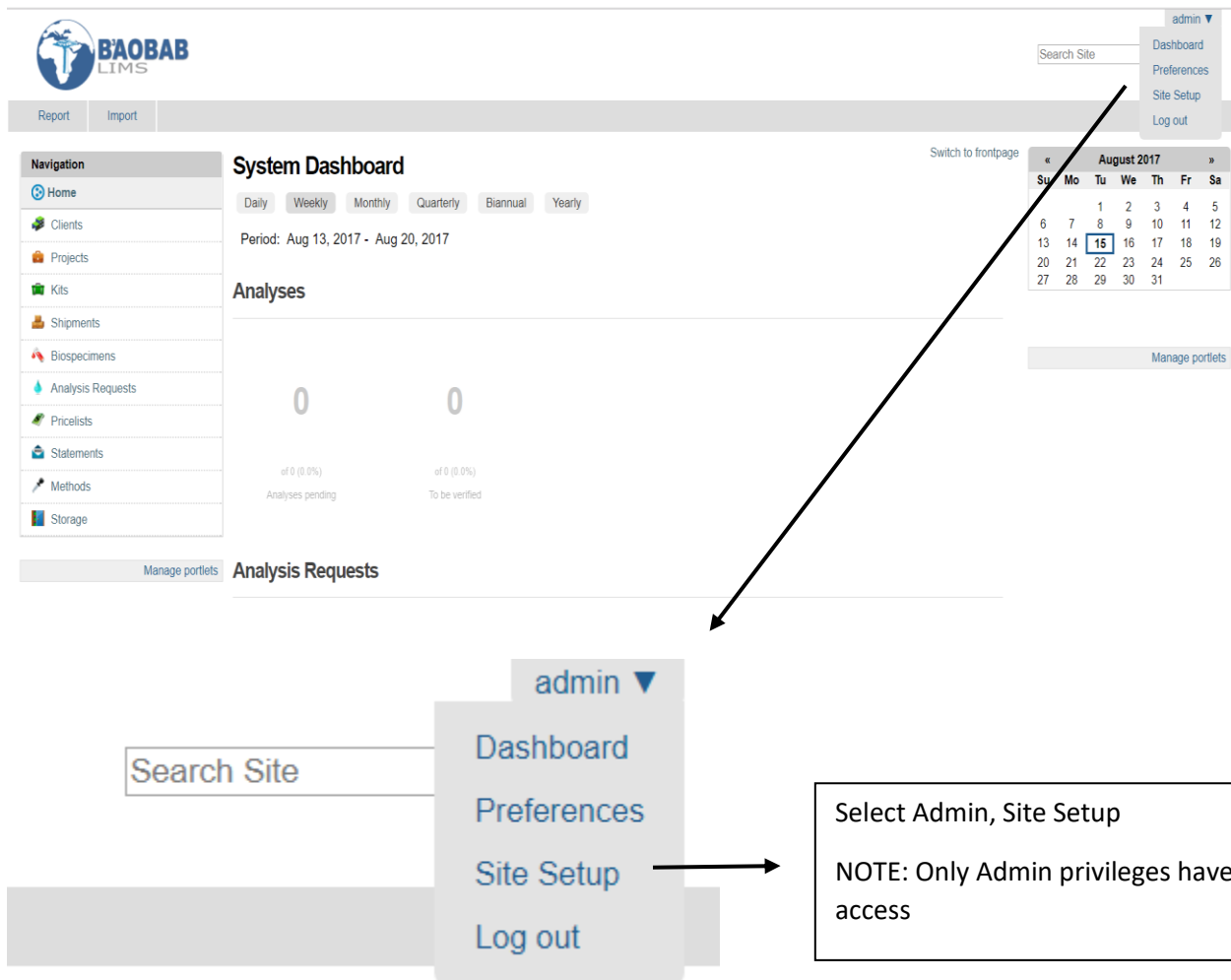
Install

Change the Baobab Theme

The Baobab theme can be changed to the graphite theme. The graphite theme has an easy access navigation panel at the top of the page and a site map.



Follow the instructions below to change your theme;



Site Setup

Configuration area for Plone and add-on Products.

Warning You have not configured a mail host or a site 'From' address, various features including contact forms, email notification and password reset will not work. Go to the [Mail](#) control panel to fix this.

Plone Configuration

- Add-ons
- Calendar
- Configuration Registry
- Content Rules
- Discussion
- Editing
- Errors
- HTML Filtering

Baobab LIMS Configuration

- AR Priorities
- Analysis Categories
- Analysis Services
- Analysis Specifications
- Attachment Types
- Bika Setup
- Calculations

- Image Handling
- Language
- Mail
- Maintenance
- Markup
- Navigation
- Search
- Security

- Instrument Types
- Instruments
- Kit-Templates
- Lab Contacts
- Lab Departments
- Laboratory Information
- Methods

- Site
- Syndication
- Themes
- TinyMCE Visual Editor
- Types
- Users and Groups
- Zope Management Interface

- Reference Definitions
- Sample Types
- Sampling Deviations
- Stock items
- Storage Locations
- Storage types
- Suppliers












Select 'Add ons'

Add-ons

This is the Add-on configuration section, you can activate and deactivate add-ons in the lists below.

To make new add-ons show up here, add them to your buildout configuration, run buildout, and restart the server process. For detailed instructions see [Installing Plone add-ons](#).

