myfab LIMS

myfab
Laboratory Information Management System

Manual of the Myfab LIMS

Intiro Development
10/18/2010

Manual Myfab LIMS

Contents

General

Glossary

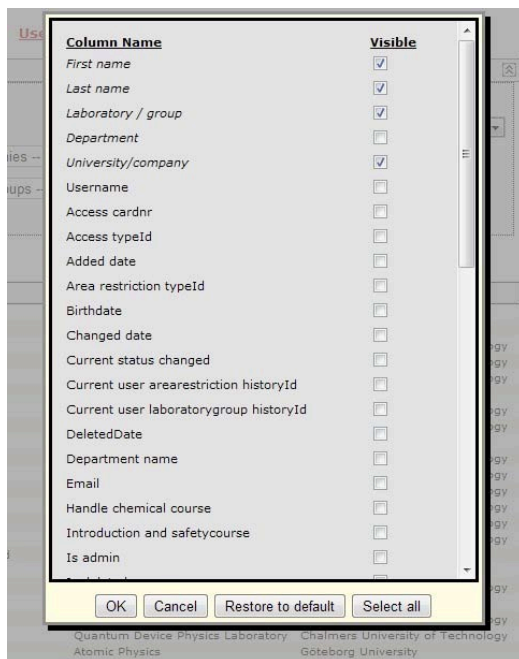| Term	Description
Tool Id	A unique tool number. This Id is user defined.
Tool status	The status of a tool. The statuses are *Available*, *Warning* and *Down*.
Tool category	The tool type. All tools belong to one of the defined categories.
Tool down time	The hours the tool has been unavailable.
Tool document	Documents connected to the tool.
Booking	A booking on a specific tool.
Calendar	In the calendar the users can create/edit/view bookings. The calendar displays one week at a time.
Tool license	To book a specific tool the user must have a licence for that tool.
Licence application	Users that need to use (and book) certain tools must apply for a licence. The application is handled by the tool responsible/instructor.
Tool responsible	A user category. There are 1st and 2nd tool responsible. The users in this category grants licenses and is permitted to edit tool properties.
Practical coach	The practical coach is a user that has helped an applicant using a specific tool. The practical coach is a user who has licence for that specific tool.
Supervisor	When applying for membership in LIMS the applier can name his/her supervisor.
Instructor	A user category that instructs new users how to use tools and grants licenses.
Project	When booking a tool the user have to specify a project.
Batch	It is possible to add and edit batches, to be referenced to in log entries.
Night shift booking	Certain rules apply when booking tools outside daytime hours. (Optional)
Newsletter	Users belonging to one of advanced user roles can create/edit and send the newsletter.
Sitemap	A map over the structure of the website.
Profile	All users has a profile which can be edited by the users himself, email, password etc.
Process line(s)	Tools used in a process flow can be grouped using a process line.
External mail receivers	External (persons not active in the lab) mail addresses that will receive the newsletters.
Internal info page	The start page for LIMS. The page can be edited by advanced users.
Log	Electronic log book function or an entry in the electronic log book.
Log fields	It is possible to add/create custom log fields on every tool.
Fares and charges	Sets hourly rates, monthly fee etc. Used when handling invoices data.
Favourites	A menu that contains the selected favourites in the LIMS system. The favourites are user defined and set in the "My Profile" section.

Lists/grids

Lots of pages in the system are "List pages", like User list, tool list, Booking list, project list, etc. Common for these pages are that they have a filter with options – depending of type of page.
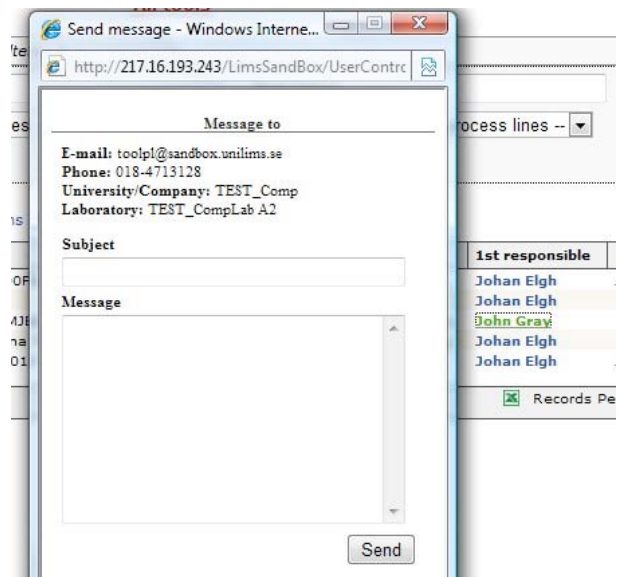

Some lists have a lot of viewable columns, a logged in user have the option to choose the columns to view. These settings are saved until the next time the user changes them.

Each list has some default columns that are showed the first time. You can always change back to "default" if you like (Restore to default button).

User in the lists is clickable. When clicked a small window with contact information is displayed. It is also possible to send a message.

Roles of the system

The system consists of primary and secondary roles.
Primary roles are: Administrator, User, Project manager, Project leader.
A user of the system must have one of these roles.
The user can also have an optional, secondary role: Instructor or Tool responsible.

An "Administrator" can see and do everything in the system. Booking rules do not apply, with a few exceptions.
A "User", the most common role, is a standard user. He can See information, but not change or add/delete it.
A "Project manager" is basically a "User" who can add and manage projects, while a "Project leader" can manage projects, but not create any new.

The roles "Instructor" and "Tool responsible" opens up menus for editing tools, settings, and allow licensing of equipment for users.

Use cases

This section describes the workflow when performing some common tasks in LIMS.

Apply for access to LIMS

When a potential user needs access to LIMS, the user has to apply for membership.

Researchers, graduates, students and others that require access to the lab(s) can apply for membership from the start page by clicking the menu "Membership".

The steps necessary by the applying user are explained in the section Membership.

After a user has sent an application applying for membership in LIMS an administrator has to process the application, these steps are explained in the section Process application.

Apply for tool licence

If a user needs to book a tool, the user has to have a licence to use that particular tool.

The steps performed when applying tool licenses are described in the section Apply licence.

A tool responsible has to approve or decline applications, these steps are describe in the section Manage Licence applications.

To book a tool

The core of LIMS is the booking of tools. Booking a tool can be initiated from different sections in LIMS. The most common way of doing this is from the start page. This is done by clicking "Book" to the left of one of the tools displayed in the list My Licensed tools and thereafter perform a booking on that specific tool. The booking procedure is described in the section Book a tool.

Create a log connected to a booking or a tool

The recommended way is to create logs on bookings but some tools are not possible to book. In that case the user has to create a log directly on that tool.
Logging is usually performed from the start page in the list "My Bookings".

How to create log on a booking see the section: Log for booked tools.

How to create log on a tool see the section: Log without booking.

Send messages

From within LIMS the user has the option to send messages to the other registered users in LIMS, how to do this is described in the section: Send Message.

Start page

Home

After a successful login the user is redirected to the start page shown below.
From the start page it is possible for the user to do the most common tasks in LIMS.

The start page contains of following sections:

- New license applications and new user applications

- News

- Booked tools, a list of booked tools

- Logs without bookings, a list of logs

- Project leader bookings, a list of bookings

- My licenced tools (Favorites), a list of tools

- My licenced tools (All licenced tools) , a list of tools

New license applications and new user applications

At the top of the page, both new licence applications(Tools) and new user applications(LIMS) are displayed.

There are **10** licence applications to process
There are **3** user applications to   process

By clicking the links the user can manage/process these applications.

This section is only shown to the users who manages user applications or licence applications. The roles who manages applications are administrators and tool responsibles.

News (Internal info page)

The news are displayed under the header "Important information about the lab".

Users with the role administrator, tool responsible, project manager and instructor are permitted to edit the internal info page/news page at Home » Advanced » Internal info page.

Booked Tools

This section of the start page displays booked tools and started log entries that are not connected to a booking. See picture below.

The user can edit the bookings and perform logging from any of the lists. This is done by clicking the links "Edit" (to edit a booking) and "Log" (to create a log on a booking).

My licenced tools

This section lists the tools where the user has a licence. As default, only the tools selected as favorites are displayed. Favorite tools are selected/deselected at Home » Tools » My licenced tools.

To see all licenced tools the user has to click the link "[All licenced tools]". See picture below.

As seen above the user has the choice to perform bookings, perform logging or view the tool information in the list. This is done by clicking the links "Book" (to book a tool), "View" (to view a tool information page) and "Log" (to create a log on a tool without booking).

Tools

Home » Tools

The "Tools" menu is accessible to all users of the system.

View Tool

This page is opened from several different tool lists like "All tools", "Tool list", "My Licensed tools" etc. View tool shows standard information, viewable to all users.

My licensed tools

Home » Tools » My Licensed Tools

The page displays a list of the tools where the user has licence.

As seen above the user is able to perform bookings, perform logging or viewing the tool in the list. This is done by clicking the links "Book" (to book a tool), "View" (to view a tool) and "Log" (to create a log on a tool without booking).

It is also possible for the user to add or remove a tool as a favourite tool. The favourite tools are seen at the top of the list "My Licenced tools" in the LIMS start page.

How to create log on a booking see the section: Log for booked tools.

How to book a tool is described in the next section: Book a tool.

Book a tool

From the list described above (My licenced tools) the user clicks the link "Book" to start booking a tool.

When clicking the link "Book" a calendar is displayed, all bookings are made in this calendar view. See picture below.

Booking is made by clicking the start time and end time in the calendar. See picture below.

