Preface

On behalf of the team at **UniLab**, I am pleased to introduce the **AC Lab System (ACLS)**, a purpose-built platform designed to support the evolving needs of modern research infrastructure facilities.

ACLS was created to address a fundamental challenge faced by laboratories worldwide: how to efficiently manage shared resources, track consumable usage and service job, ensure compliance, and achieve sustainable cost recovery while maintaining a seamless user experience. Over the years, ACLS has grown into a comprehensive ecosystem that integrates booking, consumable and service job management, access control, usage tracking, billing, and reporting into a single, unified platform.

At its core, ACLS is designed to bring **structure, accountability, and intelligence** to research operations. By combining software applications such as the web portal, Tracker, and Sensor with hardware innovations like MoxyTap and MoxyTouch, ACLS bridges the gap between digital systems and physical laboratory environments. This integrated approach ensures that resource usage is not only recorded accurately but also governed in real time.

As research environments become increasingly complex, ACLS continues to evolve. With the introduction of **ACLS-PLUS with AI-enabled capability**, we are advancing beyond operational management toward enabling research infrastructure intelligence connecting operational data, including resource usage, with measurable research outcomes and providing deeper insights for strategic decision-making.

We are proud to support universities, research institutes, and core facilities across Australia and beyond. Our commitment remains focused on delivering a secure, scalable, and future-ready platform that empowers institutions to maximise the value of their infrastructure investments.

Thank you for choosing ACLS.

Dong Zheng
ACLS Founder
Executive Director
UniLab Pty Ltd

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1 Introduction

AC Lab System (ACLS) is a web-based, lab-integrated resource and information management platform that has been continuously developed and supported for over years. It plays a critical role in driving digital transformation and enhancing operational efficiency in alignment with institutional strategies across research-intensive universities.

Built with a **modular and flexible architecture**, ACLS offers a wide range of configurable tools that streamline laboratory operations, improve compliance, and support evidence-based decision-making.

Key System Capabilities:

ACLS includes a suite of feature-rich modules designed to meet the diverse needs of modern research environments:

- **Comprehensive Booking System**
  - Supports operation, training, user, maintenance, service, and commercial bookings
  - Allows designation of staff-assisted vs. unassisted bookings
- **Training & Induction Management**
  - Certification control to set up booking quota and to restrict equipment access based on training status
  - Online lab induction setup with full status tracking
- **Resource Access & Scheduling**
  - Multi-account/project booking support
  - Booking confirmations with smart activation reminders
  - QR code shortcuts for instrument access and consumable usage
  - Exportable calendar reminders (compatible with Outlook, Mac Mail, etc.)
- **Usage & Cost Recovery**
  - Project-, account-, and resource-based billing
  - Data collection via ACLS Tracker and MoxyTap devices for usage analytics
  - Consumables tracking and order management
  - Group sample processing and chemical job management
  - Loaned item tracking with return and overdue alerts
- **Communication & Support**

- Targeted broadcast messaging to defined user groups
- Integrated support ticketing system
- Incident logging and escalation workflows

- **Analytics & Reporting**
  - Customisable data reports and batch invoicing
  - Research publication tracker and analyser
  - Consumables library usage and cost tracking

- **Digital Document Management**
  - Secure access to lab documents, forms, and video resources
  - Centralised laboratory resource catalogue

- **Sample Workflow Management**
  - Sample-based and time-based tracking for commercial or regulated workflows

- **Mobile Access**
  - Native ACLS mobile apps for both iPhone and Android platforms

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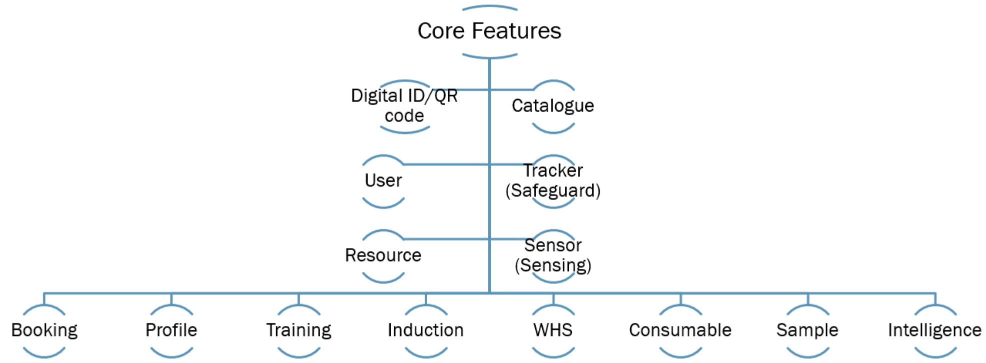
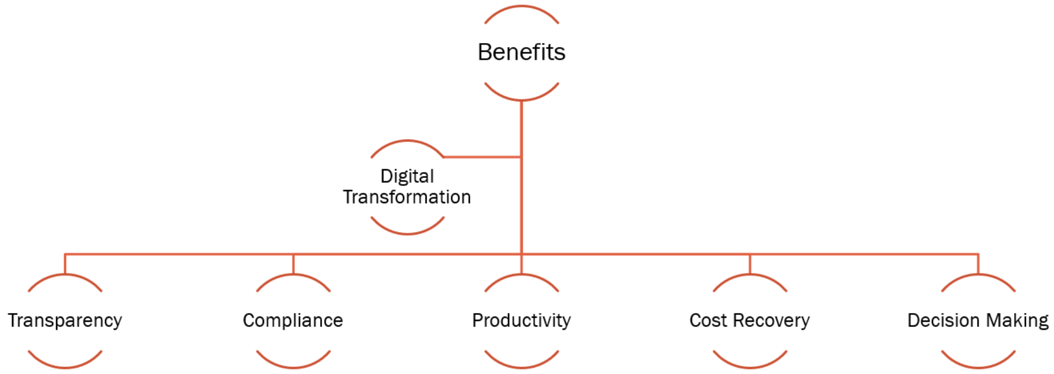
Authentication & Security:

ACLS supports multiple authentication protocols to integrate with institutional identity management systems, including:

- **Local ACLS authentication**
- **Active Directory (LDAP)**
- **Azure-based SAML single sign-on (SSO)**

Whether managing bookings, training, consumables, samples, or support communications, ACLS provides an all-in-one platform to power laboratory operations at scale. Its modular design and high configurability ensure that it can adapt to a wide range of scientific, technical, and administrative workflows.





1.1 Version Series

The latest web version is SQL 9.7.x

1.2 Internet Browsers

ACLS is tested and certified for compatibility with the following major internet browsers:

- Google Chrome
- Mozilla Firefox
- Microsoft Edge
- Apple Safari

1.3 Customer Support

If you have any feedback or require support or assistance with the operation of ACLS, please contact us at **support@unilab.com.au**.

2 System Installation

ACLS functionality is delivered through a suite of integrated applications and hardware components, forming a unified ecosystem for research infrastructure management. Each component plays a distinct role in ensuring seamless operation, data capture, and access control across laboratory environments.

- **Web Portal and Web Application**

A mobile browser–friendly interface developed using modern web technologies such as HTML, JavaScript, ReactJS, and PHP.

The web portal serves as the central platform for managing bookings, users, resources, reporting, and administrative functions.

- **ACLS Tracker Application (Desktop)**

A desktop-based application installed on instrument computers.

It is responsible for enforcing booking compliance, authenticating users, and collecting usage data to support accurate resource management and reporting.

- **ACLS Sensor Application (Desktop)**

Designed to interface directly with laboratory instruments, the Sensor application captures real-time operational data.

It supports both online and offline modes and integrates with the ACLS platform for data synchronisation and analysis.

- **Smartphone App (iOS and Android)**

The mobile application provides convenient access to key ACLS functionalities, including booking management, QR code scanning, notifications, and user account features, enabling flexibility for users on the go.

- **MoxyTap (Tap & Go Hardware Device)**

A smart NFC-enabled hardware device that enforces the **“Booking First” policy** at the physical layer.

MoxyTap ensures **mandatory access control** by requiring authorised user authentication before enabling instrument operation. It captures real-time usage data and eliminates potential bypass scenarios associated with software-only enforcement.

2.1 System Requirements

2.1.1 Server Operating System

ACLS supports the following server operating systems:

- Windows Server 2019 Standard / Enterprise (64-bit)
- Windows Server 2022 Standard / Enterprise (64-bit)
- Windows Server 2025 Standard / Enterprise (64-bit)

2.2 Server Installation

The installation process for an ACLS server instance typically follows this sequence:

- **Web Server Installation**

  Installation and configuration of the web hosting environment.

- **PHP Engine Installation**

  Deployment of the PHP runtime to support ACLS server-side logic.

- **PostgreSQL Engine Installation**

  Setup of the PostgreSQL database engine for data storage and management.

- **System Server Installation, including:**

  - Email server
  - Mailer server
  - Mobile text message server *(optional)*

2.2.1 Troubleshooting: URL is too long

For system administrators only.

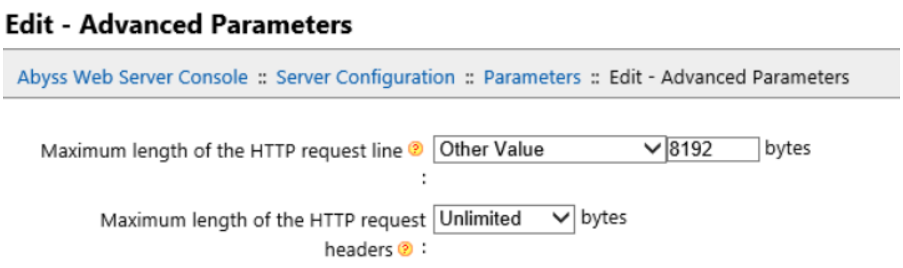
In some cases, users may encounter a **"URL too long"** error when accessing ACLS. This issue can be resolved by adjusting the configuration settings of the **Abyss web server**.