Available add-ons

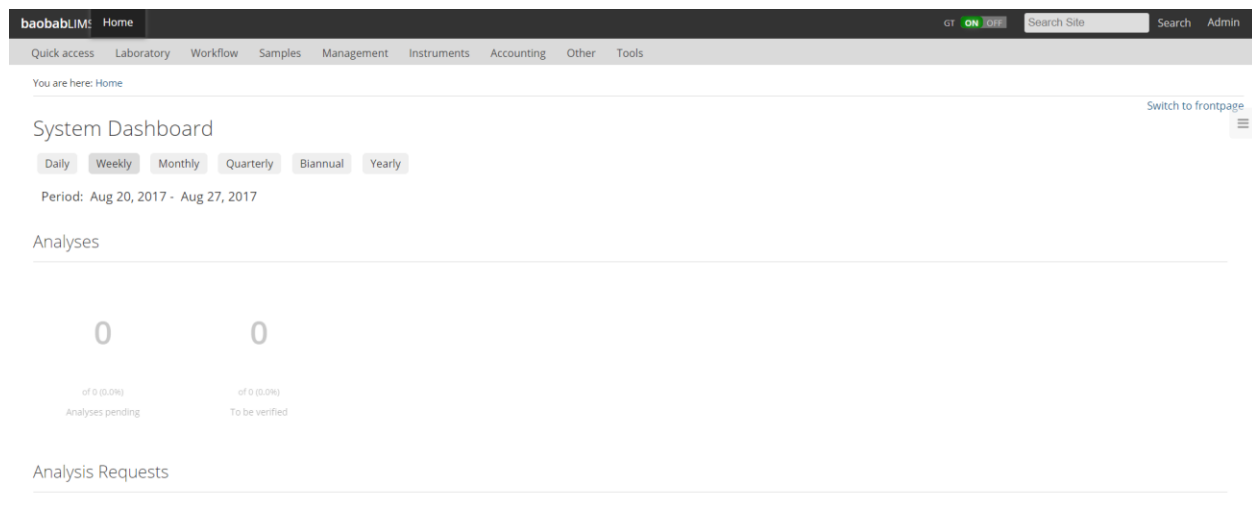
- ☐  **Autocomplete widget 1.2.9**
- ☐  **Content tree widget 1.0.13**
- ☐  **Dexterity Content Types 2.0.17**
Configures various components needed for full Dexterity support.
- ☐  **Diazo theme support 1.1.7**
Installs a control panel to allow on-the-fly theming with Diazo
- ☒  **Graphite Theme for Bika Open Source LIMS 1.2**
Graphite Theme is a Diazo smooth theme for Bika Open Source LIMS.
- ☐  **HTTP caching support 1.1.11**
Installs plone.app.caching
- ☐  **Marshall 2.1.4**
- ☐  **OpenID Authentication Support 2.0.4**
Adds support for authenticating with OpenID credentials in a Plone site
[Add-on Description](#)
- ☐  **Referenceable Behavior for DX 0.7.4**
Extension profile for plone.app.referenceablebehavior
- ☐  **Relation Field 1.2.3**
Adds support for content relationships defined using z3c.relationfield
- ☐  **Session refresh support 3.5.6**
Optional plone.session refresh support.

Check Graphite Theme

Activate

Click 'Activate'

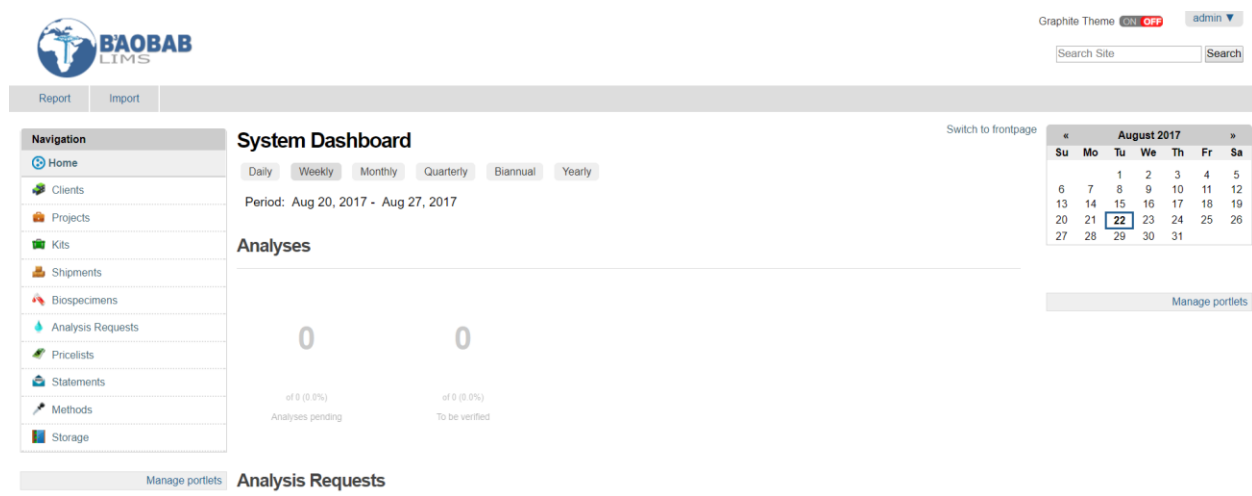
Activated add-ons



The figure above represents the homepage of the Graphite theme.



Graphite theme can be turned on/off here



The figure above represents the homepage if the graphite theme has been disabled.

Your Baobab distribution

With your installation complete, you can now set up your site. Baobab LIMS requires that your site is set up before you can start to manage clients and projects and certain compulsory information is required for each step. As such, we recommend that you follow this setup section in a stepwise manner.