After clicking the end time a popup is displayed where the user selects project, batch no (optional) and confirms the booking by clicking the button named "Book". See picture below.

After confirmation the booking is displayed in the calendar as shown in picture below.

By selecting another tool at the top of the page the user can book several tools at once.
The bookings for the selected tool are displayed in blue. Other tool bookings made by the user are displayed in green. See pictures below.

The easiest way to edit a tool booking is simply to click the link "Edit" from the list Booked Tools at the Start page.

There are a number of rules and settings affecting the booking of tools. These are described in the section Booking in LIMS.

Apply for licence

In this page any user can apply for a tool licence.
The three different dates are suggestions for the necessary overhaul done by a tool responsible or an instructor. The practical coach is another user who has licence for that tool. The practical coach must be a user that has helped the applicant using the specific tool.
The application is sent by mail to 1st or 2nd tool responsible and all instructors for that tool. When the license is confirmed by a tool responsible or instructor the user receives a "driving" license for that tool. This means that the user is allowed to book and use that tool.

All tools

Home » Tools » All tools

This page lists all tools registered in the system. It is possible to do some filtering to narrow down the number of tools displayed.
To book a tool click the link "Book".
To view the details click the link "View".
To perform logging, click the link "Log".

All tools

	Optional filters for this list	(Hide filters...)		
Tool Id:			Tool name:	
Category:	-- All categories --		Process line:	-- All process lines --

Apply filters

Add/remove columns (5 of 32 columns chosen)

	Name	Tool Id ▲	Manufacturer	Process responsible	Instructors
Book View Log	Microscope - Olympus AH3 (Vanox)	102	Olympus		
Book View Log	4-point probe - CMT-SR2000N	103	Doktor Snuggles		Svante Pålsson
Book View Log	Ellipsometer - Sagax Iscoscope	104	Sagax		
Book View Log	Ellipsometer - Rudolph AutoEL-II	105	Rudolph		
Book View Log	Microscope - Olympus MX40	106	_		Aldo Instr Jesorka
Book View Log	Surface profiler, stylus - Tencor P15	108			
Book View Log	SEM - JEOL JSM-6301F	110	JEOL Ltd.		
Book View Log	SPM - DI Dimension 3000 SPM	111			
Book View Log	Ellipsometer - J.A. Woollam M2000	112	J.A. Wollam		
Book View Log	Surface profiler, optical - Wyko NT 1100	114	Wyko		
Book View Log	SEM - Zeiss Supra 60 VP (IXRF EDX)	116	Zeiss		Piotr Jedrasik
Book View Log	Macro photo system	118			
Book View Log	X-ray Diffractometer	120	Philips		
Book View Log	Parameter Analyzer - Keithley 4200-SCS	123	Keithley	Göran Alestig	
Book View Log	Microscope - Olympus MX50	125			
Book View Log	Microscope stereo - Olympus SZH-10	126			
Book View Log	IR Wafer Inspection System	127			
Book View Log	Ozone Cleaning System Novascan	130	Novascan	Örjan Arthursson	
Book View Log	Offline analysis(SPM/Ellipsometry/L-draw/AutoCAD	140	HP		
Book View Log	Photolithography Stepper - ASML PAS	201	ASML		

Tool status

Home » Tools » Tool status

This page lists all tools registered in the system displaying their current status.
It is possible to do some filtering to narrow down the number of tools displayed.

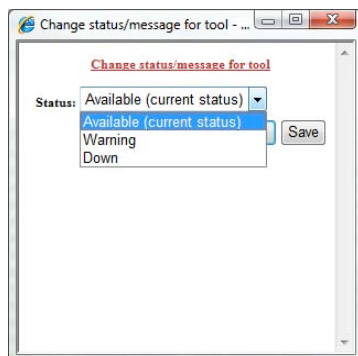Users with proper permissions can change the status for a tool by clicking the link "Change status".

The popup window used to change tool status, see picture below.

When the user changes the tool status it will probably affect the bookings made on that tool.

Status change	Effect
Available -> Warning	When a booking is made a warning message will be displayed to the user.
Available/Warning -> Down	All future bookings will be deleted. If a booking spans into the down period that booking will be shortened to the nearest available ½ hour.
Down -> Available/Warning	If licenced users to that tool has activated e-mail notifications in "My Profile" they will receive a notification e-mail when a tool status changes from "Down".

The setting in that activates e-mail notification, see picture below.

View bookings

Home » Tools » View Bookings

This part of the application give the users an overview of their own bookings and the opportunity overview other bookings as well.

My bookings

Home » Tools » View Bookings » My bookings

The page is an overview of the bookings made by the user. The listed bookings can also be edited, viewed and deleted.
To edit a booking click "Edit" in the list.
Bookings can be deleted by selecting booking(s) and pressing the button "Delete checked bookings".
The user can also perform logging by clicking the link "Log".

All bookings

Home » Tools » View Bookings » All bookings

The page lists all bookings for a tool AND/OR a project during a period of time.
In the example below the user is listing all bookings in the project "Nanofabrication Laboratory".

The listed bookings can also be edited, viewed and deleted.
To edit a booking click "Edit" in the list.
Bookings can be deleted by selecting booking(s) and pressing the button "Delete checked bookings".
The user can also perform logging by clicking the link "Log".

Booking overview

Home » Tools » View Bookings » Booking overview
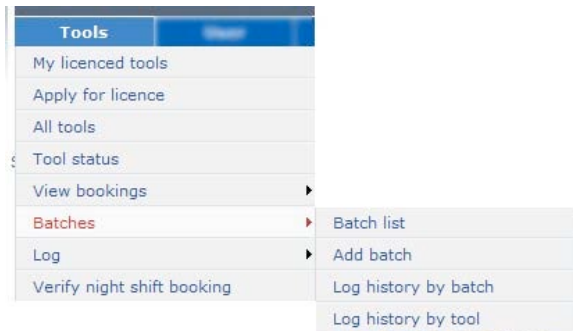
This page displays an overview of bookings the selected date.
It is possible to see all bookings the selected day by setting the filter seen below.

Batches

Home » Tools » Batches

In this section the users have the possibility to view and manage batches.

Batch list

Home » Tools » Batches » Batch list

The page lists batches in the system. By changing the filter it is possible to see all batches.
The user has the possibility to edit/change the batch by clicking the link "edit".
It is also possible to display the log history by clicking the link "History".

Log history by batch

Home » Tools » Batches » Log history by batch

This page lists all log entries where the user has entered a batch number/name in that specific log entry.

Log history by tool

Home » Tools » Batches » Log history by tool

This page lists log entries by a specific tool where the user has entered a batch number/name in that specific log entry.

Log

Home » Tools » Log

This section provides the user with a summary / overview of the logs created.

Log status

Home » Tools » Log » Log Status

This list displays logs and their status, see picture below.
Only the users own bookings are displayed in the list.

The user can create a log or continue logging by clicking the link "Log".

In this page the user also has the option to create logs directly on a tool or to create a booking. See the picture below. To create a booking on the selected tool just press the button "New booking" and to create a log just press the button "New log".

Create a log on a booking / Log for booked tools

The user can create a log or continue logging by clicking the link "Log" in the list displaying

When creating a new log or continues logging on a booking the page below is displayed.

When pressing the button "Save as 'Started'" the log is marked "Started" and not closed, it is possible to perform more logging on that booking. If the button "Save as 'Completed'" is pressed the log on that booking is marked "Completed", logging is not supposed to continue on that booking.

Create a log on a tool / Log without booking

In this page the user also has the option to create logs directly on a tool or to create a booking. See the picture below. To create a booking on the selected tool just press the button "New booking" and to create a log just press the button "New log".

When creating a log on a tool without booking the page below is displayed.

The functionality of the buttons is the same as for Log for booked tools.

Log history by tool

Home » Tools » Log » Log history by tool

Same as described in section Log history by tool.

Log history by batch

Home » Tools » Log » Log history by batch

Same as described in section Log history by batch.

Verify night shift booking

Home » Tools » Verify night shift booking

This page helps users to find lab buddies during night shift.
Users search for bookings during the period of their lab stay.

If there are bookings during selected period they will be shown in the list.

A lab buddy is selected by clicking the link "select".

After selecting a lab buddy the user must confirm/complete the verification and optionally supply some extra information.

An e-mail is sent to the selected lab buddy upon confirmation.
The confirmed lab buddy is shown in the list "Verified users in the lab", see picture below.

User

Home » User

All users have access to the "User" menu.

In this section it is possible to:

- View and edit my own profile

- View some statistics over my bookings.

- Send messages to other users

- View some user information of other users.

My Profile

Home » User » My Profile

There are five sections in "My Profile", "Personal Info", "Change Password", "Email Settings", "User Settings" and "Favorites". In the different sections the logged in user can view and edit his/her settings.

Personal Info

To change the settings, simply edit the fields and press the button "Save Changes".
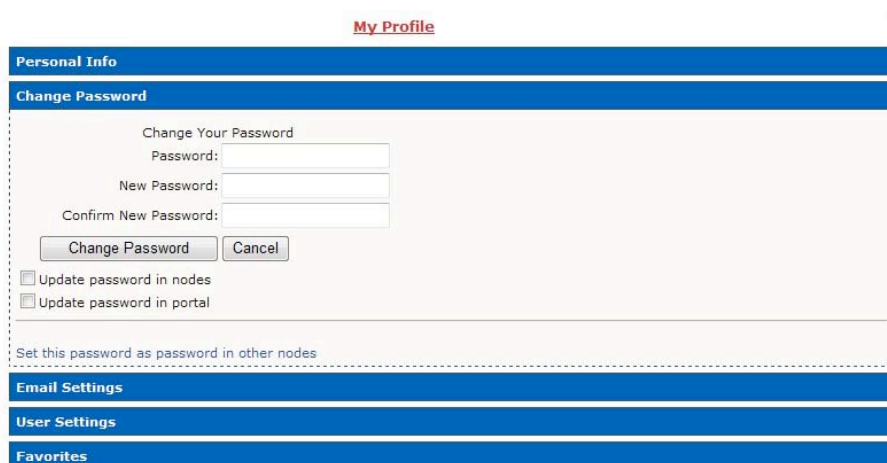
Change Password

In this section the user can change the password by entering a new password and press the button called "Change Password". If the checkbox called "Update password in nodes" is checked the password change is made in other connected LIMS nodes as well. If the checkbox called "Update password in portal" is checked the password will be updated in the portal as well.