Resolution Steps:

- Navigate to the Server Configuration Parameters page in the Abyss web server interface.
- Update the following settings:
  - **Maximum length of the HTTP request line**: Set to **8192 bytes**

- **Maximum length of the HTTP request headers**: Set to **unlimited**

These changes will prevent request truncation and ensure compatibility with ACLS operations.



2.2.2 Database Engine

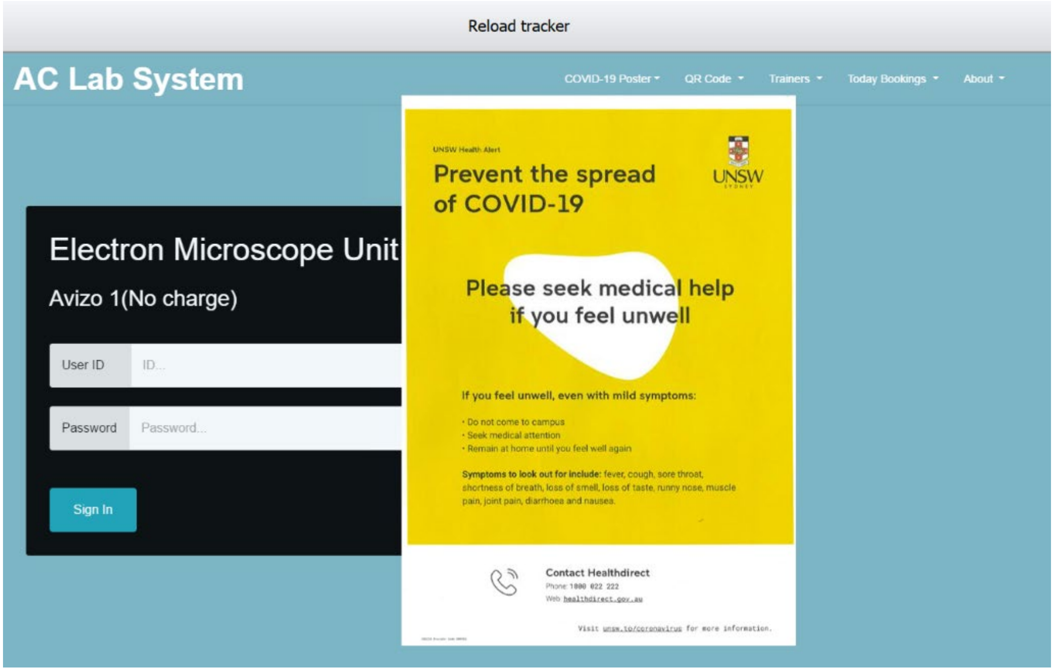
ACLS operates on the **PostgreSQL** database engine, which provides robust, scalable, and reliable data management for all system operations.

2.3 ACLS Tracker

The **ACLS Tracker** application is a desktop-based component designed for installation on resource (instrument) computers. It currently supports the **Microsoft Windows** operating system.

The Tracker plays a critical role in enforcing booking compliance and capturing accurate instrument usage data. It monitors user logins to associate system access with ACLS bookings, ensuring proper tracking of resource utilisation.

By default, the application displays the **most recent user** of the instrument, providing enhanced accountability and traceability within shared laboratory environments.



- **Booking First Policy**

The **Booking First Policy** is a core feature of the ACLS Tracker application, designed to ensure that research equipment is only accessed when a valid booking exists. This policy helps prevent unauthorised usage, reduces administrative overhead, and minimises revenue loss caused by unrecorded sessions.

- **Enforced Access Control**

When the Booking First Policy is enabled, users are only permitted to log in to the instrument during the time window of their approved booking.
Example: A user with a booking from 10:00 AM to 11:00 AM can only access the instrument within that period.

- **Onsite Booking via QR Code**

If a user arrives without a prior booking, the Tracker application provides a QR code interface, allowing immediate onsite booking (subject to availability and access permissions).

- **Administrative Control**

System administrators can enable or disable the Booking First Policy through the **Tracker Settings** tab on the Resource Profile page. Default setting: **Disabled**

- **Operational Benefits**

  - Improves compliance with booking policies
  - Enhances accountability and auditability of instrument usage

- Reduces manual intervention and administrative workload
- Ensures accurate billing and reporting

For installation and operational details, refer to Appendix I – ACLS Python Tracker.

2.4 Cyber security protection - XSS (Cross Site Scripting) vulnerability

ACLS incorporates dedicated protection mechanisms to mitigate **Cross-Site Scripting (XSS)** vulnerabilities across all user input interfaces.

These safeguards are implemented through input validation, sanitisation, and filtering scripts applied to web forms and data entry points. The objective is to prevent the injection and execution of malicious client-side code that could compromise user sessions, data integrity, or system behaviour.

By enforcing these controls, ACLS ensures:

- Protection against malicious script injection via user input fields
- Preservation of data integrity across the platform
- Enhanced security of user sessions and web interactions

2.5 Human access protection for online user registration process

ACLS implements advanced human verification and bot mitigation mechanisms within the online user registration process to prevent automated or malicious account creation.

This protection layer evaluates multiple risk indicators to distinguish legitimate users from automated threats, including:

- **IP address reputation**
- **User behaviour patterns** (e.g., interaction timing, navigation flow)
- **Known bot signatures and detection rules**

These controls ensure that only genuine users can complete the registration process, thereby:

- Reducing the risk of automated abuse and spam registrations
- Protecting system resources and data integrity
- Strengthening overall platform security posture

3 Getting Started

Before using ACLS, users should become familiar with its core functions and system components. A clear understanding of how the platform operates will enable efficient navigation, ensure compliance with institutional policies, and support productive use within research environments.

3.1 Navigating ACLS

ACLS provides an intuitive and role-based user interface designed to simplify access to system features and operational workflows. The platform is structured around two primary navigation menus:

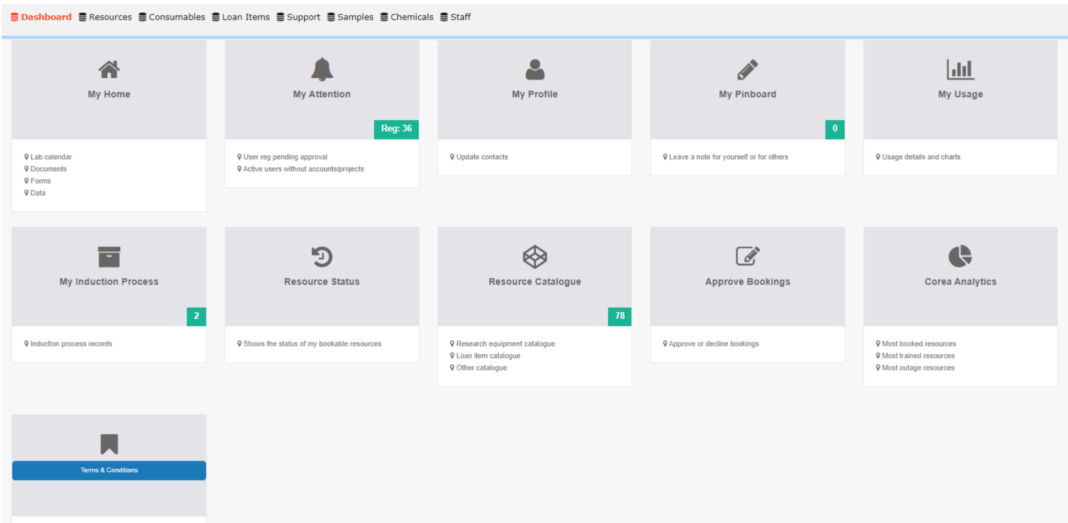
- Top Horizontal Menu

Provides access to major system modules and high-level functions, such as dashboard, booking management, loan management, consumable management, service management and staff utility including reporting, administration, and user management.

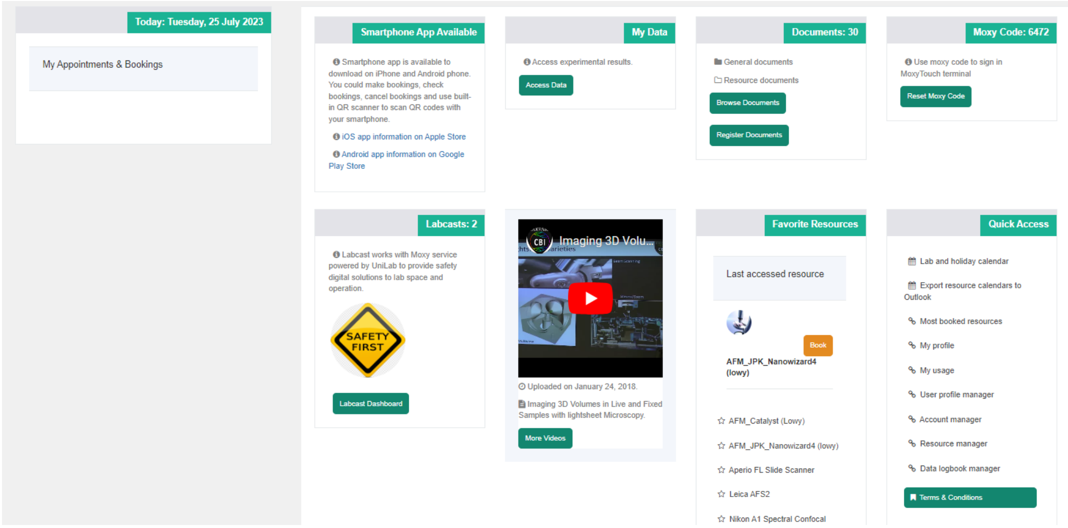
- Left Vertical Menu

Displays detailed features and tools within the selected module, allowing users to perform specific tasks and access relevant system functionalities.