Go to <https://<server IP address>/<installation name>>

Insert Site Name selected in installation step

This will open the homepage for your distribution.

Set up your mail settings

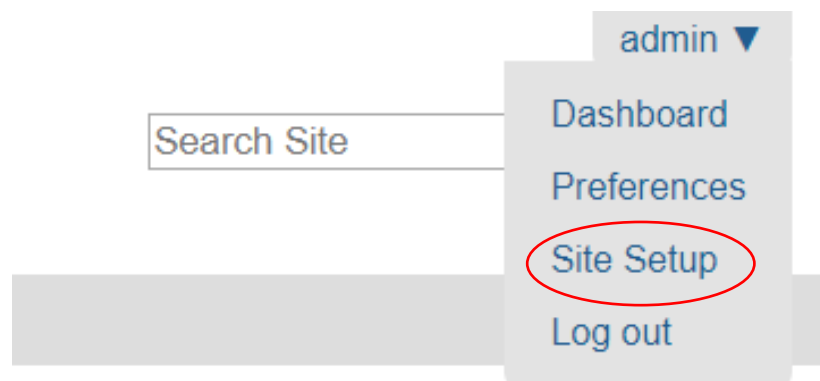
As the administrator for the site, the mail settings will need to be configured, the page will display the following error.

You are here: Home

ⓘ Warning

You have not configured a mail host or a site 'From' address, various features including contact forms, email notification and password reset will not work. Go to the [Mail control panel](#) to fix this.

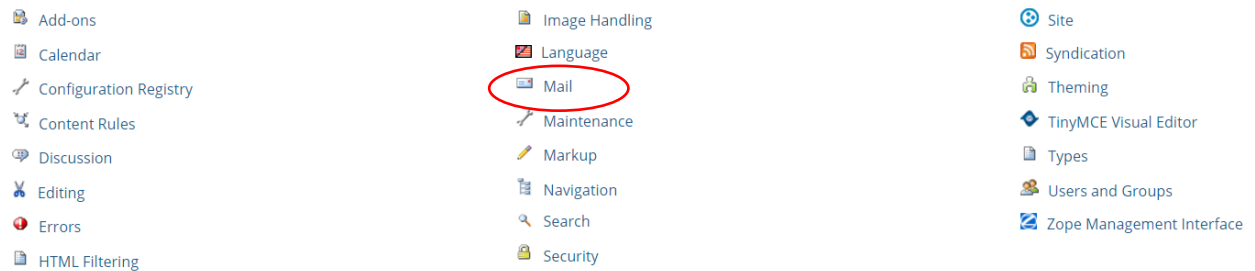
To set up the mail settings select the 'Mail control panel' link in the error message. Alternatively, go to 'site setup' and select the 'Mail' tab.



Site Setup

Configuration area for Plone and add-on Products.

Plone Configuration



You will be automatically directed to the 'Mail settings' page where you will be required to enter the SMTP server address and will be able to set the administrator username and password. Ensure that all the required fields are completed and select 'save and send test email'.

You are here: [Home](#)

[Site Setup](#)

Mail settings

Mail settings for this site.

Mail settings

SMTP server *(Required)

The address of your local SMTP (outgoing e-mail) server. Usually 'localhost', unless you use an external server to send e-mail.

For example; the SMTP server address for gmail is smtp.gmail.com.

SMTP port *(Required)

The port of your local SMTP (outgoing e-mail) server. Usually '587' or '25'.

ESMTP username

Username for authentication to your e-mail server. Not required unless you are using ESMTP.

Username for the administrators email address

ESMTP password

The password for the ESMTP user account.

Password for the administrators email address

Site 'From' name *(Required)

Plone generates e-mail using this name as the e-mail sender.

Site 'From' address *(Required)

Plone generates e-mail using this address as the e-mail return address. It is also used as the destination address for the site-wide contact form and the 'Send test e-mail' feature.

Email address from which the emails will be sent

[Save](#)

[Cancel](#)

[Save and send test e-mail](#)

Following successful set-up, you will receive an email confirming that the email server is working.



Info

Success! Check your mailbox for the test message.

Test e-mail from Plone

Inbox x



dominique@sanbi.ac.za

12:04 (1 minute ago)



to me ▾

Hi,

This is a test message sent from the Plone 'Mail settings' control panel. Your receipt of this message (at the address specified in the Site 'From' address field) indicates that your e-mail server is working!

Have a nice day.

Love,

Plone

NOTE: For Gmail users, the following error may occur due to the security settings on your Gmail account which will prevent sign-in from another device or app.

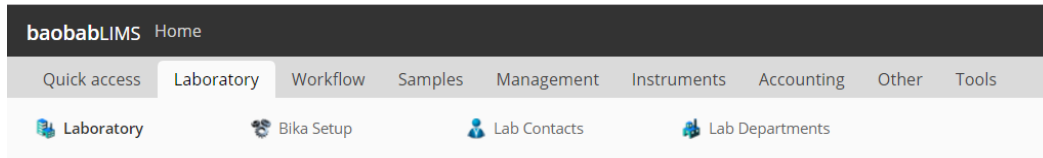
Error

Unable to send test e-mail (534, '5.7.14 <https://accounts.google.com/signin/continue?sarp=1&sc=1&plt=AKgsbVWn5.7.143eWuwKQRZjWmd8Cavre71vM0qixR6cKcCEeBrOTJW2m6wYEvQj3y20Jf15GX9OqDqaYefn5.7.148cEdZv2XW94ktLg2fj0dkatQsupGMHXXaWY8wnFqa2Ak53quwzSCNVLfns5O4EX514W9n5.7.14KvgRBIPUiq9szjuZepZ3iAzDjxr1dOYC1oNWYiMOI2w34GDiRbMsCQve_H7jLu1H2nlaU/n5.7.14DfcwKAcuvE76A87b-f4srplHbyz8w> Please log in via your web browser andn5.7.14 then try again.n5.7.14 Learn more atn5.7.14 <https://support.google.com/mail/answer/78754> 53sm12679577wry.31 - smtp').