It is possible to distribute the current password to the other LIMS-nodes by clicking the link "Set this password as password in other nodes". In this case it is not necessary to change the password, just click the link and the password will be the same in all LIMS-nodes.

My Profile

Personal Info
Change Password

Change Your Password
Password:
New Password:
Confirm New Password:

[Change Password] [Cancel]
☐ Update password in nodes
☐ Update password in portal

Set this password as password in other nodes

Email Settings
User Settings
Favorites

Email settings

This section allows the user to change the personal Email settings.

My Profile

Personal Info
Change Password
Email Settings

Show a link for sending my future bookings as an ICal-file.	Yes ▾
Receive e-mail when a (licenced) tool is available again after being down:	No ▾
Send a confirmation mail whenever an action causes a mail being sent to user(s):	Yes ▾

[Save changes]

User Settings
Favorites

User Settings

This section allows the user to change settings:

- My default project when booking

- Use simultaneous booking windows.
  When booking in the calendar, more than one booking window can be open at a time.

- Default timeout for login.
  The time before the user will be logged out due to inactivity.

- Use iCalendar-feed.
  If checked the user gets a link that can be imported to a calendar.

By clicking the link "Show" the link to the iCalendar feed is shown.
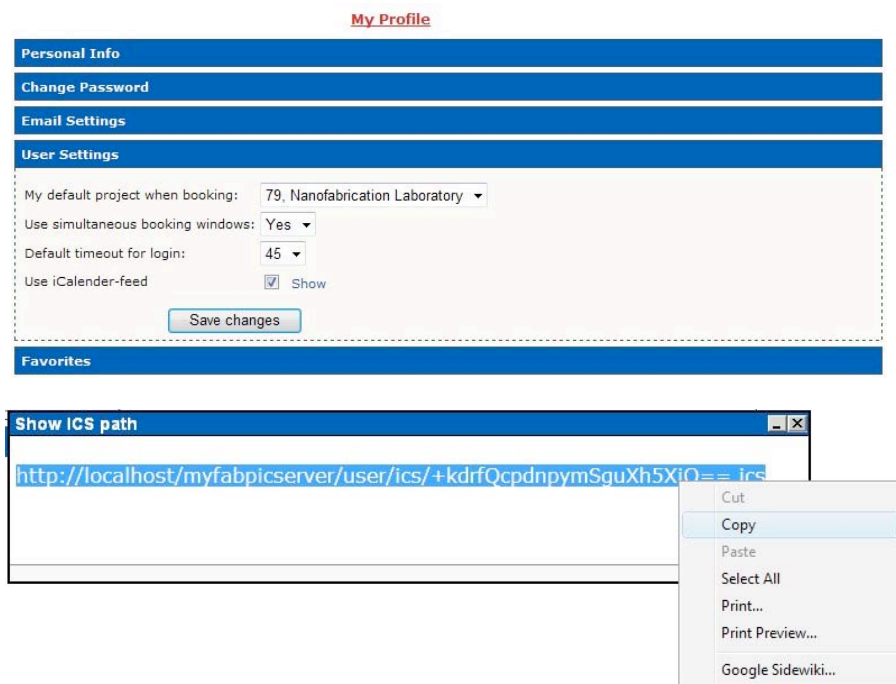
By copying the link into a calendar that supports iCalendar (like the Google calendar) the user's future bookings is shown in the calendar.
See picture below.

iCalendar Example 1 – MonoCalendar:
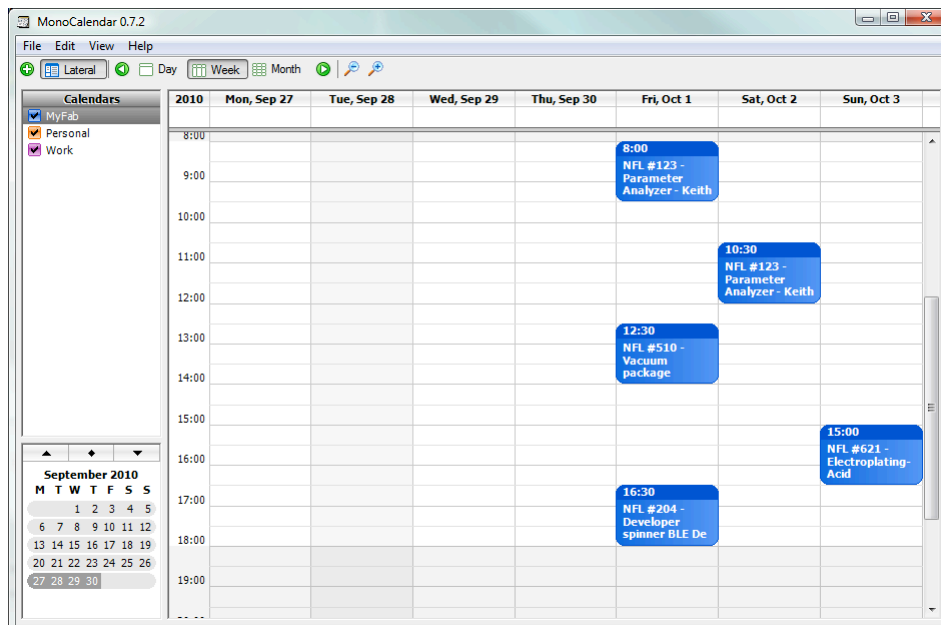
iCalendar Example 2 - Google Calendar
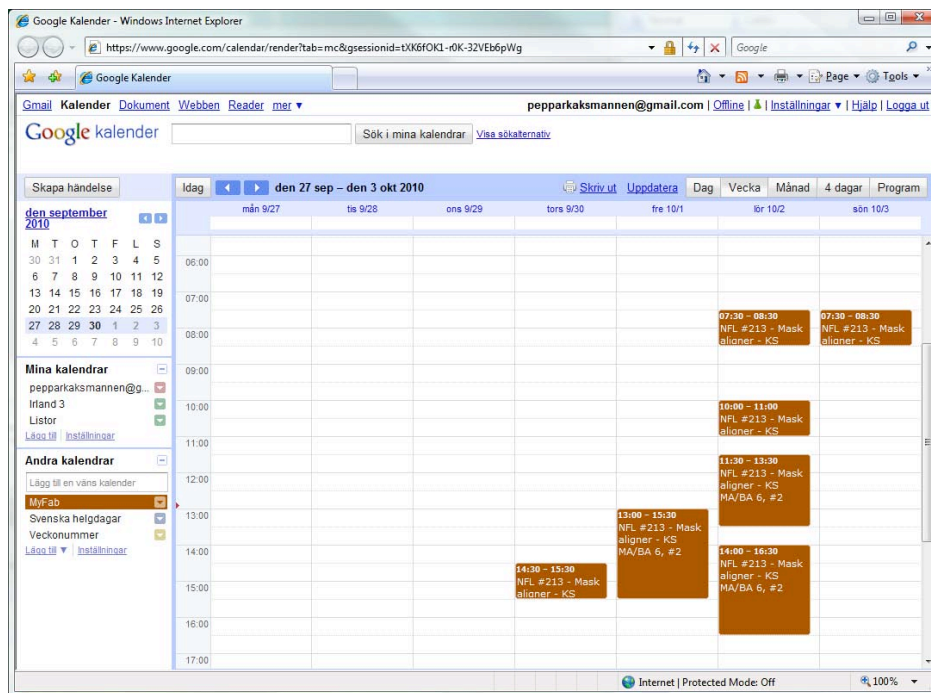
Favorites

Favorites are created by checking different sections, see picture below to the left.
The selected sections is displayed as "Favorites" in the left hand menu, see picture to the right.
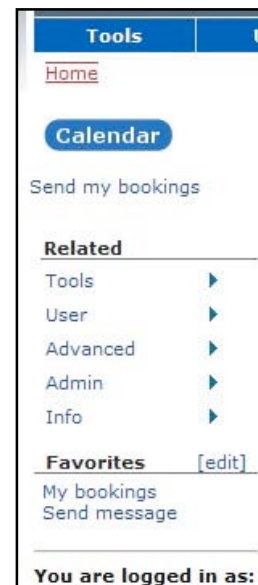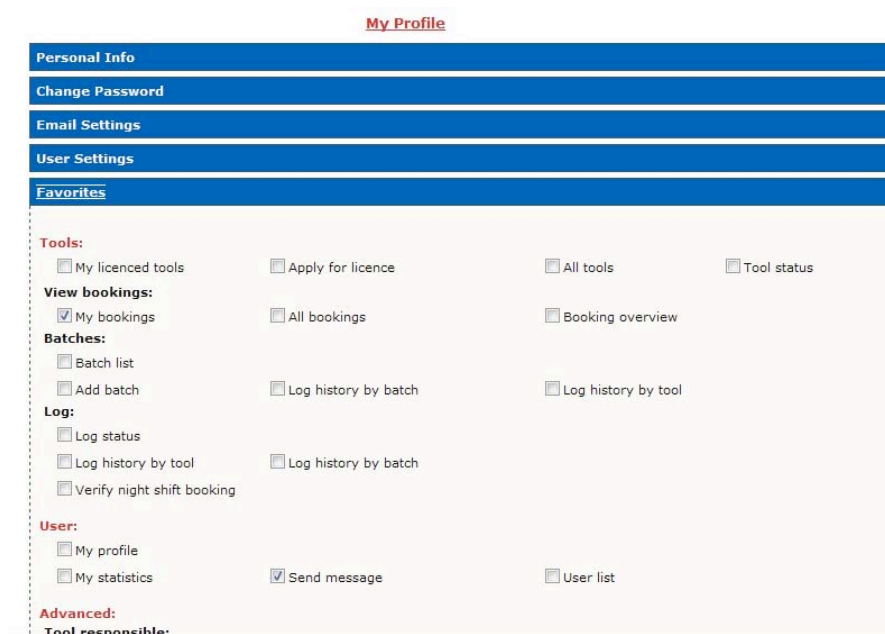
My Statistics

Home » User » My Statistics

Statistics is presented to the user, see picture below.
The data displayed is a summary of the bookings performed by the logged in user during selected period.