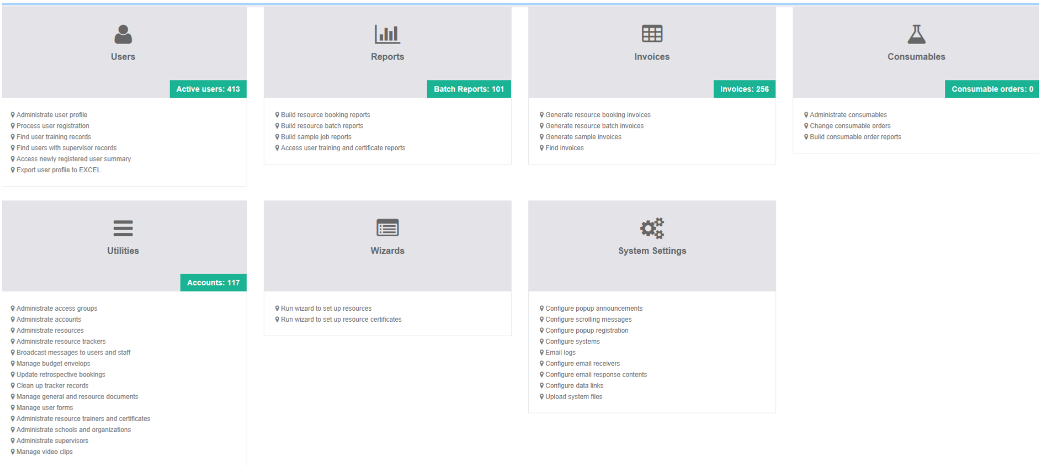
- **Dashboard tab**



- **Utility tab**



- **Staff tab**



- Role-Based Access Control

Menu visibility and available options are dynamically determined based on the user's assigned **access group** and permissions. This ensures that:

- Users only see functions relevant to their role
- System complexity is reduced for end users
- Security and access control are consistently enforced

This structured navigation approach enables ACLS to deliver a streamlined user experience while maintaining flexibility for diverse roles across research facilities.

3.2 Selecting the Business Model

Before configuring ACLS, it is essential to determine the **cost recovery model** adopted by your laboratory. The selected business model defines how charges are calculated for bookings and resource usage, forming the foundation for billing, reporting, and financial management.

Note: Only one business model can be configured per ACLS instance. For setup instructions, refer to the *Configuring ACLS* chapter.

ACLS supports the following business models:

3.2.1 Project-Based (Common in Medical Laboratories)

This model establishes a structured relationship between users and billing projects, making it suitable for environments where research activities are funded through grants or project allocations.

Key Components:

- Project supervisors and associated researchers
- User-to-project associations
- Account contribution rates
- Charging rules and rate structures

In this model, billing is ultimately linked to the project accounts assigned to each user. For operational details, refer to the *Operating ACLS* chapter.

3.2.2 Account-Based (Widely Adopted)

The Account-Based model applies rates based on user-linked accounts and is commonly used across shared research facilities.

Key Components:

- Account name
- Account type (e.g., internal or external)
- Charging rate (if account-based billing is enabled)

This approach offers a simple and flexible structure, making it easy to manage and scale.

For operational details, refer to the *Operating ACLS* chapter.

3.2.3 Resource -Based (Commonly Used)

In the Resource-Based model, cost recovery is directly tied to the **resource or instrument** being used.

Key Characteristics:

- Charges are determined by predefined resource usage rates
- Independent of user accounts or project associations

This model is ideal for facilities that prioritise **standardised pricing per instrument**. For operational details, refer to the *Operating ACLS* chapter.

3.3 Resource Multi-Dimension Charging Model

The ACLS charging model operates as a **three-dimensional matrix**, where the final rate is determined by the intersection of:

- User (Who is using the resource)
- Resource (What is being used)
- Charge Category (How the usage is classified)

```
                 Charge Category
                (Internal / External / Commercial)
                            ▲
                            |
                            |
User ───────────────────────┼──────────────▶ Resource
(Alice, Bob, etc.)          |             (Microscope, Instrument, etc.)
                            |
                            ▼
                     Final Applied Rate
```

- A single resource can have multiple rates depending on the charge category
- A single user may be mapped to different charge categories across resources
- The final billing rate is dynamically calculated based on this intersection

This model enables ACLS to support:

- Complex institutional pricing policies (e.g., internal vs external users)
- Different rates per user group or funding structure
- Fine-grained financial control without duplicating resources or accounts

3.3.1 Charging Model Overview

- **Define Charge Rates by Resource and Charge Category**

Establish base rates for each combination of **resource** and **charge category**.
Example: Internal vs External rates for the same instrument.

- **Map Users to the Resource–Category Matrix**

Associate users (or user groups) with specific charge categories, enabling ACLS to automatically apply the correct rate during booking and usage.

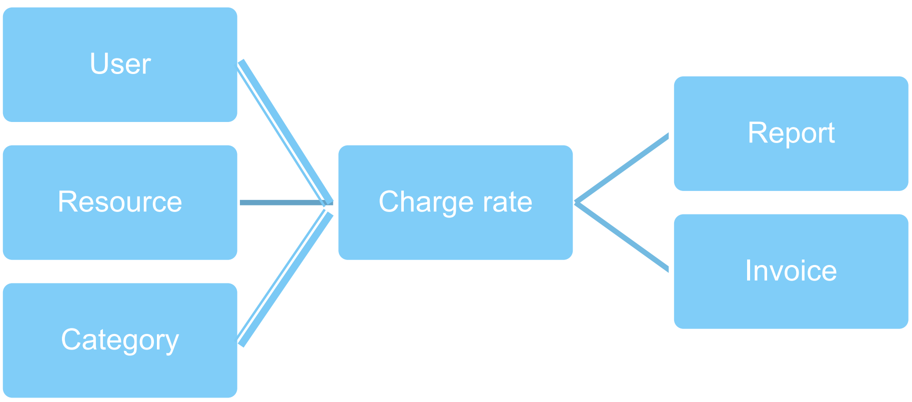
Example Charging Matrix

User	Resource	Charge Category	Rate ($/hr)
Alice	Microscope A	Internal	25
Alice	Microscope A	External	60
Bob	Microscope A	Internal	30
Carol	Instrument B	Commercial	120

Benefits

- Supports differentiated pricing strategies
- Enables fair and transparent cost recovery
- Adapts to diverse operational and funding models
- Provides high flexibility for complex research environments

3.3.2 Indicative diagram for multi-charge rate method



3.3.3 Enabling the multi-charge rate method

The multi-charge rate method must be explicitly enabled by a system administrator.

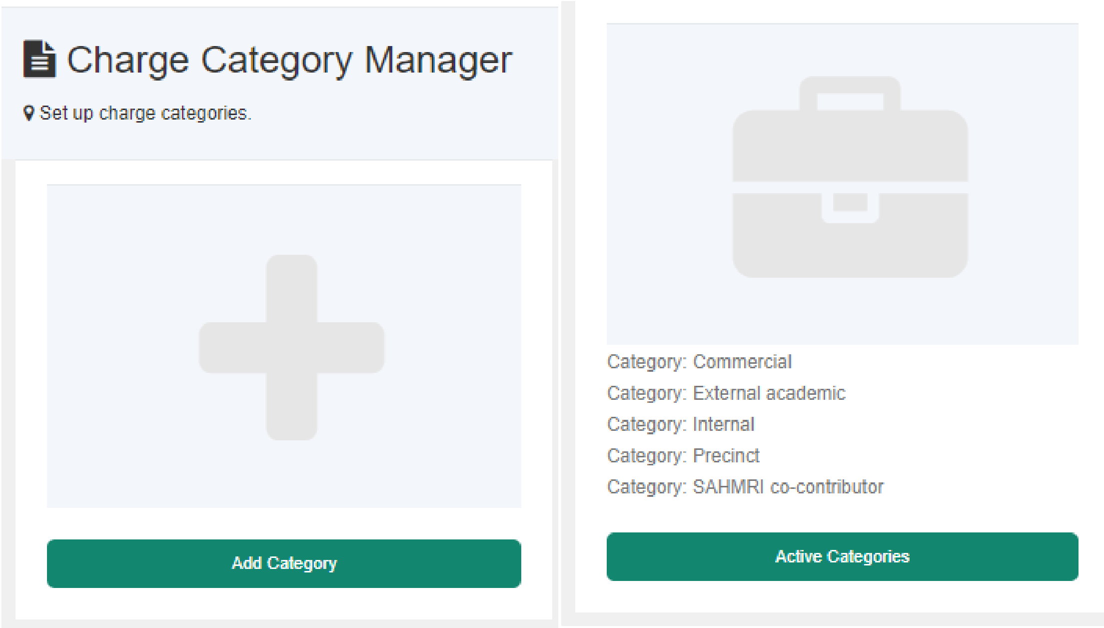
Steps to Enable:

1. Navigate to: *System Setting → Configure System → Parameter*
2. Locate the parameter: *EnableChargeCategoryManager*
3. Tick the checkbox to enable it, then click **Accept** to save the change.

Once enabled, the system will support differentiated charge rates across user, resource, and charge category dimensions.

3.3.4 Setting up charge category

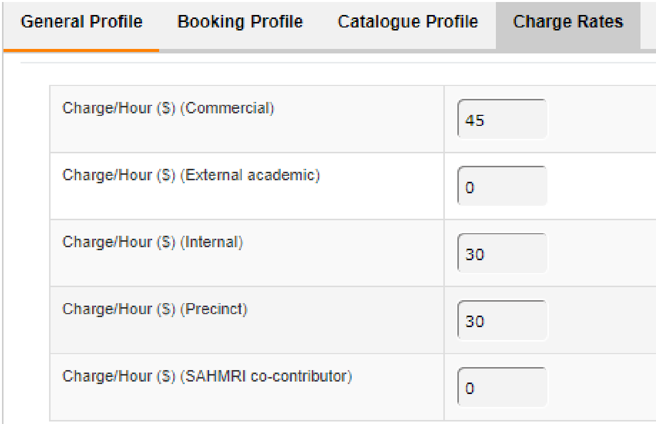
Go to *Staff tab -> Utility -> Charge Category Manager* to set it up.