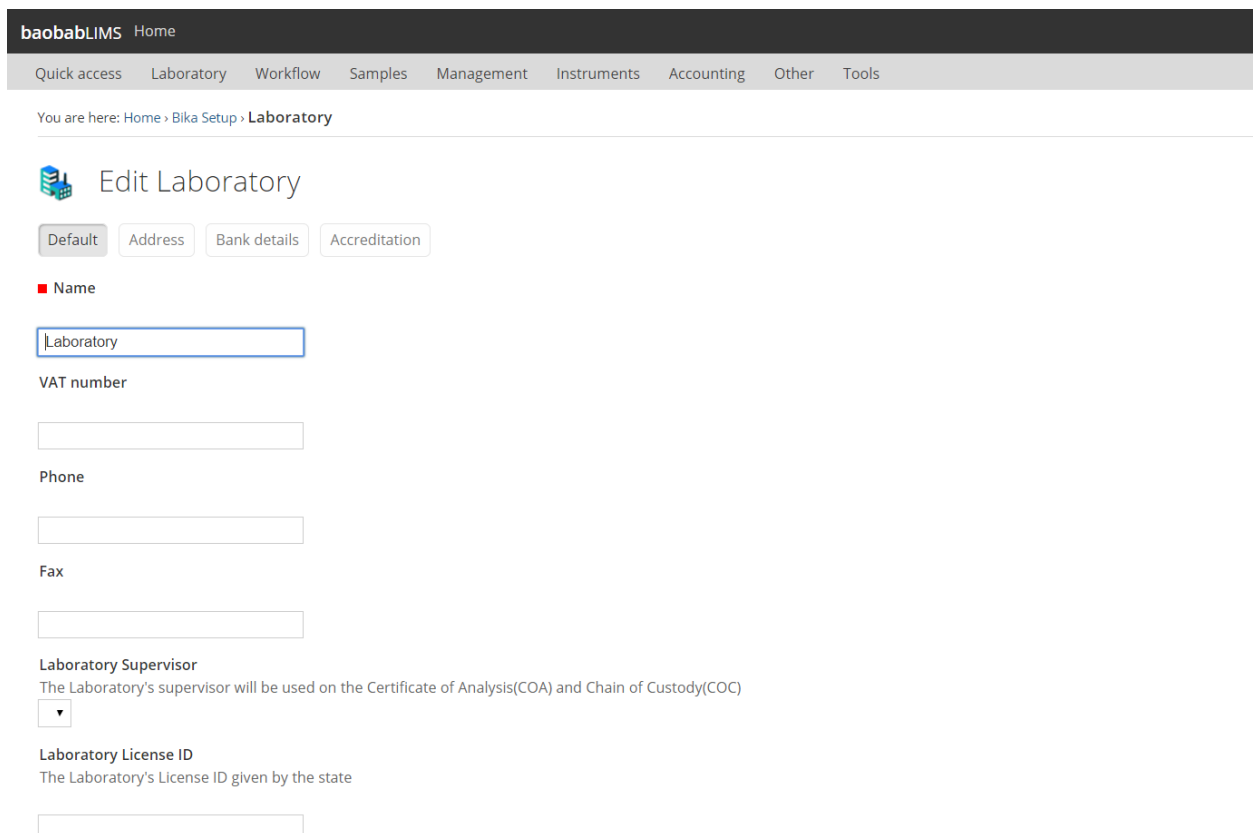
Please ensure that your Gmail settings permit the site to access your account. Use the following link to understand more; <https://support.google.com/accounts/answer/6010255>

Set up your laboratory

Mouse over the 'Laboratory' Tab and select 'Laboratory'



Enter the details of the laboratory and press 'save'. Compulsory fields are indicated by ■

The screenshot shows the 'Edit Laboratory' form in the baobabLIMS system. The navigation bar is at the top, and the breadcrumb trail reads 'You are here: Home > Bika Setup > Laboratory'. The form title is 'Edit Laboratory' with a building icon. There are four tabs: 'Default' (selected), 'Address', 'Bank details', and 'Accreditation'. The 'Name' field is marked with a red square icon and contains the text 'Laboratory'. Below it are fields for 'VAT number', 'Phone', and 'Fax', each with a red square icon. The 'Laboratory Supervisor' field is a dropdown menu with a red square icon, and its description is 'The Laboratory's supervisor will be used on the Certificate of Analysis(COA) and Chain of Custody(COC)'. The 'Laboratory License ID' field is also marked with a red square icon, and its description is 'The Laboratory's License ID given by the state'.

Mouse over 'Laboratory' and select 'Lab Contacts'

Add a lab contact by selecting the 'add' button

You are here: [Home](#) > [Bika Setup](#) > **Lab Contacts**



Lab Contacts

Add

Active

Dormant

All



No items found

Enter the details of the lab contact and press 'save'. Compulsory fields are indicated by ■

Select the 'email, telephone, fax' tab, enter the email address of the lab contact and press 'save'.