Send message

Home » User » Send message

This page enables the user to send messages to other users registered in LIMS.

The user first selects a recipient type in the drop down box.
When a recipient type is selected the page changes appearance and the user is presented with different options:

- One user.
  A text field is shown.
  Use the text field to enter the name of a user.
  The text field will display a list of users when entering the name.

- Several users.
  Displays a list of all users with filtering options.

- Tool responsible.
  Displays a drop down box containing all tools.

- Users of a specific tool.
  Displays a drop down box containing all tools.

- The booking system administrator.

After selecting recipient type the user selects the actual recipient(s) and enters subject, the message text and attaches file(s).

User list

Displays users in LIMS, all users can be listed here.

Advanced

Four different roles have access to the "Advanced" section. Users with the roles: Instructor, Tool Responsible, Project Manager and Administrator.

Tool Responsible

The Advanced menu for users with the Role "Tool Responsible".

My Tools

Home » Advanced » Tool responsible » My tools

The page displays a list with the tools under the responsibility of the logged in user. The user also have the possibility do some actions related to the tools in the list, edit, view, to perform logging, to set a service message and to set a general message.

Tool time blocking

Home » Advanced » Tool responsible » Tool time blocking

The page for tool time blocking enables the tool responsible to block bookings on a tool during certain times.

Choose period
Specifies a time period during which the specified blocking will be active.

Choose time
Specifies a time during the day when the tool is blocked from being booked.

Choose days
Specifies the days in the week when the blocking is active.

Choose time before release
Specifies how many hours before the specified time the booking block will be released.

An example
As seen in the picture above.
The tool responsible has created a new blocking for a tool during
the period 2010-10-05 to 2010-12-31.
During that time the tool cannot be booked in advance during 10:00 to 17:00 on Tuesdays, Wednesdays, Thursdays and Fridays. These days users will be able to make bookings between 10:00 to 17:00 from 06:00 (4 hours before 10:00).

Tool blocking does not apply to tool responsible, administrators and members of the service project. They can book at any time.

Allow/Disallow mail subject "booking cancelled"

Home » Advanced » Tool responsible » Allow/Disallow mail subject "booking cancelled"

When a booking is cancelled it is possible to send a mail with the subject "booking cancelled".

The list enables the tool responsible to allow or disallow mail with the subject "booking cancelled" when a booking has been cancelled. Toggle between enabling and disabling this feature by clicking True/False in the "Allow" column.

Licenses by user

Home » Advanced » Tool responsible » Licenses by user

In this page a tool responsible manages licenses for using tools. This is done by selecting user and adding/removing licenses for different tools.

Licenses by tool

Home » Advanced » Tool responsible » Licenses by tool

In this page a tool responsible manages licenses for using tools. This is done by selecting a tool and adding/removing licenses for different users.

Manage Licence applications

Home » Advanced » Tool responsible » Manage Licence applications

The first page shown displays applications from users applying for tool "driving" licenses. By clicking "Process" the user can manage individual license applications.

The tool responsible manages the license application as seen below. The application can be declined, saved as pending and confirmed. There are also some text fields so that the tool responsible can supply the application with supplementary information about the tool and its intended use.
As soon as the application is confirmed the user can book that specific tool.

Information about the user is also displayed.

Application info

Tool	Ellipsometer - Sagax Iscoscope(104)
Application date	2010-06-07
Status	New application
Prefered date(s)	2010-06-15 2010-06-16 2010-06-21
Estimated use	544h
Practical coach	
Short info of intended use	

Latest change, by

Notes

[Decline]   [Save as pending]   [Confirm licence]

Current Licences

(204) Developer spinner BLE De	20100512
(9901) Harrys Golvmopp	20100512
(123) Parameter Analyzer - Keithley 4...	20100512
(103) 4-point probe - CMT-SR2000N	20100412

Name
Email:
Phone:
Mobile phone:

University / Company:
Department:
Laboratory / Group
Supervisor:
User Category:

- Nanofabrication L
- Service Project
- M2 - Helsinki
- M17 - Athens
- M18 - Bologna
- M27 - Ankara
- M31- Louvain la N
- M32 - Bellaterra-
- M35-Warsaw
- M37-Karlsruhe
- M38-Trondheim
- M39-UC Leuwen
- M40-Bellaterra
- M41-Prague
- M42-Athens

Bookings, nr of bookings:

Bookings, total tim

Logs, nr of logs:

Manage instructors by user

Home » Advanced » Tool responsible » Instructors by user

This page is used to add/remove users as tool instructors. This is done by selecting user and adding tool to that user.

The first page shown displays only a search field. Type/Select the name of the user who is going to be an instructor. Display the user's tools by clicking the button "Display Tools".

The tools available for that user are displayed as shown below.
Add the user as instructor by selecting tools in the list named "Available Tools" and click the "Add tool(s)" button.

Manage instructors by tool

Home » Advanced » Tool responsible » Instructors by tool

This page is used to add/remove users as tool instructors. This is done by selecting tool and adding users as instructors too that tool.

When selecting a tool a list of available users is displayed, just select and add/remove users as instructors in that list.

Edit log fields

Home » Advanced » Tool responsible » Log fields

This page is used for add/remove/edit additional log fields for a specific tool.
Every tool has three standard log fields; these fields cannot be changed or removed from a tool.
The standard log fields are: "Log start" (Date and time), "Log stop" (Date and time) and "Additional info" (Text).

To add additional log fields, start by selecting a tool.
Current additional log fields are displayed as shown below.
Add new log field by clicking the button "Add new log field".
Edit existing log fields by clicking "Edit" in the list.

It is possible to add additional 9 numeric log fields and 9 additional text log fields.

The fields can be set to Optional, Optional - but warning if not filled on and Compulsory.

Maintenance log fields

Home » Advanced » Tool responsible » Maintenance log fields

The functionality is the same as in "Log fields". See the section *"Home » Advanced » Tool Responsible » Log fields"* for more information.

The only difference is that these custom fields only are available in maintenance projects.

Service log fields

Home » Advanced » Tool responsible » Service log fields

The functionality is the same as in "Log fields". See the section *"Home » Advanced » Tool Responsible » Log fields"* for more information.

The only difference is that these custom fields only are available in service projects.

Instructor

The Advanced menu for users with the Role "Instructor".

Licenses by user

Home » Advanced » Instructor » Licenses by user

In this page a tool responsible manages licenses for using tools by selecting user and adding/removing licenses for different tools.

See the section *"Home » Advanced » Tool Responsible » Licenses by user"* for more information.

Licenses by tool

Home » Advanced » Tool responsible » Licenses by tool

In this page a tool responsible manages licenses for using tools by selecting a tool and adding/removing licenses for different users.

See the section *"Home » Advanced » Tool Responsible » Licenses by tool"* for more information.

Manage Licence applications

Home » Advanced » Tool responsible » Manage Licence applications

The first page shown displays applications from users applying for tool "driving" licenses. By clicking "Process" the user can manage individual license applications.

See the section *"Home » Advanced » Tool Responsible » Licenses applications"* for more information.

Manage my projects

The Advanced menu for users with the Role "Project Manager".

New project

Home » Advanced » Manage my projects » New project

The page enables a project manager to create a new project.

Add/Manage project members

Home » Advanced » Manage my projects » Add/Manage project members

In this page the project managers can Add/Remove project members. This is done by checking users and pressing the "Add" button or the "Remove" button.

Add/Manage project list

Home » Advanced » Manage my projects » Project list

The page displays the projects registered in LIMS.

As shown below, users can send message to the project leader by clicking a name in the "Project leader" column.
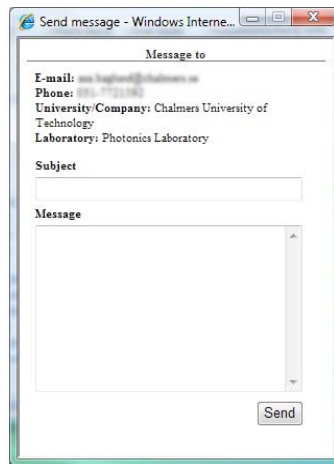
As shown below, administrators and project managers can edit a project by clicking the "Edit" column.

To delete a project simply set the radio button "Is deleted" to true.

Administrator

The Advanced menu for users with the role "Administrator". As shown below, user with the administrator role have access to all sections.