3.3.5 Setting up charge rate with resource vs charge category

Go to *Staff tab -> Utility -> Resource Manager -> Booking Resources* and edit the resource profile.

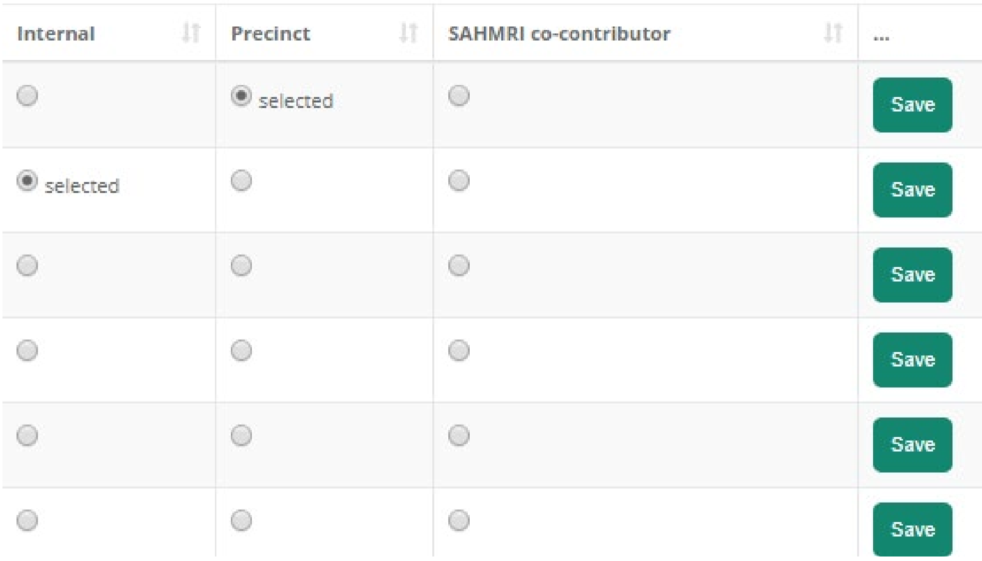
On *Resource Manager -> Resource Profile -> Charge Rates*, enter the charge rate accordingly.



3.3.6 Setting up a charge method on a user's profile

Go to *Staff tab -> User Profile -> User Profile Manager*, find and edit *user profile -> charge category* tab.

Select charge category for the resource and save. Note that this may be a time-consuming job if you have a large number of resources and users.



There are two functions on this page: listing the user's selected resource/category, and functionality to edit/select resource vs category

Charge Category List

Show 100 entries

Showing 1 to 100 of 126 entries

Resource
AHMS - BD FACSCanto II - Flow Cytometer (Analyser)
AHMS - BD FACSFusion
AHMS - BD LSRFortessa X20 Analyser
Albira PET/SPECT
Anaerobic Chamber
Anaesthesia Machine Mobile Proc.2 #2

Edit Charge Category

Show 100 entries

Showing 1 to 4 of 4 entries

Resource	Selected Charge Category
AHMS - BD FACSCanto II - Flow Cytometer (Analyser)	Precinct
AHMS - BD FACSFusion	Internal
AHMS - BD LSRFortessa X20 Analyser	External academic
Zeiss PALM MicroBeam Laser Capture System	SAHMRI co-contributor

3.3.7 Multi-dimension charge method in invoices

ACLS applies the multi-dimension charging model to both:

- Individual invoices, and
- Batch invoice generation

Charges are calculated based on the defined relationships between **users**, **resources**, and **charge categories**, ensuring accurate and tailored billing across all invoicing processes.

3.3.8 Resource vs User Category-Based (ANFF MCN Customization)

A specialized variation of the multi-dimension charging model has been implemented for **ANFF MCN**, based on **resource vs user category** mappings.

This customization branches from the standard model to accommodate ANFF MCN's specific billing structure.

For detailed implementation and configuration guidance, please refer to *Appendix A*.

3.4 Authentication Access

The access policy for each function as follows:

3.4.1 Dashboard

Authentication Groups	Dashboard/My Home
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Dashboard/My Attention
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Dashboard/My Profile
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access

General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Dashboard/My Pinboard
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Dashboard/My Usage
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access
Standard users	Limited Access

Authentication Groups	Dashboard/Resource Status
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access
Standard users	Limited Access

Authentication Groups	Dashboard/Research Catalogue
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access

General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Dashboard/Corea Analytics
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Dashboard/Video Clips
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

3.4.2 Booking Resources

Authentication Groups	Booking Resources/Resource Catalogue
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/Resource Catalogue Public URL
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access

Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Today
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/Moxy Code
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/Labcast
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Favorite Resources
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access

User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/Quick Access
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/My Calendar
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access, No Staff and Service calendars
Standard users	Limited Access, No Staff and Service calendars

Authentication Groups	Booking Resources/Outlook Calendar
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access
Standard users	limited Access

Authentication Groups	Booking Resources/Lab and Holiday Calendar
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Info only
Equipment Supervisor	Info only
General Staff	Info only
User Supervisors	Info only
Standard users	Info only

Authentication Groups	Booking Resources/Resource Trainers
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/Resource Timeline Calendars
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Certified resource calendars only
Standard users	Certified resource calendars only

Authentication Groups	Booking Resources/My Bookable Resources
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Certified resource calendars only
Standard users	Certified resource calendars only

Authentication Groups	Booking Resources/Resource Dropdown List
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Certified resource calendars only
User Supervisors	Certified resource calendars only
Standard users	Certified resource calendars only

Authentication Groups	Booking Resources/Operation Calendar (Unassisted)

System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Booking Resources/User Calendar (Assisted)
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Training Calendar (Assisted)
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Group Calendar (Assisted)
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Commercial Calendar
System Administrators	Full Access
Administration Staff	Full Access

Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Booking Resources/Service Calendar
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

3.4.3 Consumables

Authentication Groups	Consumables/Order Consumables
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Consumables/Register New Consumables
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Consumables/Search and Edit Consumables
System Administrators	Full Access
Administration Staff	Full Access

Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Consumables/Order Consumables for User
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Consumables/Change Consumable Orders
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Consumables/ Consumable Order Report
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

3.4.4 Loan Resources

Authentication Groups	Loan Resources /My Loaned Resources
System Administrators	Full Access

Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Loan Resources /Loaned Resource Listing
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Loan Resources /Loan Resource Table
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access
Standard users	Limited Access

3.4.5 Samples

Authentication Groups	Samples/Define Operation Groups
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Samples/Sample Jobs
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

3.4.6 Publications

Authentication Groups	Publications/Search
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Full Access
Standard users	Full Access

Authentication Groups	Samples/Bar Charts
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Samples/Pie Charts
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	No Access
Standard users	No Access

3.4.7 Support

Authentication Groups	Support
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Full Access
General Staff	Full Access
User Supervisors	Limited Access
Standard users	Limited Access

3.4.8 Staff

Authentication Groups	Staff/User Profile
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Limited Access
General Staff	Limited Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Staff/Report Manager
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Limited Access
General Staff	Limited Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Staff/Invoice Manager
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Limited Access
General Staff	Limited Access
User Supervisors	No Access

Standard users	No Access

Authentication Groups	Staff/Utility Manager
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	Full Access
Equipment Supervisor	Limited Access
General Staff	Limited Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Staff/System Wizards
System Administrators	Full Access
Administration Staff	Full Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

Authentication Groups	Staff/System Settings
System Administrators	Full Access
Administration Staff	Limited Access
Management Staff	No Access
Equipment Supervisor	No Access
General Staff	No Access
User Supervisors	No Access
Standard users	No Access

4 User Registration

ACLS provides a flexible and secure user registration framework to support diverse institutional requirements, including manual administration, online self-registration, and enterprise authentication integration.

4.1 Select Login Name

ACLS supports multiple login methods to accommodate different authentication strategies and user preferences. Users may log in using one of the following options:

- **Email Address**

Example: xx@unsw.edu.au

- **Custom Login Name**

Example: abcd

- **Institutional Single Sign-On (SSO)**

Integration with organisational identity systems, including:

  - LDAP-based authentication
  - SSO providers such as:
    - Microsoft Entra ID (formerly Azure Active Directory)
    - Okta

System administrators can configure login options via: *Configure System → Authentication Settings*

For detailed configuration, refer to *Appendix M – Enterprise Deployment and Appendix L – Authentication Integration.*

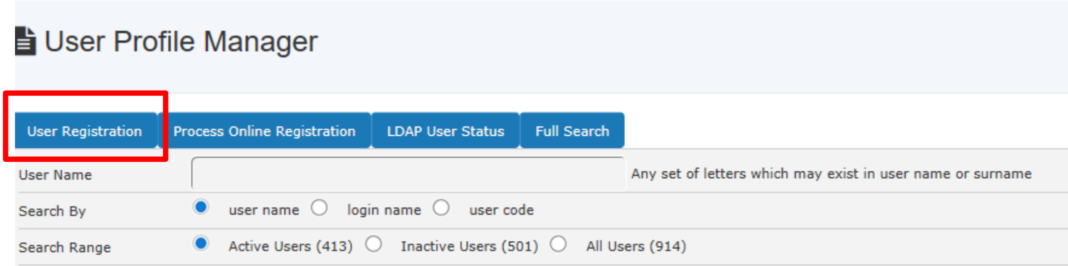
4.2 Manual User Registration

Manual registration is performed by authorised administrative staff through the *User Profile Manager.*

- **Process Overview**

  - Select **Activate User Entry** to grant system access
  - Click **Accept** to save and complete registration
  - Optionally select **Send Confirmation Email** to notify the user

Note: Only authorised administrators can register users manually.



- **Additional Considerations**
  - User photos are optional but may be required depending on system configuration
  - Access may be restricted if mandatory profile fields (e.g., photo) are not completed
  - This method is ideal for controlled onboarding scenarios

- **Important**

User registration alone does **not grant full system access**. Additional configuration is required depending on the selected business model.