Add Lab Contact

Default

Email telephone fax

Address

Publication preference

Title

Greeting title eg. Mr, Mrs, Dr

■ Firstname

Middle initial

Middle name

■ Surname

Job title

Select 'Login details'

You are here: [Home](#) > [Bika Setup](#) > [Lab Contacts](#) > **Dominique Anderson**

Edit

Login details



Active



Deactivate

Enter the details of the user and press 'save'

Edit Login details

Login details

No user exists for Dominique Anderson and he/she will not be able to log in. Fill in the form below to create one for him/her.

Link an existing User

Suche
Full Name Email User Name

Link User

Create a new User

User Name *(Required)

Enter a user name, usually something like 'jsmith'. No spaces or special characters. Usernames and passwords are case sensitive, make sure the caps lock key is not enabled. This is the name used to log in.

Password *(Required)

Minimum 5 characters.

Confirm password *(Required)

Re-enter the password. Make sure the passwords are identical.

Email *(Required)

Enter an email address. This is necessary in case the password is lost. We respect your privacy, and will not give the address away to any third parties or expose it anywhere.

dominique@sanbi.ac.za

You are here: Home > Bika Setup > Lab Contacts > Dominique Anderson

Edit Login details


Info

Member registered and linked to the current Contact.

Login details

Dominique Anderson can log into the LIMS by using **labman** as username. Contacts must change their own passwords. If a password is forgotten a contact can request a new password from the login form.

Manage Linked User

 Full Name labman
User Name labman
Email dominique@sanbi.ac.za
Last Login Time Jan 01, 2000 12:00 AM

Unlink and Delete User

Unlink User

An email will be sent to the users email address

User Account Information for Baobab

Inbox x



Portal Administrator <hocine@sanbi.ac.za>

11:03 (1 minute ago) ☆



to me ▾

Welcome labman, Your user account has been created. Your username is labman. Please activate it by visiting <https://b3abiobank.sanbi.ac.za/Demo/passwordreset/a9656e2da00c5c5e7d3662ba44958732?userid=labman> Please activate your account before Aug 22, 2017 11:03 AM

With kind regards,

--

Portal Administrator

Select the link to activate the account and change the password

You are here: [Home](#)

[View](#)

Set your password

Please fill out the form below to set your password.

New Password

My user name is

Enter your user name for verification.

New password

Enter your new password. Minimum 5 characters.

Confirm password

Re-enter the password. Make sure the passwords are identical.

[Set my password](#)

Set the new password


You are here: [Home](#)

[View](#)

Password set

Your password has been set successfully. You may now log in with your new password.

Mouse over 'Laboratory' and select 'Lab Departments'

Add a lab department by selecting the 'add' button. Compulsory fields are indicated by 

Add Department

 Title

✕ Title is required, please correct.

Description

Used in item listings and search results.

Manager

Select a manager from the available personnel configured under the 'lab contacts' setup item. Departmental managers are referenced on analysis results reports containing analyses by their department.

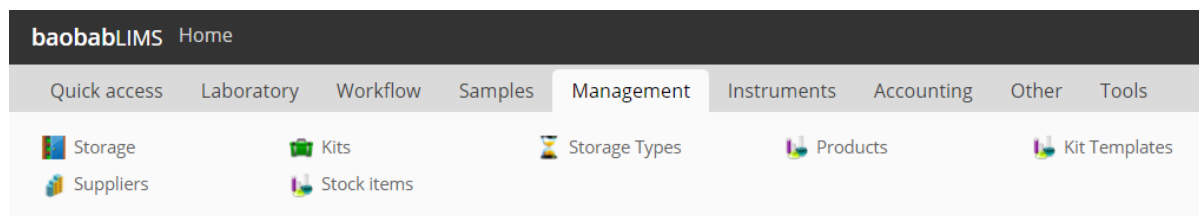
Dominique Anderson ▾




Added users are now available to be selected

Set up your suppliers

Mouse over the 'management' tab and select 'Suppliers'



Add a supplier by using the 'Add' button

Enter the details of the supplier and press the 'save' . Compulsory fields are indicated by 



Add Supplier

Default

Address

Bank details

■ Name

⊗ Name is required, please correct.

VAT number

Phone

Fax

Website.

Once a supplier has been added, contacts, instruments and inventory orders associated with the supplier can be added. Note that products belonging to the supplier must be added using the 'Products' tab.

Mouse over the 'management' tab and select 'Products'

Add a product by using the 'Add' button



Add Product

Default

Price

■ Title

⊗ Title is required, please correct.

Description

Used in item listings and search results.

☐ Hazardous

Samples of this type should be treated as hazardous

Quantity

The number of items of this product already in storage. eg. 15, 100

■ Suppliers

Name	Website
Thermo Scientific	

Enter the details of the product and press the 'save' . Compulsory fields are indicated by ■

Once products associated to suppliers have been added, the products are now available to be selected in the 'Suppliers' tab.

You are here: Home » Bika Setup » Suppliers » Thermo Scientific

Edit Products Contacts Instruments Orders

● Active ○ Deactivate

Products

Active Dormant All

Title	CAS	Quantity	VATAmount	Total Price
PCR tubes			0.00	0.00

Remarks

Save remarks

History

Added products are now available to be selected in 'Suppliers'

Set up your instruments

Mouse over the 'Instruments' tab and select 'Instrument types'

baobabLIMS Home

Quick access Laboratory Workflow Samples Management Instruments Accounting Other Tools

Instruments Instrument Types Calculations Methods


Add an instrument type by using the 'Add' button

Instrument Types Add

Active Dormant All

Enter the details of the instrument type and press the 'save' . Compulsory fields are indicated by ■

Once instrument types have been added, select the 'Instruments' tab. Add an instrument using the 'Add' button. Enter the details of the instrument and press 'save'. Compulsory fields are indicated by ■

 Add Instrument

Default

Procedures

Additional info.