Common menu sections

There are 5 sections in the "Advanced" menu that are accessible by all roles that have permissions in the "Advanced" menu. These sections can be accessed by users with the roles of Instructor, Tool Responsible, Project Manager and Administrator.

Although these roles have permission to the different areas, the do not have the same level of access to all parts.

As seen below the sections that are accessible to all roles with permission to the "Advanced" menu is: Newsletter, Internal info page, Tool downtime and Tool history.

Newsletter

Home » Advanced » Newsletter

Newsletters are sent to all registered users. The newsletter is also sent to all external receivers that are registered in the "External mail receiver list".
The "External mail receiver list" is managed by an administrator and can be found at *Home » Admin » System info » External receivers.*

There are 4 parts in the newsletter.

- General news – Anything goes here.

- Incidents – Reports about incidents in the lab.

- Service and Maintenance - Information about service and maintenance in the lab.

- News/Info about a specific tool.

See picture below.

The two rows in the bottom are news about specific tools.
Permissions:

- An administrator is allowed to edit all parts of the newsletter.

- Only an administrator is allowed to post the newsletter.

- A tool responsible is allowed to add/edit news content about tools where the user is 1st or 2nd tool responsible.

- A user with the role "tool responsible" is just allowed to view news content about any other tool.

- An instructor is only allowed to view news content about the tool(s).

- A project manager is only allowed to view news content about the tool(s).

To edit the different parts of the newsletter simply click "Edit" on that specific row/part.

Select a tool in the drop down to add news content about that specific tool.

To send the newsletter simply click the button "Post newsletter", this can only be performed by an administrator.

Internal Info Page

Home » Advanced » Internal Info Page

In this page the users can manage the content of the internal info page.

The internal info page is the start page for LIMS.
After a successful login the user will be directed to the start/home page which displays the information entered for the internal info page along with information about the user's bookings.
Usually the information is about the latest changes and updates.
Editing of the internal info page supports formatting and adding pictures, se picture below.
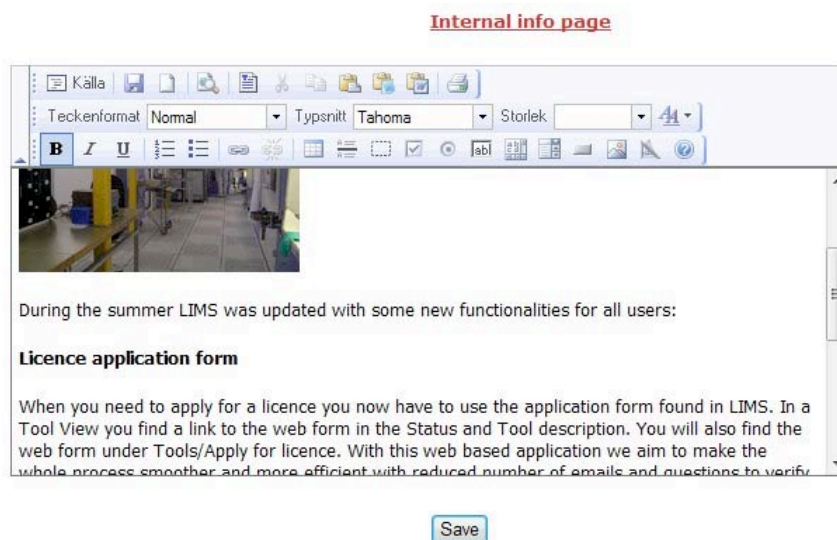
The start page with the updated text and picture is shown below.

Tool downtime

Home » Advanced » Tool downtime

This page displays a list of the tool downtime during selected period, and how many hours the tool has not been available for booking.

Click the tool name for details, a popup window will display the details as shown in picture below.

Tool History

Home » Advanced » Tool history

This page displays warnings, services and downtimes for a selected tool during for a specific year, or part of a year. The list displayed is very similar to the one displayed in the popup detail window in Tool downtime. See picture below.

Admin

Following pages requires the role "Administrator" to view.
Though, some pages that you can reach from an adminpage, you can also reach from a different part of the system. Ex: "Admin -> Tools" -> "Tool list" -> "Edit tool", is also reachable from "Advanced" -> "Tool responsible" -> "My Tools" -> "Add tool / Edit tool"

Add

Here you can add new entities. See picture below.

All entities are handled in separate menus.

Entities

"University / company", "Department", "Laboratory / group" have dependencies.
One university can have one or several departments. One department can have one or several laboratories / groups.
A laboratory / group have to belong to a department, and a department must belong to a university / company.

Each entity has a page for listing, and one page for add / edit.

Add / Edit University or Company

Home » Admin » Entities » New university /

company

Name and VAT are mandatory fields.

Type

Organization type, values are "Commercial", "University" or "Institute".

Charge type

Can be "Zero", "Low", "Medium", "High"

This is to set the cost for bookings for people belonging to this type.

Add / Edit Department

Home » Admin » Entities » Add department

Only "Name" is mandatory.

Choose a university / company to connect the department to.

Add/Edit Laboratory or Group

Home » Admin » Entities » New laboratory / group

Only "Name" is mandatory.

Choose a department to connect the Lab / group with.

Laboratory / group are used at many places within the system. It tells belonging of a user, responsible group for a tool or group, and used for calculate invoices.

Area / Rooms

Area / rooms are as the name suggests physical locations within the lab, which is set for equipment when you add it in the system. You can temporary close an area, which will prohibit booking on equipment in that area during the period.

Area / room list

Home » Admin » Areas / Rooms » Area / room list

Add / edit: area / room

Home » Admin » Areas / Rooms » New area / room

"Room responsible" and "Name" are mandatory

Area closedowns

Home » Admin » Areas / Rooms » Area closedown

Add/Edit: Area closedown

Home » Admin » Areas / Rooms » New area closedown

"Reason" is optional – rest is mandatory.

"To Time" must occur after "From Time"

During the period, no one will be able to book on equipment standing in that area.

If there are any current bookings, they will be removed when you add the "closedown", so be careful.

Booking view during closedown

Tools

Tool list

Home » Admin » Tools » Tool list

It is possible to view a tool or edit a tool from the list.

Fares and charges

Home » Admin » Fares and Charges

Fares and charges can be split up in "Hourly rates", "Monthly fee" and "Monthly fee reduction"
Each rate/fee is showed as a matrix, and this is the values used for calculate invoices.

All fees have a period for which they are valid, and often you only set this once.

Hourly rates

Hourly rates are for calculating cost of a booking per hour, combining the Tool rate and the Charge type of project. (?)

Monthly fee

Monthly fee from 200710 and forward
[Change fees]

	Low	Medium	High
Monthly fee, SEK	1000 SEK	1500 SEK	2000 SEK
Monthly breakpoint, SEK	10000 SEK	15000 SEK	25000 SEK
Reduction after breakpoint, %	0%	70%	60%

Previous fees

Start month	End month
200001	200709
200710	-

Monthly fee is for calculating the cost of members in a certain lab group.

Monthly fee reduction

Monthly fee reduction from 200710 and forward
[Change reduction]

Area type	Reduction
No restriction	0%
Only coat lab	0%
Only clean lab	0%

Previous restrictions

Start month	End month
200208	200709
200710	-

Users with access to only parts of the lab can have a reduction of monthly fee.

Invoices

Invoices are being calculated by a lot of factors, by combining monthly fee, hour rate, booked or logged time.

This section covers generation of invoices, displaying invoices based on different parameters, and simulation of invoices.

Price levels and invoice functions as implemented in LIMS

Below follows a short description of how price levels are set and how invoices can be calculated using the Myfab LIMS system. There are several possibilities to calculate costs under "Admin" and "Invoices". It is also possible to sort the costs in various ways by choosing clicking on the headers. The main entity for handling costs is "Project" so it is important that projects and project members are correctly set-up before using the invoice functions.

Charge type

In LIMS, it is possible to assign three different "Charge types". The three levels are called "Low", "Medium" and "High". The intenteded use for "Charge type" is to have a possibility to set different price levels for different categories of users. It is thus possible to set lower rates for academia and higher rates for commercial users. The charge type "Medium" can be used if a middle price level is wanted.

However, it is not necessary to use all three charge types. If all users should pay the same rates, this can be achieved by always assigning the same charge type (e.g. Low). The charge type can be assigned to "University/Company" and to "Project". Normally, a user will only work on projects that belong to the user's University/Company. Then the charge type of the University/Company and the Project will be the same.

However, it is possible for a user to book some time on an academic project (usually charge type "Low") and some time on a commercial project (usually charge type "High").

Tools

All tools must have an assigned "Tool rate". Five different rates are possible to set:

A, B, C, D or E. The rate is the hourly cost in SEK/hour. Rate A is the lowest, rate E is the highest. However, it is not necessary to use all five levels. If it is wanted that all tools should have the same price, this can be achieved by assigning the same rate (e.g. rate A) to all tools.

The tool rate is set using "Edit" in the tool list. The actual rate value in SEK/hour is set on the page "Fares and Charges". For each of the three "Charge types", a value for the tool rate should be set. This means that the matrix for hourly costs will consist of (A,B,C,D,E) x (Low, Medium, High) which gives 5 x 3 = 15 values.

The hourly cost set by the tool rate can apply to "Booked hours" or to "Logged hours". The choice is made under "Invoice settings" on the "System settings" page.

Please note that tools with "Compulsory booking" will always result in a cost when invoice calculation is done. Tools with "Optional booking" will result in a cost only if a booking was made. Tools which are "Unbookable" will not result in a cost.