4.2.1 Project-Based Registration

For **Project-Based** ACLS instances with two options:

User profile manager:

- Assign one or more **projects** to the user
- Navigate to: **Project Tab → Edit User Projects**

Project Manager:

- Navigate to **Project Manager**
- Assign the user to an active project

Important: Users not linked to a project **cannot make bookings** or access project-based resources.

4.2.2 Account/Resource-Based Registration

For **Account-Based** or **Resource-Based** models:

- Assign one or more **billing accounts** to the user
- Navigate to: **Account Tab → Edit User Accounts**

Note: "Account" refers to a billing account, not a login account.

- **Account Status Options**
  - **Active** – Enables usage
  - **Suspended** – Disables access
  - **Delete** – Removes account (if not linked to bookings/logs)

4.3 Register Users Online

ACLS supports **self-service online registration**, enabling users to request access through a structured workflow.

Registration Workflow

- Access registration page via ACLS portal
- Enter personal and contact details
- Accept terms and conditions
- Select billing/project information
- Upload supporting documents (if required)
- Submit for administrator approval

Upon submission:

- A **unique reference number** is generated
- Notification emails are sent to users and administrators
- The account remains **inactive until approved**

Approval Process

Administrators can review applications via: *User Profile Manager ➔ Online Registration*

Actions available:

- **Approve** – Completes registration
- **Delete** – Cancels request

Auto-Approval Mechanism

ACLS supports automated approval for **internal users**, reducing administrative workload.
Example:

- **Configuration Parameters**
  - **EnableRegAutoApproval** is checked
  - **OrgRegName** sets to Organisation name (e.g., UNSW)

4.4 Register Supervisors

Supervisors are managed via: *Staff Tab → Utility → Supervisor Manager*

Functions include:

- Add or update supervisor records
- Link supervisors to users, projects, or accounts

4.5 User Password Reset

Users can reset passwords via the login page:

Click **Forgot Password / Reset Password**

- Enter registered email
- Follow instructions in email notification

For SSO/LDAP-enabled systems, password management is handled externally.

4.6 Admin Reset Password for Users

For systems using **local authentication only**:

- Navigate to **User Profile Manager**
- Select user and reset password

For SSO/LDAP-enabled systems, password management is handled externally.

4.7 User Registration Approval Process

The registration process typically follows a structured workflow:

- User submits registration
- System validates inputs and generates reference ID
- Admin reviews (or auto-approval applies)
- User account is activated
- Notification email is sent

This process may vary depending on institutional policies and system configuration.

4.8 Summary

The ACLS user registration framework provides:

- Flexible authentication options (local + SSO)
- Controlled onboarding via admin workflows
- Scalable self-service registration
- Secure and auditable approval mechanisms

Start

↓

User fills out the registration form and submits it

↓

Admin approves the user's registration at the user profile manager

↓

Admin checks login id/name to ensure it follows the correct format (e.g contains z for zID)

↓

Admin enables user access in the access tab

↓

Admin issues required training certificates in the certificates tab, so the user can book the appropriate resources

↓

Admin links a billing account to the userin the Accounts tab

↓

Admin links a supervisor to the user in the supervisor tab

↓

End

5 Configuring ACLS

5.1 Configure System Settings (System Admins Only)

During the initial setup of ACLS, it is essential to review and configure the global system settings to align with your operational requirements. These parameters determine the core behaviour of the system and should be validated by system administrators before use.

Important:

ACLS is compiled and deployed based on the configuration selected during installation. This determines the visibility and availability of certain features in the system.

Default Configuration:

Upon installation, ACLS uses a set of default system parameters. These must be reviewed and updated as needed.

Ensure these configurations are completed prior to onboarding users or enabling booking functions.

Parameter	Description	Notes
Access Portal URL	The URL for the SSO Portal	Refer to Appendix M, Enterprise service
ACLS Lab Name	Informational	
ACLS Version	Informational	
Active Users For Training Booking	Modifies the user selection list for training bookings.	❌: Show all users in selection list for training bookings ✅: Show active users only in selection list for training bookings
Adv Booking Reminder Day	Sets the number of days prior to the booking, for the purposes of sending out a reminder email	Default: 2 days
Azure Sign Out URL	An Azure AD configuration option. Only works when Azure authentication is integrated and enabled	Enterprise service
Booking Calendar Staff Only	Disables regular user access to booking calendar.	❌: Enable booking calendar to all (users and staff)

		: Enable booking calendar to staff only. This is the default.
Booking Display All	Either show all resources or show resources per resource group.	: Show resource selection list per resource group : Show all resources in one selection list
Booking for Industry Partner	ANFF tailored calendar feature	: Disable industry parent data collection in calendar : Enable industry parent data collection in calendar
Booking Only	Switch between reporting usage data collected through the ACLS console, or through booking data.	: Usage data through logon console : Booking only
Calendar Multiple Days	Enables multiple day events on the calendar.	: Show multiple day events through the separate top row of the calendar : Show multiple day events through time continuously. This is the default.
CGI Directory	Set webserver location to retrieve CGI files, including book.dll.	For example: if hyperlink is http://localhost/cgi/book.dll, CGIDirectory should be “cgi”.
Clear Browser Cache	Adds html page header to block the browser cache.	: Allows caching : Add special cache header to stop browser cache. This is the default.
Commercial User Code	Used for commercial booking	
Consumable Order Cancellation Days	Sets to Zero to disable the feature. If not zero value, system auto-cancels the uncollected and open consumable orders in xx days after the date that user places the order	Days
Consumable Order Collection Reminder Days	Sets to Zero to disable the feature. If not zero value, system auto-sends the consumable order collection reminder to the users in xx	Days

	days after the date that user places the order	
Contact Us Email	Used for "contact us" in the web footer	This should be a general email address for the lab
Data Directory	The server's directory location for system data files.	For example, if the actual directoryis "d:\emudata", DataDirectory should be "d:\emudata".
Data Logbook Back Days	Number of viewable previous days editable for the data logbook calendar	Default: 360 days
Data Log Edit Last Month Cutoff Days	Number of future days editable for the data logbook calendar	Default: 7 days
Data Storage Ctrl	*No longer in use*	*No longer in use*
Deactivate If No Access Period	Period before automatically deactivating users that have not used any resources	Default: 120 days
Deactivate If No Picture Period	Period of allowable time before changing an active user to inactive if their photo is not available	Default: 120 days
Default Total Yearly Hours KPI	Informational	Used for data analysis
Default Total Yearly Training Hours KPI	Informational	Used for data analysis
Default User Group Code for Reg Approval	The default user group for newly approved users	Set up in Access Group Manager
Doc Directory Name	Document directory name for storing printable html files.	For example, if the document directory is "d:\emudata\doc", Doc Directory Name should be "doc".
Doc Web Directory Name	Document virtual directory name as defined in web server configuration.	For example, if the web server sets the virtual path "/doc" to "d:\emudata\doc", Doc Web Directory Name should be "doc".
Email Data Date	Informational	Email server program updates the date to current date on daily basis; if not, ACLS may have a corrupted database.
Enable AAF Sign In	*No longer in use*	*No longer in use*
Enable Account Exception Alert	Enables organisation GLC or account exception alerts, if the organisation account feature is enabled. This works only when	: Disable : Enable

	SSI is enabled for organisation GLC, or if the account feature is enabled	
Enable Account Select For Booking	Enables account selection for the operation booking calendar and timeline booking calendar. If enabled, users must select account even if they have one account. Disabled by default.	: Disable : Enable
Enable Active Users for Job Reg	If enabled, user selection for sample job reg will show active users. If disabled, user selection for sample job reg will show all users.	: Disable : Enable
Enable Admin Timeline Calendar	Enables permission for admins to change any bookings on the resource timeline calendar	: Disable : Enable
Enable AI Assistant	Enables ACLS chatbot powered by MoxyBot	: Disable : Enable
Enable Alert Show Upon Sign-in	Enables alert checks upon sign-in	: Disable : Enable
Enable ANFF UQ	Enables the ANFF UQ modification	: Disable : Enable
Enable Azure AD Sign In	Enables the Azure AD SAML Sign-in protocol	: Disable : Enable
Enable Banner for Login	Enables the banner image on the login page. By default, the system uses the built-in header.	: Disable : Enable
Enable Built In Sign In Page	Mandatory to enable for SSO sign in mode	: Disable : Enable
Enable Calendar Start Date Selection for General User	Enables operation calendar start date selection for general users.. Disabled by default.	: Disable : Enable

Enable Certificate Preapproval Booking	Enables preapproval booking setting in certificates, it is required to use with the resource pre-approval booking setting.	: Disable : Enable
Enable Certificate Search Hint	Enables showing the certificate list in the following locations: user certificate editor, user profile manager	: Disable : Enable
Enable Charge Category Manager	Enables the resource charge category method. Refer to the resource charge category chapter for details	: Disable : Enable
Enable Charge Rate On Calendar	Enables showing the resource charge rate on calendar pages	: Disable : Enable
Enable CMCA	Enables the CMCA modification	: Disable : Enable
Enable Consulting Service Calendar	Enables the UNSW STATS consulting service calendar modification build on PLUS calendar module	: Disable : Enable
Enable Consumable Module	Enables the consumable module, used for managing and ordering consumables	: Disable : Enable
Enable Consumable Order All Year Report Consumable	Enables the consumable report for full year option, working for less than 600 consumable order lab environment	: Disable : Enable
Enable Consumable Order Qty Validation	Enables consumable order quantity validation against stock quantity. If the stock quantity is less than the ordered quantity, then the	: Disable : Enable

	order is not accepted. Disabled by default.	
Enable Consumable QR code	Enables consumable QR codes. If QR codes are disabled, the mobile app will disable functionality for the consumable module.	: Disable : Enable
Enable Consumable Stock Email Alert	Enables daily consumable stock alert emails to all admin staff. Enabled by default.	: Disable : Enable
Enable Consumable Stock Update upon Delivery	Enables updates for consumable stock quantities upon delivery. If enabled, the stock quantity is updated once a delivery is marked as delivered. If disabled, the stock quantity will not be updated in this way.	: Disable : Enable
Enable Consumable Stock Zero	If enabled, consumable stock quantities are prevented from going below zero. Negative values are set to zero. Disabled by default.	: Disable : Enable
Enable Corea Analytics	Enables the Corea analytics feature	: Disable : Enable
Enable Create User Folder	*No longer in use*	*No longer in use*
Enable Current Hour Booking Change	*No longer in use*	*No longer in use*
Enable Dashboard	Enables dashboard page and module	: Disable : Enable
Enable Data Logbook Manager	Enables data logbook manager for retrospective booking changes	: Disable : Enable
Enable Default Account	Enables the default account for tracker login	: Disable : Enable
Enable Email Server Alert	Enables a pop up alert message when the system administrator logs in	: Disable : Enable