■ Title

ThermoPrd

Asset Number

The instrument's ID in the lab's asset register

Description

Used in item listings and search results.


■ Instrument type

RT-PCR thermocycler ▼

■ Supplier

The instrument type and the supplier can be selected from data which was previously added

Once an instrument has been added, a notification of expired calibration certification will appear and additional tabs will become available for editing.



1 Instrument's calibration certificate expired:
ThermoPro

You are here: [Home](#) > [Bika Setup](#) > [Instruments](#) > **ThermoPro**

Edit


QC Results


Calibrations

Calibration Certificates

Validations

Documents

 Active

 Deactivate

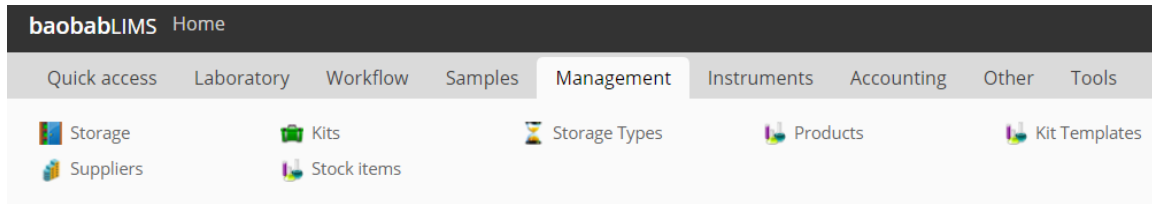
Select the 'Calibration Certificates' tab and add a certification specifically related to the instrument using the 'Add' button.

Enter the details of an instruments calibration and press 'save'. Compulsory fields are indicated by ■

If the calibration dates are current, the notification which occurred, will automatically be removed

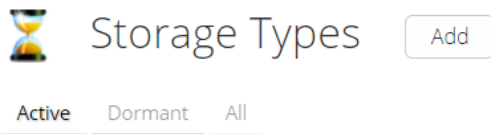
Set up your storage types

Mouse over the 'Management' tab and select 'Storage Types'



Add a storage type by using the 'Add' button

You are here: [Home](#) > [Bika Setup](#) > **Storage Types**



Enter the details of the storage type (e.g. a freezer) and press the 'save'. Compulsory fields are indicated by ■

Set up your storage

Mouse over the 'Management' tab and select 'Storage'

The screenshot shows the 'Create new storages' form. At the top, there's a green icon and the text 'Create new storages'. Below this is a tab labeled 'Storage units'. The form contains several sections of text and input fields. The first section is titled 'Storage units' and contains the text: 'Storage units are used for creating the structure that matches the physical storage. Storage units can contain more storage units as well as managed or unmanaged storages, but items cannot be stored directly in storage units. In the following simple layout Room, Freezer and Shelf are storage units:'. Below this is a bullet point: 'Room -> Freezer -> Shelf -> Box [-> Position]'. The next section is titled 'Prefix Text:' and contains the text: 'The display titles and IDs for new storage units. Provide the prefix to be append to the leading zeros number.' To the right of this text is an input field labeled 'Prefix text'. The next section is titled 'Leading Zeros:' and contains the text: 'Prepend the zeros specified here to the sequence numbers of the storage units to create, ex: 00'. To the right of this text is an input field labeled 'Leading zeros'. The next section is titled 'ID Sequence Start:' and contains the text: 'The number of storage units to create. If the sequence start is 'A' and the number of items is 5, items A,B,C,D and E will be created.' To the right of this text is an input field labeled '1'. The next section is titled 'Storage unit type' and contains an input field. The next section is titled 'Department' and contains an input field. At the bottom of the form is a button labeled 'Create Storage units'.

Prefix text: such as room, shelf, box

Leading zeros: denotes the prefix number

ID sequence start: the number on which the prefix should start

Number of items: How many units with the prefix must be created

Storage unit type: become available once defined in the 'Storage types'

Department: becomes available once defined in the 'departments' section in 'set up your laboratory'

Enter the details of the storage and press 'create storage units'

Once a storage has been created, the storage unit can be selected and a hierarchical storage system can be created for each unit.

Example: Room > Freezer > Shelf > Box > Position

The screenshot shows the 'Storage' management interface. At the top, there's a header 'Storage' with a menu icon. Below it is a 'Create new storages' button. A navigation bar includes tabs: 'All', 'Storage Units' (selected), 'Managed Storages', 'Unmanaged Storages', 'Occupied', and 'Occupied Boxes'. A search bar is on the right. Below the navigation bar is a table with columns: 'Title', 'Type', 'Temperature', and 'Department'. The table contains one row: 'Room 01', 'Storage unit', '-80 Degrees', and 'Dept1'.