Monthly fee

In LIMS, it is possible to set a monthly fee for the users. The monthly fee is calculated on a calendar month basis. This cost is fixed and will not be influenced by the number of booked or logged hours. The fixed cost is intended to cover such things as cleanroom clothing, use of tools that are not booked (e.g. microscopes, wet benches and similar) and administration costs. Alternatively, the monthly fee can be used if a lab wants to charge **only** by a fixed monthly fee. The hourly rates mentioned above should then be set to zero.

A setting under "Invoice settings" on the "System settings" page allows a lab to choose between applying the monthly fee to all "Active users" without regard to any booking or logging that month **or** applying the monthly fee only to active users that have at least made one booking/logging during the month.

If the setting is chosen to always apply a monthly fee to active users and a user do not have any booked or logged time for a month, the University/Company that the user belongs to will be charged the monthly fee. In the invoice generation this will be accomplished by creating a special project named "<Name of Laboratory/Group> - Monthly Fees". The monthly cost for users with no booked or logged hours will be charged to this project.

The monthly fee can have three different levels (Low, Medium, High) as described under "Charge type". The level for a specific user is determined by the charge type of the University/Company that the user belongs to. The actual cost in SEK/month is set on the page "Fares and Charges".

The monthly fee for each user is divided equally amongst the university/companies that own the projects that the user has booked or logged time on for the given month. The cost will then be divided amongst the projects.

As an example: User A has booked time on Project1, Project 2 and Project 3 for one month. He has a monthly fee of 1200 SEK. Project 1 and Project 2 belongs to University/Company XX and Project 3 belongs to University/Company YY. Since both Project 1 and Project 2 belongs to same University/Company the monthly fee will be divided as follows:

Project 1: 300 SEK
Project 2: 300 SEK
Project 3: 600 SEK

Fee reduction based on booked or logged hours

In LIMS, it is possible to apply a discount for users with many hours during a month. The discount is calculated by adding all hourly costs for an individual user during a calendar month. A reduction in percent is given on hourly costs above a specified breakpoint.

The actual value in SEK for the breakpoint and the percentage of the reduction is set on the page "Fares and Charges".

Only hours for projects that belong to the **same** University/Company and have the **same** charge type are basis for the fee reduction. If a user book or log time on projects belonging to different Universities/Companies or different charge types, the adding of costs for the discount calculation is done separately for each (University/Company and/or charge type).

The fixed monthly fee is not included in the calculation of the fee reduction.

Monthly Fee reduction based on user area restriction

It is possible to apply a monthly fee reduction for users that do not have access to all areas of the laboratory. When editing a user in LIMS the area restriction can be set for that user. On the page "Fares And Charges" the reduction for each "Area Restriction" is set.

Simulation of invoices.

Note: If the simulation period span over several months, the difference between real and simulated invoices is not only related to changes done in "Simulate invoices", but also because any real changes within the simulation period will not have an effect in the simulation because of the initial values for the simulation origin from the last month in the chosen period.

A suggestion would be to first make a simulation for the same period without any changes at all to see the effect of no changes.

Invoice by project

Home » Admin » Invoices » Invoice by project

Month	Project Name	Hours ▼	Monthly fees	Cost by hours	Total cost
2009-03		1 256,0	26 000	716 050	742 050
2009-01		1 191,0	19 500	634 150	653 650
2009-02		1 039,0	22 000	556 850	578 850
2009-03		763,5	2 025		2 025
2009-01		678,0	2 427		2 427
2009-03		625,5	8 000	369 250	377 250
2009-02		520,0	8 500	306 150	314 650
2009-03		480,0	3 608		3 608
2009-02		453,0	2 532		2 532
2009-02		278,0	4 031		4 031
2009-01		275,0	4 093		4 093
2009-03		260,5	4 000	158 250	162 250
2009-02		258,0	4 000	185 950	189 950

Invoice by tool

Home » Admin » Invoices » Invoice by tool

Month ▲	ToolId	Tool name	Tool category	Project Id	Project name	Hours	Cost by hours
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	76		8,0	3 830
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	79		2,0	
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	102		2,0	1 200
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	1136		4,0	1 200
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	1209		1,0	
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	1210		3,5	
2008-10	108	Surface profiler, stylus - Tencor P15	Metrology	16254100		9,0	2 700

Invoice by User

Home » Admin » Invoices » Invoice by tool

Month	Project name	User	Hours	Monthly fees	Cost by hours	Total cost ▼
2008-10			358,0	1 000	181 300	182 300
2008-10			241,0	1 000	120 500	121 500
2008-10			185,0	1 000	96 650	97 650
2008-10			99,5	1 000	79 150	80 150
2008-10			136,5	1 000	73 050	74 050
2008-10			71,5	1 000	61 600	62 600
2008-10			44,0	1 000	25 000	26 000
2008-10			49,0	1 000	24 100	25 100
2008-10			49,5	1 000	23 550	24 550

Regenerate invoices

Home » Admin » Invoices » Regenerate invoices

Since invoices are calculated, you must regenerate them if you have been changing a previous booking or logging.

Select period, and click "Ok" to regenerate the invoices.

Simulate invoices

Home » Admin » Invoices » Simulate invoices

By changing fares and charges on this page, you can simulate invoices to see what the outcome would be.

•Step 1: Choose the period for which you want to simulate invoices by entering from-month and to-month (YYYYMM).

•Step 2: Press button 'Step 2: Initialize values for given period'

•Step 3: Go through all lists below and change to desired values. For each textbox or dropdown list in the lists below the actual real value (for your chosen to-month) is on the left of that textbox or dropdown list. If you press enter after you have changed a value in a textbox the background will be changed for that cell to make it easier to see the changes you have done.

•Step 4: Press button 'Step 4: Start simulation calculation'.

•Step 5: Go to any of the other simulation pages to see the result of your simulation.

Simulated invoice by project

Home » Admin » Invoices » Simulated invoice by project

Optional filters for this list   *(Hide filters...)*

Simulation period: 2009-08 ▾ - 2009-10 ▾

University / Company: -- All Universities / Companies -- ▾

Note: If the simulation period span over several months, the difference between real and simulated invoices is not only related to changes done in "Simulate invoices", but also because any real changes within the simulation period will not have an effect in the simulation because the initial values for the simulation origin from the last month in the chosen period.
A suggestion would be to first make a simulation for the same period without any changes at all to see the effect of no changes.

Add/remove columns (11 of 19 columns chosen)

Month ▲	Cost center	Project Name	Hours	Monthly fees	Cost by hours	Total cost	Diff. Total cost	Simulated Total cost	Simulated Cost by hours	Simulated Monthly fees
2009-08		AlfaExx AB - Monthly fees	0,0	2 000		2 000	18 000	20 000		20 000
2009-08		Analytical Chemistry, GU - Monthly fees	0,0	2 000		2 000	18 000	20 000		20 000
2009-08		Atomic Physics - Monthly fees	0,0	25 000		25 000	225 000	250 000		250 000
2009-08		Biological Physics - Monthly fees	0,0	13 000		13 000	117 000	130 000		130 000
2009-08		BioNano Systems Laboratory - Monthly fees	0,0	16 000		16 000	144 000	160 000		160 000
2009-		Bionanophotonics - Monthly	0,0	4 000		4 000	36 000	40 000		40 000

Simulated invoice by tool

Home » Admin » Invoices » Simulated invoice by project

Optional filters for this list   *(Hide filters...)*

Simulation period: 2009-08 ▾ - 2009-10 ▾

Responsible group: -- All Laboratories / Groups -- ▾

Tool: -- All tools -- ▾   Sort: id ▾

Note: If the simulation period span over several months, the difference between real and simulated invoices is not only related to changes done in "Simulate invoices", but also because any real changes within the simulation period will not have an effect in the simulation because the initial values for the simulation origin from the last month in the chosen period.
A suggestion would be to first make a simulation for the same period without any changes at all to see the effect of no changes.

Add/remove columns (8 of 20 columns chosen)

Month ▲	ToolId	Tool name	Project name	Hours	Cost by hours	Simulated Cost by hours	Diff. Cost by hours
2009-08	806	MBE-system - EPI 930	Service Project	428,0			
2009-09	510	Vacuum package	Service Project	11,5			
2009-09	510	Vacuum package	BioNano MC2	2,0	200	400	200
2009-09	806	MBE-system - EPI 930	Service Project	214,0			
2009-10	108	Surface profiler, stylus - Tencor P15	Service Project	3,0			
2009-10	408	Evaporator - Opto	Service Project	2,0			

Simulated invoice by user

Home » Admin » Invoices » Simulated invoice by project

Optional filters for this list   *(Hide filters...)*

Simulation period: 2009-08 ▾ - 2009-10 ▾

University / Company: -- All Universities / Companies -- ▾

Project: -- All Projects -- ▾

Cost center: [   ]   [Apply filters]

Note: If the simulation period span over several months, the difference between real and simulated invoices is not only related to changes done in "Simulate invoices", but also because any real changes within the simulation period will not have an effect in the simulation because the initial values for the simulation origin from the last month in the chosen period.
A suggestion would be to first make a simulation for the same period without any changes at all to see the effect of no changes.

Add/remove columns (9 of 38 columns chosen)

Month ▲	Project name	User	Monthly fees	Total cost	Diff. Total cost
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000
2009-08			1 000	1 000	9 000

Process line

Tools used in a process flow can be grouped using a process line.

Process line list

Home » Admin » Process lines

Add/Edit Process line

Home » Admin » Process lines » New process line

Edit or adding a new process line gives only two options: Name and description, the name is mandatory.

After you added a process line, you can associate tools to it.