Enable Facility Catalogue	Enables the resource catalogue feature. In this case, the term “facility” refers to resources.	: Disable : Enable
Enable Facility Status	Enables the resource status page. Only applies when the setting “Booking Only” is set to ON. In this case, the term “facility” refers to resources.	: Disable resource status page : Enable resource status page
Enable Facility Status Privacy	Enables user photos on the status page. In this case, the term “facility” refers to resources.	: Disable user photo display when users access the resource status page. Only staff can view photos. : Enable user photos display.
Enable Featured Report	Enables featured reports. Refer to the report chapter for more details.	: Disable : Enable
Enable Future Invoicing	Enables future invoicing. Refer to the invoice chapter for more details. Disabled by default.	: Disabled, meaning that admins can only run past invoices. : Enable
Enable Induction Process	Enables the induction process. Enabled by default.	: Disable : Enable
Enable Invoice Manager	Enables the invoice manager. Enabled by default	: Disable : Enable
Enable Lab Bot	Enables research lab knowledge chatbot via Moxybot service	: Disable : Enable
Enable Lab Bot Disclaimer	Enables research lab knowledge bot disclaimer	: Disable : Enable
Enable Labcast	Enables the labcast feature in ACLS. This is a UniLab integration to cast a live calendar via the UniLab labcast service.	: Disable : Enable
Enable LDAP Redirect	Enables LDAP login filter and protection for bot attacks	: Disable : Enable

Enable Loan Item	Enables the loan item module and feature	: Disable : Enable
Enable Loan Item As landing Page	Sets the loan item page as the landing page after signing in, instead of the default landing page (the Bookings page).	: Disable : Enable
Enable Loan Item Overdue Notification	Enables loan item overdue notification	: Disable : Enable
Enable Mail To User For User Booking	Enables email notifications to the users of a booking.	: Disable : Enable
Enable MCN	Enables the MCN modification	: Disable : Enable
Enable Mobile SMS	Enables the mobile sms server. This requires a specific configuration and a mobile sms plan. Disabled by default.	: Disable : Enable
Enable Moxy Sign In	This is a UniLab integration. Enables using a Moxy code to sign in on a MoxyTouch screen for the purposes of making bookings and ordering consumables.	: Disable : Enable
Enable MoxyTap	Enables tap & go module	: Disable : Enable
Enable MoxyTap Space Report	Enables tap & go space report module	: Disable : Enable
Enable My Bookable Resource	Enabless my bookable resource in Booking Resource module	: Disable : Enable
Enable My Data	*No longer in use*	*No longer in use*
Enable Nextcloud	*No longer in use*	*No longer in use*
Enable Online Reg OTC	Enables online reg process protection from machine bot.	: Disable : Enable
Enable Online Reg Project	Enables the project field in the online registration form.	: Disable : Enable

Enable Online User Password Reset	Enables the reset password feature	: Disable : Enable
Enable Order Consumable Login	Enables the consumable order logo on login page	: Disable : Enable
Enable Org Master Account	Enables the organisation GLC and account validation feature	: Disable : Enable
Enable Org Master Account For Reg	Enables the organisation GLC and account validation feature for user registration. Disabled by default.	: Disable : Enable
Enable Outlook Calendar Export	Enables calendar exports for Outlook or any service supporting ICS e.g Google Calendar. Users can export My Calendar data. Staff can also export Resource calendar data.	: Disable : Enable
Enable PLUS SSO	Enables PLUS platform integration via its special SSO	: Disable : Enable
Enable Privacy Calendar	Enables public display of booking details on the public access calendar	: Disable : Enable
Enable Project Form In My Profile	Enables user project forms in my profile when project managed is enabled	: Disable : Enable
Enable Publication	Enables the publication data feature. Enabled by default.	: Disable : Enable
Enable Public Calendar	Enables a public display calendar that can be seen without logging in.	: Disable : Enable
Enable Public Holiday Entry	Enables a public data entry feature, default is Disabled	: Disable : Enable
Enable Random Pick Home Video	Displays a video on the home page.	: Disable : Enable
Enable Reactivation Page	Displays a reactivation link on the login page	: Disable

		: Enable
Enable Reg Auto Approval	Enables the auto approval process for user registrations. Requires the integration with the organisation's LDAP system. Refer to the Auto Approve chapter for more details.	: Disable : Enable
Enable Reg Pathway	Enables the pathway for online registrations.	: Disable : Enable
Enable Reg Project Compulsory	Sets the project field in the user registration to compulsory	: Disable : Enable
Enable Repeat Booking	Enables the repeat booking feature for the operation booking calendar	: Disable : Enable
Enable Resource Booking	Enables the Booking tab page. This option is only useful when ACLS is only used for a loan item service.	: Disable : Enable
Enable Resource Charge on Catalogue	Enables resource charge rates in the resource catalogue	: Disable : Enable
Enable Resource Data	*No longer in use*	*No longer in use*
Enable Resource Field Customisation	Enables customisation of the resource database field	: Disable : Enable
Enable Resource Maintenance	Enables the resource maintenance profile and module	: Disable : Enable
Enable Resource Per Tracker Background Image	Enables tracker background image per resource mode	: Disable : Enable
Enable Resource Tracker Background Image	Enables tracker background image for all resources	: Disable : Enable
Enable Resource Tracker Poster	Enables tracker poster per resource	: Disable : Enable
Enable Sample Details In Report	Enables full sample details in the sample report	: Disable

		: Enable
Enable **Sample Job Alert**	Enables the sample job overdue alert. The alert triggers once daily.	: Disable : Enable
Enable Scan Booking Notes	Enables scanning booking notes to filter out the special characters once daily.	: Disable : Enable
Enable Scan Missing Supervisor	Enables scanning the users who missing default supervisor every Saturday. The default supervisor is a must for invoicing to work.	: Disable : Enable
Enable Scan User Folder	*No longer in use*	*No longer in use*
Enable Service Repeat Booking	Enables the repeat booking feature for the service booking calendar	: Disable : Enable
Enable Session Hour Check	Enforces the minimum booking unit check for each booking event.	: Disables the minimum booking unit check. : Enables minimum booking unit validation for each event. If the booked hours are less than the min booking unit, the event will not be saved.
Enable Share Labcast	Allows admin staff to grant share permissions for other admins to manage their labcast settings. Useful if an admin needs to take leave.	: Disable : Enable
Enable Single Sign-In	Enforces Single Sign-On mode. If enabled, users can only access ACLS via Single Sign On	: Disable : Enable
Enable Smart Phone App	Enables mobile web sign in. If enabled, users can sign in to the mobile app to book resources and order consumables.	: Disable : Enable
Enable SMTP Mailer Server	Enables the mailer server on ACLS server. The mailer server deals with authenticated SMTP services, such as sending emails.	: Disable : Enable

Enable Space Booking	Enables the COVID-19 space booking feature, used to enforce social distancing.	: Disable : Enable
Enable Staff Calendar	Enables staff roaster calendar. Disabled by default.	: Disable : Enable
Enable Staff Roster Notification	Enables email notifications for staff roster changes. Disabled by default.	: Disable : Enable
Enable Subscription Credits	*Not implemented yet*	
Enable Survey	*No longer in use*	*No longer in use*
Enable Term Condition	Enables the terms and conditions display on the webpage footer, and on the dashboard menu	: Disable : Enable
Enable Timeline Calendar	Enables the timeline calendar. Enabled by default.	: Disable : Enable
Enable Title For Login	Enables the title bar on the login page	: Disable : Enable
Enable Tracker Status Board	Enables tracker status board on booking resource dashboard	: Disable : Enable
Enable Track Samples	Enables the Track Sample module	: Disable : Enable
Enable Unapproved Booking Report	Enables unapproved booking report in report manager	: Disable : Enable
Enable User Booking Confirmation	Sends booking confirmation alerts to users a few days before the booking time. Users can confirm the booking or cancel the booking	: Disable : Enable
Enable User Contact in Operation Calendar	Enables user contacts for general users in the operation calendar	: Disable : Enable
Enable User Notes In My Profile	Enables staff notes in my profile	: Disable : Enable

Enable User Photo Change in My Profile	Allows users to change their photo in My Profile	: Disable : Enable
Enable User Portrait Photo	Enables user portrait photo in the user profile. Note that this does not refer to the thumbnail user photo.	: Disable : Enable
Enable User Privacy Calendar	Sets calendar booking details to private. Users will only be able to see their own bookings. Other bookings will appear as Busy.	: Disable : Enable
Enable User Profile Usage Tab	Enables the user usage/booking report tab in the user profile editor and the user profile manager	: Disable : Enable
Enable WHS Document	Enables the WHS document module. Only avaliable on the Single Sign In Portal. UNSW Only.	: Disable : Enable
Enable XNAT	*No longer is use*	*No longer is use*
Equipment General Staff Consumable Access	Allow staff in the general staff access category to access the consumable library	: Disable : Enable
Equipment Supervisor Consumable Access	Allow staff in the equipment supervisor access category to access the consumable library	: Disable : Enable
EXCEL Password Protection	*No longer is use*	*No longer in use*
Facility Charging	Enables the resource charging policy in Resource Manager. In this case, the term "facility" refers to resources.	: Disable : Enable
Facility Status Display All	Resources display their status regardless of any restrictions. This means any users can see the full list of resource statuses. In this case, the term "facility" refers to resources.	: Disable, this is the default : Enable
Resource Status Image Height	Sets the resource image height	Height of resource image shown in resource info page is defined here