Title	Type	Temperature	Department
Room 01	Storage unit	-80 Degrees	Dept1

Select the 'Room' initially created. Enter the details of a new storage unit and press 'create storage unit'

The screenshot shows the 'Room 01' storage unit details page. At the top, it says 'You are here: Home > Storage > Room 01'. Below this is a 'view' button and an 'Edit' button. There are two status indicators: 'Active' (green circle) and 'Deactivate' (red circle with a slash). Below these is an 'Info' section with a lightbulb icon and the text '2 Storage units created.' Below the info section is the 'Room 01' header. Below the header is a 'Create new storages' button. A navigation bar includes tabs: 'All', 'Storage Units' (selected), 'Managed Storages', 'Unmanaged Storages', 'Occupied', and 'Occupied Boxes'. A search bar is on the right. Below the navigation bar is a table with columns: 'Title', 'Type', 'Temperature', and 'Department'. The table contains two rows: 'freezer 1', 'Storage unit', '-80 Degrees', and 'Dept1'; and 'freezer 2', 'Storage unit', '-80 Degrees', and 'Dept1'.


Title	Type	Temperature	Department
freezer 1	Storage unit	-80 Degrees	Dept1
freezer 2	Storage unit	-80 Degrees	Dept1


Select a freezer storage unit that has been created. Enter the details of a new storage unit and press 'create storage unit'


You are here: Home > Storage > Room 01 > freezer 1

view Edit

● Active ✖ Deactivate







 Info
6 Storage units created.

 freezer 1

 Create new storages

All Storage Units Managed Storages Unmanaged Storages Occupied Occupied Boxes

Q


Title	Type	Temperature	Department
 shelf 01	Storage unit	-80 Degrees	Dept1
 shelf 02	Storage unit	-80 Degrees	Dept1
 shelf 03	Storage unit	-80 Degrees	Dept1
 shelf 04	Storage unit	-80 Degrees	Dept1
 shelf 05	Storage unit	-80 Degrees	Dept1
 shelf 06	Storage unit	-80 Degrees	Dept1


Select a shelf storage unit that has been created. Enter the details of a new storage unit and press ‘create storage unit’


You are here: Home > Storage > Room 01 > freezer 1 > shelf 01

view Edit

● Active ✖ Deactivate



 Info
2 Storage units created.

 shelf 01

 Create new storages

All Storage Units Managed Storages Unmanaged Storages Occupied Occupied Boxes

Q

Title	Type	Temperature	Department
 Box 01	Storage unit	-80 Degrees	Dept1
 Box 02	Storage unit	-80 Degrees	Dept1

At each level of a storage unit creating, space can be managed (ie. Spaces are assigned) or unmanaged (ie. Spaces are not allocated prior to storage).

Managed storage

Managed storage is used specifically for the storage maintenance of biospecimens. The process of creating managed storage is as follows;

Navigate to the storage unit created in the previous step and select the ‘managed storage’ tab.

Create new storages

Storage units

Managed storage

Unmanaged storage

Managed storage contains a set number of positions for storing objects, e.g. boxes which can store 36 tubes each, or shelves which can store three of a type of stock item. Once all positions are occupied, the storage itself will be flagged as occupied, and when a position next becomes available the storage becomes available too. Items can be stored in specific positions, or the storage itself can be selected, in which case a position is chosen automatically.

Prefix Text:
The display titles and IDs for new storage units. Provide the prefix to be append to the leading zeros number.

Leading Zeros:
Prepend the zeros specified here to the sequence numbers of the storage units to create, ex: 00

ID Sequence Start:
The number of the first item in the ID sequence. This can be a simple number like '1', or it can be a string like 'A' or 'AA'.

Number of items:
The number of storage units to create. If the sequence start is 'A' and the number of items is 5, items A,B,C,D and E will be created.

Number of positions:
Enter the number of possible storage positions located inside these storages.

Storage Types:
Select the types of objects that can be stored here.

Graphical representation:
Select a dimension and set number of columns and rows to represent positions in a grid.

Create storages

Prefix text

Leading zeros

1

1

Samples

Rows: 0

Columns: 0

Enter the details required to create managed storage and press ‘create storage’.

By selecting the created storage unit, a list of created positions will be shown. In addition, a graphical display is available.