Add/Manage tools for process lines

Home » Admin » Process lines » Add/Manage tools for process line

Select tools that you want to add/remove from the process line.

Project

In order to make a booking, you must associate it to a project.

A user can be member of different projects at the same time. Each project has a start and a stop date, and outside of this period, it's not possible to make a booking on the project. Each project does also have a charge type, for calculating invoices.

Add/Edit projects

Home » Admin » Project » New project

This page is also reached by users with role "Project manager"

All fields but "Supplementary info" are mandatory.

Project Id

This is the Id you choose for the project. This must be a unique number.

Project name

Name of the project

Laboratory / group

Group responsible for the project

Charge type

Zero – Low – Medium – High. This is to set the cost for bookings within this project.

Project leader

Responsible for project

Start date / End date

Dates for start and stop. It's not possible too book before start or after stop.

Supplementary info

Optional. Short description of project.

When changing charge type or laboratory group, the user must select a start month for the new charge, since cost is calculated per month

Project list

Home » Admin » Project » Project list

This page is also accessible to users with role "Project manager"

Lists projects – both current and old/deleted, by using the filter.

From the list, the user can choose to edit a project.

Add / Manage project members

Home » Admin » Project » Add/Manage project members.

This page is also reached by users with role "project manager" or "project leader"

Here, you choose a project to view current members.

You can then choose other available users from the list to the left, and add as member of the project.

Or, choose users from the list to the right to remove from the project.

Statistics

The pages cover statistics for bookings and loggings, seen from different views.

One view is summarization of bookings/loggings, with the option to group by up to three entities – the other view is to see the actual bookings/loggings in a selected period.

Statistics for booked time

Home » Admin » Statistics » Statistics for booked time

This page shows bookings during a specific period of time, grouped by entities.
Using the groups in different order, you can create a very specific report, example:
"How many hours have Person X booked in the Project Y, on Tool Z, during period P?"
Or, like above: "Booked hours, grouped by University/Company, during first quarter of 2009"

Statistics for logged time

Home » Admin » Statistics » Statistics for logged time

This page works the same way as "statistics for booked time" – but displays a summary of the logged, time instead of the booked time.

Booking List

Home » Admin » Statistics » Booking list

This page shows all bookings within a certain period of time. Service bookings have the color of yellow, maintenance orange – but can be filtered not to be visible.

Log list

Home » Admin » Statistics » Log list

A page just like booking list – but in this case, all logs during a certain period.

Project time by resource

Home » Admin » Statistics » Person project hours

Gather all resource bookings for a project or person, during a certain period.
(Hours booked on a project, without booking on a tool)

System Info

System settings

Home » Admin » System info » System settings

Most of these settings are made only once, since changing them can create usage problems, especially when changing something from "allow" to "don't allow" or the opposite way around.

Settings are.
E-mail settings, Invoice settings, Booking settings and General settings

E-mail settings: These settings are for receivers of mail at certain events in the system.

- When a night shift booking is made

- When a user applies for access

- When a mail is sent to "system admin"

Invoice settings: For generation of invoice data.

Tool charge:

"Tool charge applies for all tools" or "No charge for tool owners"
No charge for tool owners means that if a user does a booking or log (depending on invoices are based on booked or logged time) and the project for that booking/log are owned by the same laboratory / group as the owner of the tool, the project will not be charged.

Monthly fees

If set to "Always charge monthly fee for active users" all **active** users will always pay monthly fee, regardless whether the user have booked or logged time (depending on invoices are based on booked or logged time) for a given month or not.

Note: If you make <u>any</u> changes to the invoice settings above, <u>all</u> invoice data will be re-generated (which can take several minutes) next time someone opens any of the invoice-pages.

Booking settings: These general rules apply to all users of the system.

Nightshift start and stop
In this case, a booking made between 07 and 18 is considered a "daytime booking", while a booking between 18 and 07 is a nighttime.
At nighttime, you are not allowed to be alone in the lab – just must have a so called "Lab buddy".
There can also be a difference in the amount of time you can book for a tool at day or at night.
(Those settings are made at tool-level)

Startview, bookings
Default sorting on startpage, when a user log in.
Values: "Show from yesterday and newer", "show from today and newer", "show non logged bookings"

Missing log(s) for bookings with mandatory logging
You can force the user to log his previous bookings, before he's allowed to create a new.

Change log
Allow user to change start time on an existing log.

Project leader bookings
Show the list of (if used) project leader bookings on homepage.

Logs without bookings
Show the list of logs with no connected booking.

Public tool list:

Select which columns should be visible in the public tool list – showed for anonymous users.

General settings: This is general texts – like Laboratory name, Newsletter headers and settings for what a user can choose when making an application.

Area restriction choice

Determinates if the user, when creating an application, can choose which part of the lab he wants to gain access to.
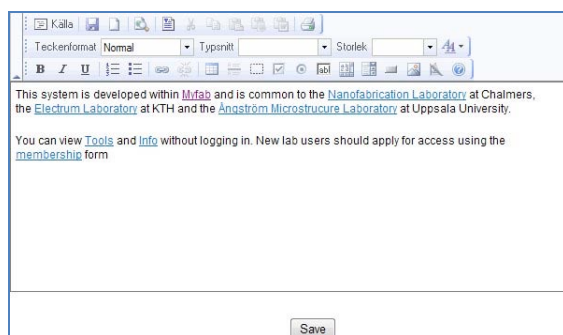
Access hours choice

Determinates if the user, when creating an application, can choose for which times he wants to gain access to the lab.

External info page

Home » Admin » System info » External info page

This page controls the information published on the start page of the system, for anonymous users. Using the "what you see is what you get"-editor, you can format and adding text, links and information.

Night shift message

Home » Admin » System info » Nightshift message

This is the info showed when you are doing a booking that partly or whole are outside the daytime perimeters. Using the "what you see is what you get"-editor, you can format and adding text, links and information.

External mail receivers

Add/Edit/Remove mail addresses for users who are not member of LIMS, but should have the newsletter.

	First name ▲	Last name	Email
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			
Delete Edit			

Show Page: 1 (Total Records: 13)   Records Per Page: 20

Add New

User

List Users

Home » Admin » User » User list

The list displays all users. The list is configurable, it is possible to filter the content and selecting columns.

You can send a mail to a user, Edit a user or View a user.

View User

Home » Admin » User » View user

View Users shows detailed information about a user:
Both the standard information – like first name/last name, email, status, group role.
And information about what the user is involved with – like his licences, projects and statistics of previous bookings.

Add/Edit User

Home » Admin » User » Add user

Add/Edit User changes the standard information about a user, or adds a new user.

Most of the fields are "information only", with no specific connection to the system, with a few exceptions.

Laboratory / Group
This affects invoices, since different groups can have different fees.
If you change the "Laboratory/Group", you choose "Make change from month" So in case you are in the middle of a month, that group will still be debit for that user, that month.

User status
Active / Inactive / Deleted.
An Inactive user can still log in, but can not do anything in the system. A deleted user can not log in at all. (Though, a deleted user can be set back to active again)

Roles
A role determinates what a user can see or do in the system.
More info at: Roles of the system

Bookable as resource
This is a setting that gives the user the option to book/log time in projects.
Primary this function is for lab personnel that are active in different projects, where someone else has booked. Project time by resource is found under [LINK]

User status

Home » Admin » User » User Status

User status is a list of users, based on their status, when they logged in the last time, and when they last attended to a safety-/chemical course.

New users to approve/decline

There are two ways to become a user of LIMS.

1) An administrator creates an account.

2) The user fills out a membership application.

New applications ends up in this list, and users selected under System settings, email-settings, get an email and see a notification when they log in, that there are applications to process.

New/Pending applications, is shown in a list on this page.

Process application

Home » Admin » User » New users to approve/decline

Page for processing an application is split in two parts:
The information that the applicant has entered, and fields corrected by administrator.

There are three options for an application:
The administrator declines the application, when an application is declined a message is sent to the user explaining why he/she won't be granted access.
The administrator can save the application as pending – for example, he completes the fields, but wants the user to go a course before the user gets access.
He can save and approve the user to use the system.

Unlock user

Home » Admin » User » Unlock user

The system has a built in security, to prevent "brute force" – this means, if a user enters an invalid password five times in a row, they account is locked. An administrator can from this page "unlock" it.

Info

As a logged in user, this is what you see.

As a not logged in user, you only see General documents and sitemap.

Area / room list

Home » Info » Area / room list

As the name indicates, this is a list with all areas in the lab.

General documents

Home » Info » General documents

List documents

General documents are both viewable as logged in or anonymous user.

Only a user with the role "administrator" can add, edit or delete documents.

Add/Edit document

You can add two types of documents:

Physical document, or link to document.

In the first case, you select a file, and uploads it – in the second case, you point out a document on a network or on the internet.

Chemical list

Home » Info » Chemical list

A standard user can view the list, and see the documents attached. An administrator, tool responsible or instructor can add new chemicals to the list, and attach documents to the chemicals in the list. Add a document works the same way as it does for a general document.

Tool documents

List tool documents

"Tool documents" lists all tools and belonging documents.

A logged in user can view the list and get the documents – an admin or tool responsible can add or edit documents.