Resource Status Image Width	Sets the resource image width	Width of resource image shown in resource info page is defined here
FTP Host Name	*No longer in use*	*No longer in use*
FTP Login	*No longer in use, for archival purposes only.*	*No longer in use, for archival purposes only.*
FTP Password	*No longer in use, for archival purposes only.*	*No longer in use, for archival purposes only.*
Home Page Link	Sets a home page URL on the footer	If this is blank, the home link will not be displayed
Https Enable	Enables https access depending on the web server settings. Disabled by default.	: Disables https access. If selected, web access is standard http : Enables https access. This option is strongly recommended.
Include Consumable to Usage Invoice	Adds consumable orders to invoices. Enabled by default.	: Disable : Enable
Include Training Booking to Operation report	Includes training booking to the operation booking report, by default, operation booking report does not include the training booking	: Disable : Enable
Invoice Accessible By Supervisor	Allows supervisor access to invoice statements.	: Disable : Enable
Jaggaer Chemical Inventory URL	Setting for Jaggaer integration	Please contact support for details
Jaggaer Sign In URL	Setting for Jaggaer integration	Please contact support for details
Lab Title Background Color	Lab name title background color, pick the color meeting university barnding req	html color code only
Lab Title Font Color	Lab name title font color, pick the color meeting university branding req	html color code only
LDAP Compulsory Check Text	Sets the default text string for enforcing compulsory LDAP	If set to 'unsw', the system checks if the user email contains 'unsw'. If so, it automatically enforces LDAP access control
LDAP Pre-Configure	Auto-runs a tool to configure user access through LDAP.	: OFF : ON

LDAP Text on Login Page	Displays a special text on the login page to remind users to login with an organization-wide ID.	For example, "UNSW staff and students must use zID/zPass to login"
Logbook Manager To Staff	Enables general staff access to the data logbook manager function.	: Disable : Enable
Login Name Tip	Sets the tip text for the login name form on the login page	Default is "Welcome"
Login Using Email	Enforces email as the login name.	: Disable : Enable
Logon Server Check	*No longer in use*	*No longer in use*
Logon Timer Ctrl	Enables session timer for the ACLS tracker	: Disable : Enable
Maintenance Auto Alert Days	Sets up early warning notifications for the resource maintenance schedule. The schedule is set out in the resource maintenance profile.	
Max Booking Form Number	Sets a limit for the uploaded resource booking form	Max 5
mCloud User Guide URL	*No longer in use*	*No longer in use*
Min Unlogged Time	Time (in minutes) before an instrument computer no longer enforces the booking login.	Default: 5 minutes
Moxy Sign In Token	Refers to the Moxy user guide at moxy.unilab.com.au	
Moxy Sign In URL	Refer to the Moxy user guide at moxy.unilab.com.au	Defaults to UNSW
Multiple Click Prevention	Prevents the same form from being submitted multiple times on accident. Disabled by default.	: Disable. : Enable.
Online Reg Ctrl	Enables online registration.	: Disable : Enable
Online Reg Visitor ID	Sets the default ID for external visitors	e.g. 000

Online Reg Visitor ID Compulsory	Enforces Student/Staff ID as a compulsory entry field in the registration form.	: Not compulsory : Compulsory
Org Reg Name	If organisation GLC or account validation feature is enabled, sets the button in Account Manager.	Defaults to UNSW
Outlook Export Sync timer	System updates the shared calendar to Outlook timer	Default setting is 56 minutes
Pictures Directory Name	Sets the picturedirectory for storing the user photos.	For example, if the directory is "d:\emudata\pictures", Pictures Directory Name should be "pictures".
Pictures Web Directory Name	The picture virtual directory as defined in web server configuration.	For example, if the web server sets the virtual path "/pictures" the Pictures Web Directory Name should be "pictures".
Privacy Statement Link	Set the privacy statement link at footer	If this is blank, the privacy statement link is not displayed
Project Manager	Enables the "Project Manager".	: Project manager is OFF : Project manager is ON
Python Tracker Poster Menu	Refer to the ACLS tracker guide	Informational purposes only
Reg Account Field 1	Used as an account field for account entry in the online registration process	If blank, then this field entry is disabled
Reg Account Field 2	Used as an account field for account entry in the online registration process	If blank, then this field entry is disabled
Reg Account Field 3	Used as an account field for account entry in the online registration process	If blank, then this field entry is disabled
Reg Account Field 4	Used as an account field for account entry in the online registration process	If blank, then this field entry is disabled
Reg Copy Delete Days	Period of time that ACLS retains temporary copies of a registration form. After this period of time, it is deleted. Only avaliable if the UWA modification is active.	Default: 14 days

Reg Def Account	Sets up default account in Account manager	
Report By Any Period	When disabled, reports span two chosen months. When enabled, reports span two chosen days.	✖: Reports span two chosen months ✔: Reports span two chosen days.
Report Deepness (Depth)	The range of years for generating reports	Default: 1 year
Restrict Bookings To General Staff	If enabled, general staff are treated like a user, meaning they require a training certificate before any bookings can be made.	✖: No restrictions to staff with respect to making bookings ✔: Staff can only make bookings if they are qualified as a trainer or being trained
Restrict User Support Ticket Access	*No longer in use*	*No longer in use*
Server Calendar Date Format	The format should match the regional server time format	Default: mm/dd/yyyy (US format) Australia: dd/mm/yyyy
Server Name	This should be the ACLS web server IP address or the ACLS domain name	e.g. www.xxx.xxx.xxx
Service User Code	The user code for the service user. The service user is used for service bookings and other use cases on behalf of the facility.	
Show Tracker Hours in Report	Makes reports display both tracker hours and booking hours for comparison.	✖: OFF ✔: ON
Show Video Clip Booking Tab Home	Displays a video clipon the booking tab home page	✖: OFF ✔: ON
SMTP Server Name	Only if Enable SMTP Mailer Server is enabled. The local SMTP server domain name. in use	e.g. smtp.unsw.edu.au
Staff Roster URL	UniLab integration. Sets the staff roster calendar. Refer to	For informational purposes only.

	the UniLab MoxyTouch user guide.	
Title Beg	The system web page title beginning	
Title End	The system web page title end	
Title To Resource Catalogue	Adds an additional title in front of the Resource Catalogue on the booking landing page.	e.g UNSW Resource Catalogue
Title To Show	The System title on the logon page	
Tracing Data Date	*No longer in use*	*No longer in use*
Training Support Request	Enables the Support module	: OFF : ON
User Access Expiry Alert	Sets the number of days before an advance warning is emailed to the user prior to expiry.	If set to 0, the alert is off. If set to 30, then an alert will be sent out to the user 30 days prior to expiry. Expiry date is set on a per-user basis on their profile page.
User Account For Reg	Enables finance account entry in the online registration process.	: Account entry not required : Account entry required
User All Account Search	Enables the finance account search function in user profile manager	: Disable : Enable
User Folder Format	*No longer in use*	*No longer in use*
User Photo Availability Check	Enforces user photo availability check. The system checks if the user photo exists. If there is no photo, the user's access is disabled after a period of time. The period of time is determined by the DeactivateIfNoPicturePeriod setting. Disabled by default.	: The system does not enforce a photo check. : . The system enforces a user photo check. If not avaliable, user access is disabled.
User Photo For Reg	Enforces user photo upload in the online registration process.	: User photo is not required : User photo must be provided
Valid Email Login	Enables a login name validation check.	: Validation not required

		: The login name must be composed of numbers and letters
Version Control	ACLS developer setting	For informational purposes only.
Web Access Validation	Enables user certificate validation. If enabled, ACLS uses web access records to validate.	: Disable : Enable

5.2 Configure Resource Groups

In ACLS, a *resource* refers to any bookable item such as an instrument, piece of equipment, tool, or device. Before creating individual resources, it is important to define a clear *resource grouping strategy*. This involves organizing similar types of resources into *resource groups*, which helps streamline user navigation, booking workflows, reporting, and access control.

For example, microscopes, imaging systems, and spectroscopy instruments may each be assigned to their respective resource groups. Properly structured groups also allow for consistent configuration of shared settings (e.g. booking policies or access rules) across similar resources.

5.2.1 Resource Group Levels

ACLS supports up to three hierarchical levels of resource group structures, allowing for flexible and scalable categorization of resources. This hierarchy is similar to a multi-level folder structure used for organizing data.

To create and manage resource groups, navigate to: *Utilities → Resource Manager → Resource Group*

Each level in the hierarchy can represent a different classification, such as:

- **Level 1**: Broad category (e.g. Microscopy, Spectroscopy)
- **Level 2**: Sub-category or platform (e.g. Confocal Microscopy, Raman Spectroscopy)
- **Level 3**: Specific lab or location-based grouping (e.g. Room 320, Imaging Suite)

This structure helps streamline resource navigation, access control, and reporting, especially in facilities with many instruments or shared resources.

On calendar pages, you could see the created multi-level resource groups.

- BIOSCIENCE TISSUE CULTURE
  - BLD 4 LEVEL 6
  - BLD 4 LEVEL 7
  - BLD 4 LEVEL 8
  - BLD 7 LEVEL 4 (GSH)

5.2.2 Set Up Resource Group Ownership

When managing multiple resource groups across different units or departments, it is recommended to assign *resource group ownership*. This feature allows designated owners—such as unit managers or staff-in-charge—to independently manage the resources, trainers, and training certificates within their assigned group.