You are here: Home > Storage > Room 01 > freezer 1 > shelf 01 > **Box 01**

view

Edit

Deactivate

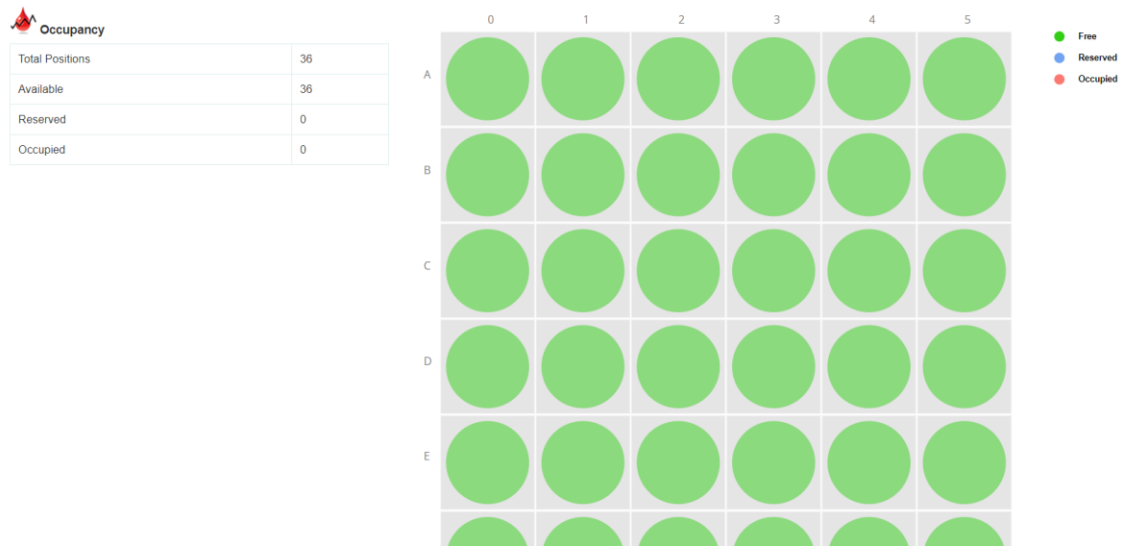
Box 01

Active

Reserved

All

ID	Storage Types	Stored Item	State
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.1	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.2	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.3	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.4	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.5	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.6	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.7	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.8	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.9	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.10	Samples		available
<input type="checkbox"/> Room-01.freezer-1.shelf-01.Box-01.11	Samples		available



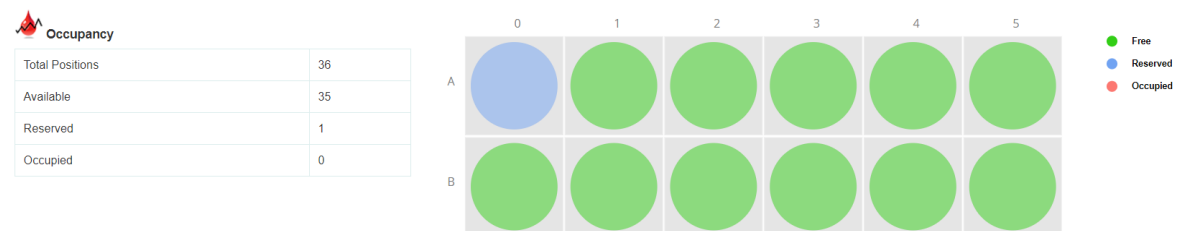
By selecting a storage unit (a position within a box), the item may be reserved. When the item is reserved, the state of the item will change and this change will also be reflected in the graphical representation.

Box 01

Active Reserved All

1 Items selected

ID	Storage Types	Stored Item	State
Box-01.1	Samples		available
Box-01.2	Samples		available
Room-01.freezer-1.shelf-01.Box-01.3	Samples		available
Room-01.freezer-1.shelf-01.Box-01.4	Samples		available



The storage position can be freed by selecting the position and pressing 'liberate'.

Box 01

Active Reserved All

1 Items selected

ID	Storage Types	Stored Item	State
Box-01.1	Samples		reserved
Box-01.2	Samples		available
Room-01.freezer-1.shelf-01.Box-01.4	Samples		available
Room-01.freezer-1.shelf-01.Box-01.5	Samples		available

Unmanaged storage

Unmanaged storage refers to locations for items such as inventory stock items that will be used in kit assembly. The process of creating unmanaged storage is as follows;

Navigate to the storage unit created previously and select the 'add new storage' button. Navigate to the 'unmanaged storage' tab and enter the details of the storage.

In the example below, Room01 contains 3 shelves for storage of inventory items. The shelves are labeled from 1 to 3 and will contain stock items.

 Room 01

Create new storages

Storage units

Managed storage

Unmanaged storage

Unmanaged storage does not restrict the number of items which can be stored. These storages will be available for selection until they are manually flagged as occupied or available.

Prefix Text

The display titles and IDs for new storage units. Provide the prefix to be append to the leading zeros number.

Shelf

Leading Zeros

Prepend the zeros specified here to the sequence numbers of the storage units to create, ex: 00

0

ID Sequence Start

The number of the first item in the ID sequence. This can be a simple number like '1', or it can be a string like 'A' or 'AA'.

1

Maximum number of unmanaged storage

The maximum number of unmanaged storage to create.

3

Storage Types

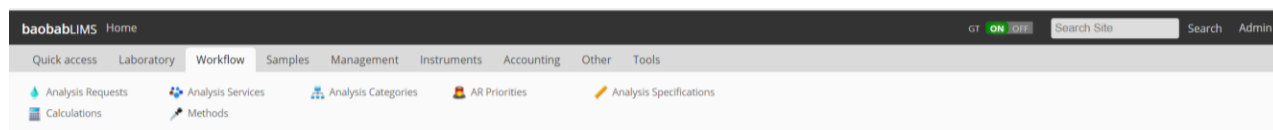
Select the types of objects that can be stored here.

Stock Item

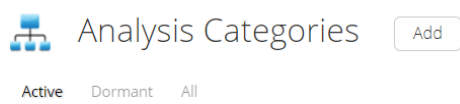
Create storages


Set up your analysis category


Mouse over the 'Workflow' tab and select 'Analysis category'



Add an analysis category by using the 'Add' button



 No items found

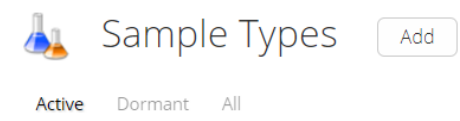
Enter the details of the analysis category and press the 'save'. Compulsory fields are indicated by 


Set up your Sample Type


Mouse over the 'Samples' tab and select 'Sample Types'



Add a sample type by using the 'Add' button



 No items found

Enter the details of the sample type and press the 'save'. Compulsory fields are indicated by 

Set up your other parameters

Once all the above categories have been set up, all other categories can be set up. These can be managed by simply selecting the category and adding information using the 'Add' button. Enter details related to the category and press the 'save' button. Compulsory fields are indicated by ■

Other categories to be set up include;