Add / edit documents

Adding document for a tool works the same way as for adding a General document or a Chemical document. But in addition, you also have to choose type of document:

Control Specification, Recipe, Service Instructions, Technical Description, Tool Manual, or User Instructions

Sitemap

Home » Info » Sitemap

Tools

- My licenced tools (See list over tools where you have licence)
- Apply for licence (Make an application for a licence)
- All tools (See list of all tools in lab)
- Tool status (See list of status for all tools in lab)
- View bookings (Manage bookings)
    - My bookings (See list of your bookings)
    - All bookings (See list over tools in order to see when tool is booked)
    - Booking overview (See view over tools in order to see when tool is booked)
- Batches (Manage batches)
    - Batch list (Find the batch owner for a given batch id)
    - Add batch (Add new batch)
    - Log history by batch (View history for batches that you or project you belong to have created)
    - Log history by tool (View log history for tool)
- Log (Manage logs)
    - Log status (Log status for booked and unbooked tools.)
    - Log history by tool (View log history for tool)
    - Log history by batch (View history for batches that you or project you belong to have created)
- Verify night shift booking (Make a new booking of tool for night shift)

User

- My profile (View and edit your profile)
- My statistics (See your statistics)
- Send message (Send message to users and admin personell of this lab)
- User list (See list of users)

Advanced

- Tool responsible (Functions for tool responsible)
    - My tools (Administrate your tools)
    - Tool timeblocking (Block time on tool)
    - Allow/Disallow mail subject "booking cancelled" (Allow/Disallow mail subject "booking cancelled")
    - Licences by user (Administrate licences by user)

Sitemap shows all accessible pages to the user.

This does not include pop-up windows, like booking view, send message.

Membership

Researchers, graduates, students and others that require access to the lab(s) can apply for membership from the start page by clicking the menu "Membership".
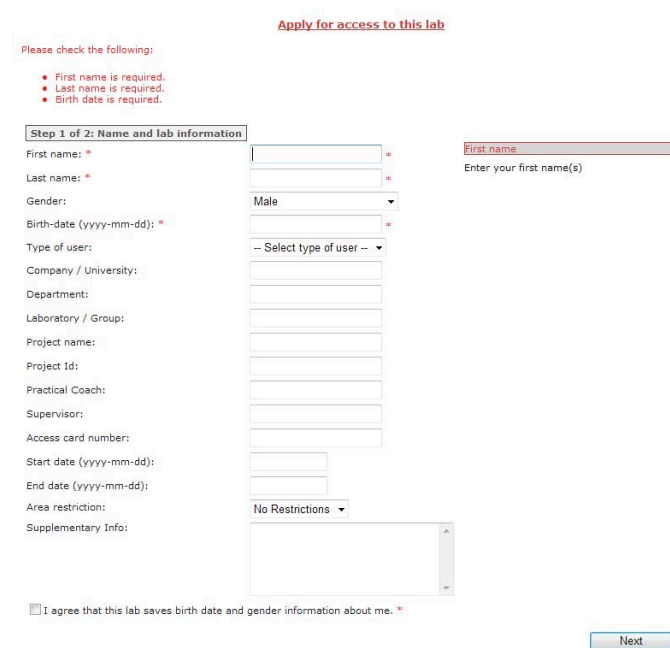
Applying for membership is done in two steps.

In the first step the applier enters name, age university etc.
As seen below, the mandatory fields are First name, Last name and Age.
The user that grants membership to LIMS will probably require more data to be entered.

In step two of the membership process the applier enters user name, password and telephone numbers. The applier clicks the button "Finish" to send the application. Users responsible for process user applications receive a message that there are new membership applications. These users are set in system settings by an administrator.

Booking in LIMS

The booking rules in LIMS consists of some system settings telling when over all booking is possible, some tool settings telling how a certain tool can be booked, and some special rules that can be temporary applied when wanted.

System settings

Admin -> System Info -> System settings

Booking settings: This is the general rules for booking, and applies to all users of the system.

Nightshift start and stop

In this case, a booking made between 07 and 18 is considered a "daytime booking", while a booking between 18 and 07 is a nighttime.

At nighttime, you are not allowed to be alone in the lab – just must have a so called "Lab buddy". There can also be a difference in the amount of time you can book for a tool at day or at night. (Those settings are made at tool-level)

Startview, bookings

Default sorting on startpage, when a user log in.

Missing log(s) for bookings with mandatory logging

You can force the user to log his previous bookings, before he's allowed to create a new.

Change log

Allow user to change start time on an existing log.

Tool settings

Admin -> Tools -> Tool list: Edit tool

Among the **tool information**, there are also the booking rules.
Here you apply rules at the level of a certain tool. (Preferable done by a tool responsible)

Minimum minutes per booking:	30
Max hours per day:	6
Max hours per night:	12
Future allocation limit, day time:	12
Future allocation limit, night time:	12
Nr of future bookings allowed:	6

Minumum minutes per booking
The least time you can do a booking.

Max hours per day / night
Total time a single user can book this equipment at day time / night time (systemsetting)

Future allocation limit, day time / night time
The total time a user can book this equipment in the future.
Ex: If the user makes a booking for later today at day time, one for tomorrow day time for 6 hours, and one booking the day after that for 6 hours, he will get an error due to "future allocation limit, day time". But, as soon as the time has passed for the booking today, he will be able to book again.
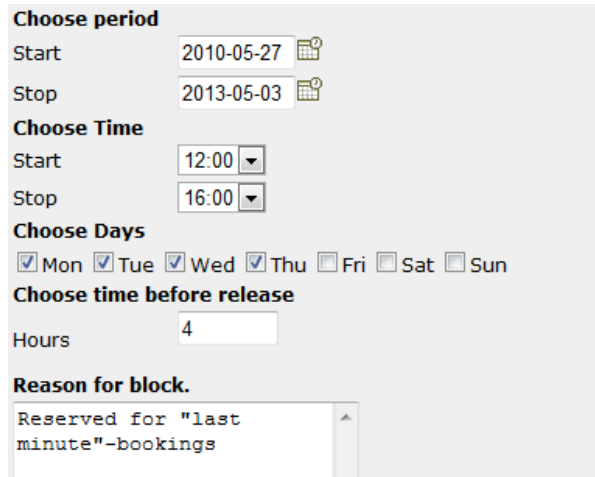
Nr of future bookings allowed
This can be for the occation, when a user tries to trick the system, doing bookings like:
07.00-07.30, 08.00-08.30…..12.00-12.30, 13.00-13.00…..18.00-18.30 – only booking a total of 6 hours, but "blocking" the tool for 12 hours.

Tool blocking

A tool can be blocked from booking during timespans – for example if you want to save spaces for last minute bookings. A blocking will be released at a predefined time.

Choose period
Start   2010-05-27
Stop   2013-05-03
Choose Time
Start   12:00
Stop   16:00
Choose Days
☑ Mon ☑ Tue ☑ Wed ☑ Thu ☐ Fri ☐ Sat ☐ Sun
Choose time before release
Hours   4
Reason for block.
Reserved for "last minute"-bookings
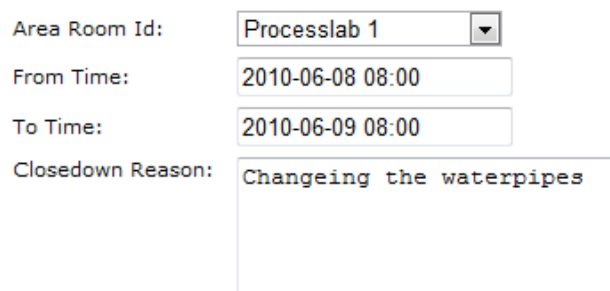
One scenario: An equipment shall not be bookable Monday to Thursday, between 12.00 an 16.00. Four hours before start time, the whole block will be released, and the time bookable

"Period" tells between which dates this block is valid.

Area shutdown

An area of the lab can be temporary shutdown. During shutdown, no equipment that is standing in that area is bookable until shutdown is over or canceled.
This applies to all users.

Area Room Id: Processlab 1
From Time: 2010-06-08 08:00
To Time: 2010-06-09 08:00
Closedown Reason: Changeing the waterpipes

Exceptions

As earlier mentioned, "system settings" and "Area shutdown" applies to all users. The rest comes with exceptions.

Administrator

A user with the role administrator can do anything in the system. This also applies to bookings. An administrator doesn't need a license to do a booking, and he has no limitations in bookingtime or numbers of bookings. He can remove/change a users bookings, or overwrite them with his own.

Tool responsible

A tool responsible is like an administrator. He has no limitations on his own tools, but on other tools the same rules applies as for other users.

Member of service project

If the user is member of a service project, he can override bookings – but only if the project he is booking on is of the type "service", and he has got a license for the tool.
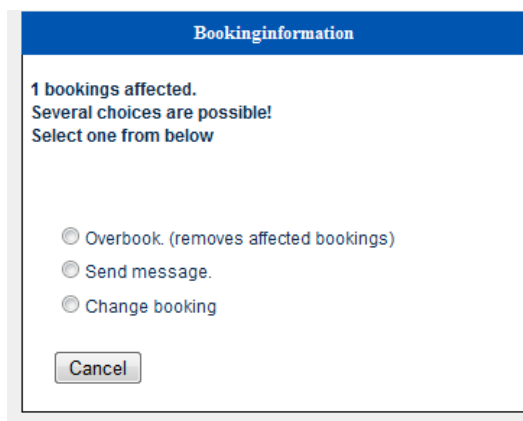
Also, if you are a member of the service project, the "time blocking" does not apply – you can book anyway.

Overriding bookings

There are levels of how you can change/override an existing booking.

Is a standard user tries to click at a time already booked, he will get a message that the time has already been taken – and the option to send a message to the user who has the booking.

If an admin / tool responsible / service-member does the same, the following will show:

These choises is only given if you are a toolresponsible or admin. If you are in the serviceproject, you will instead get these choises:

"Make a service booking" or "Send a message". (Change booking is disabled)

In the case or "Overbook" or "Make service booking" all affected bookings will be removed permanently.