To configure group ownership:

- Assign an owner (or owners) to each group as required

Benefits of assigning group ownership include:

- Delegated administration of resources and user access
- Independent management of training requirements and certifications
- Improved accountability and decentralised control across large facilities

This setup is especially useful in multi-disciplinary or multi-site environments where resources are managed locally by different teams.

To assign or update ownership, click **"Update Ownership"** in the Resource Group settings. Owners must hold the **Equipment Supervisor** role or a higher-level administrative role within ACLS.

Once assigned, resource group owners will be able to:

- Manage the resources within their group
- Assign and manage trainers
- Oversee training certificates and requirements

This delegation supports decentralised administration while maintaining system-wide consistency and control.

5.3 Configure Resources

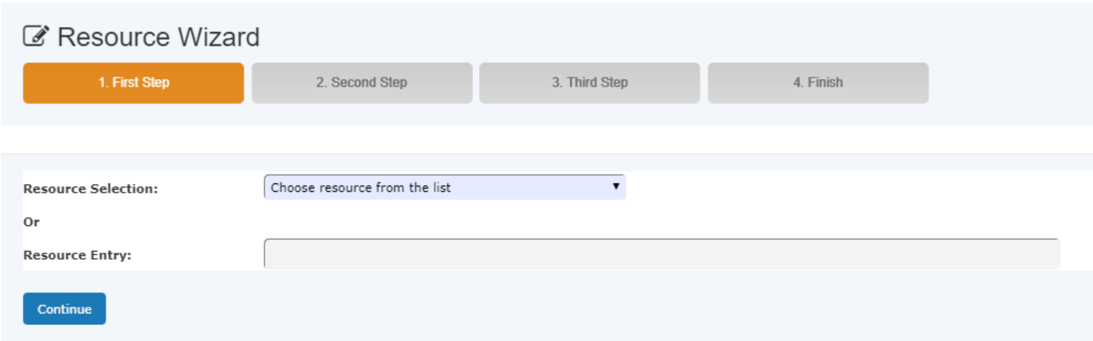
5.3.1 Resource Wizard:

The Resource Wizard provides a streamlined, step-by-step interface to assist with creating or updating resources within ACLS. It serves as a one-stop setup tool for administrators.

You can use the wizard to:

- Set up a new resource from scratch
- Select an existing resource to review or modify its configuration

The wizard guides you through key setup elements, including general information, booking rules, access permissions, training requirements, and associated cost settings.
This intuitive process ensures consistency and reduces errors in resource configuration, especially in environments with complex or numerous equipment setups.



5.3.2 Resource Manager

An experienced administrator can use the ***Resource Manager*** to add/edit/archive a resource.

Resource Profiles:

The following tabs are available in the Resource Profile:

- General profile

This section covers general resource settings.

Field	Definition
Resource Name	The full name of the resource
Resource Group	The resource group name
Resource Image	A resource image, one per resource

Resource QR Code	The resource QR code. Scanning with a smart phone allows the user to make bookings.
Quantity	Informational to indicate the quantity for the same tools
Operation Status	Either active or inactive. The resource must be active for trainers and training certificates to be set up.

- Booking profile

This section covers resource booking parameters.

Field	Definition
Min Day Per Session	Defines the minimum advance days required before a booking can be made. For example, if this is set to 2 days, users must book the session more than 48 hours in advance, otherwise the system declines the booking.
Min Hour Per Session	Defines the minimum time for each booking session. For example, if this is set to 2 hours, users have to book the session for more than 2 hours, otherwise the system declines the booking
Min Time per Session	A number that defines the minimum time a user is able to book a session. The calculation is: (min day per session) * 24 + min hour per session
Min Booking Unit	The unit of time that makes up a booking. Either 5 minutes, 15 minutes, 30 minutes, or 1 hour
Double Booking	If enabled, multiple users can make overlapping bookings in the same timeframe. This is useful for the special space booking.
Compulsory Booking Confirmation	If enabled, booking confirmations become compulsory for each booking made. If disabled, users can decide whether they want to have a booking confirmation or email notification for each booking made.
Booking Alert	If enabled, a user booking also sends a notice to the resource trainers.
Training Certificate	Indicates whether the resource requires a user training certificate to book. For example, some resources do not require training to operate.
Pre-Approval Booking	If enabled, bookings made by users must be approved by a trainer or manager.
In-Progress Booking Change	If enabled, users and staff can edit an in-progress booking. For example, if a booking is from 10am to 2pm, and the current time is

	12:15pm, then the user can choose to reduce the booking time from 10am to 12:15pm.
In-Progress Booking Cancel	If enabled, users and staff can cancel an in-progress booking. For example, if a booking is from 10am to 2pm, and the current time is 12:15pm, then users can cancel the booking. Note that this feature may be abused by users to cancel a booking after they start to operate the tool or resource.
Booking Enable	Enable or disable resource booking availability.

- Lab space profile

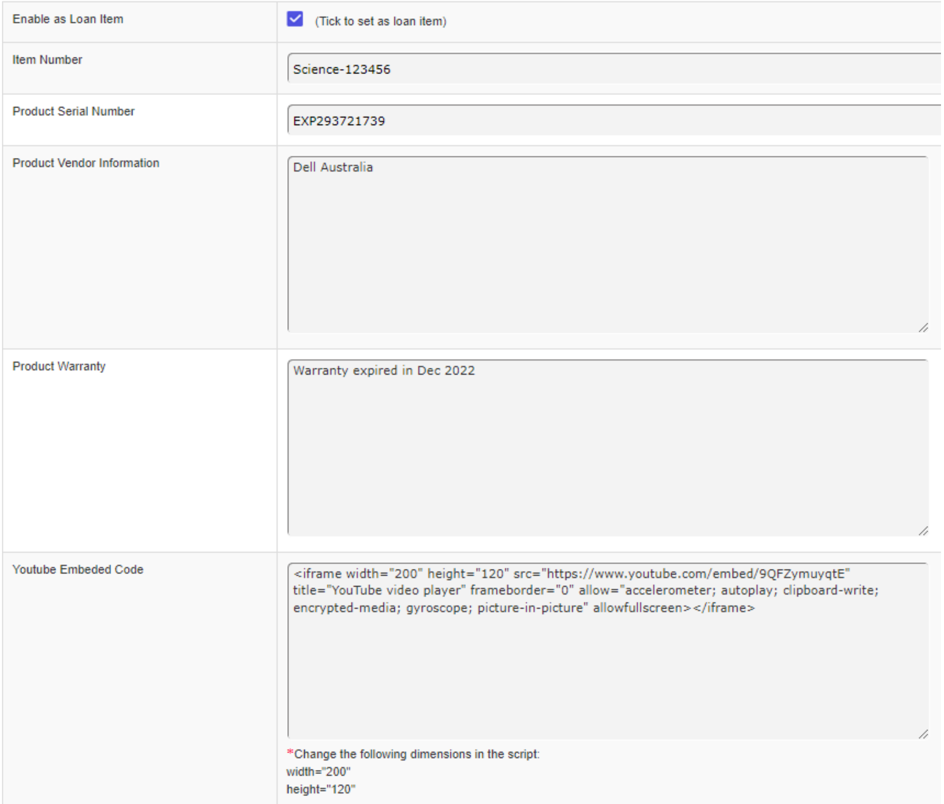
  Lab space is a feature made in response to COVID-19. It enforces social distancing by setting a limit of concurrent users in the lab space. You can add or remove the resource from a pre-defined lab space.

- Loan item profile

  The loan item module operates like a library. Like borrowing a book, the loan item module system provides 3 basic features:

  - Collect
  - Return
  - Book

  Setting up the resource as a loan item involves going to the Loan Item Profile tab and selecting enable. After that, there is a list of parameters that need to be filled out:



Enable as Loan Item	☑ (Tick to set as loan item)
Item Number	Science-123456
Product Serial Number	EXP293721739
Product Vendor Information	Dell Australia
Product Warranty	Warranty expired in Dec 2022
Youtube Embeded Code	<iframe width="200" height="120" src="https://www.youtube.com/embed/9QFZymuyqtE" title="YouTube video player" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe> *Change the following dimensions in the script: width="200" height="120"

Field	Definition
Item Number	e.g. Science-123456
Product serial number	e.g. The Dell service express code
Quantity	Quantity of the item, if there is more than one available
Purchase date	Item procurement date
Product vendor information	e.g. Dell
Product warranty information	e.g. 12 months warranty
Youtube video	Product Youtube link
Custodian	

- Catalogue profile

The resource catalogue settings are as follows:

Field	Definition
Enable Catalogue Listing	Check to list resource in catalogue

Resource Type	Following types are selectable. In the future, each type of resource has its own booking event template. Select from a resource type. The given categories are: ○ Research EquipmentTeaching Equipment ○ Field Equipment ○ Lab Equipment ○ Office Equipment ○ Office Space ○ Lab Space ○ Loan Item ○ Service ○ Meeting Room ○ Vehicle ○ Others
Catalogue Access	The following access categories are available: **Local access:** users who can sign in to ACLS **Organisation access:** users who can sign in to SSI **Universe access:** users who can sign in to AAF **Disable access:** resource is not shown on catalogue
Asset ID Number	Resource asset number in the organization asset system
Item Number	Resource item number in the organization asset system
Description	Resource description
Specification	Resource specification
Location	Resource location, e.g. room number, building name
Website	Resource website URL
Upgrades	Upgrade information
Brand	Resource brand
Model	Resource model
Serial Number	Resource serial number
Custodian	Resource custodian

- Maintenance profile

  The maintenance profile manages maintenance activities, schedule, and cost. The maintenance profile covers the following properties:

  - Resource brand
  - Resource model

- Resource serial number
- Maintenance level
- Last maintenance date
- Last maintenance comments
- Maintenance/certificate type
- Next maintenance due date
- Maintenance frequency
- Estimated maintenance cost
- Maintenance cost owner
- Cost owner others

- Charge rates

  This setting is subject to global ACLS settings. If you would like to configure the resource charging method, please refer to the Resource Charging chapter.

- Booking forms

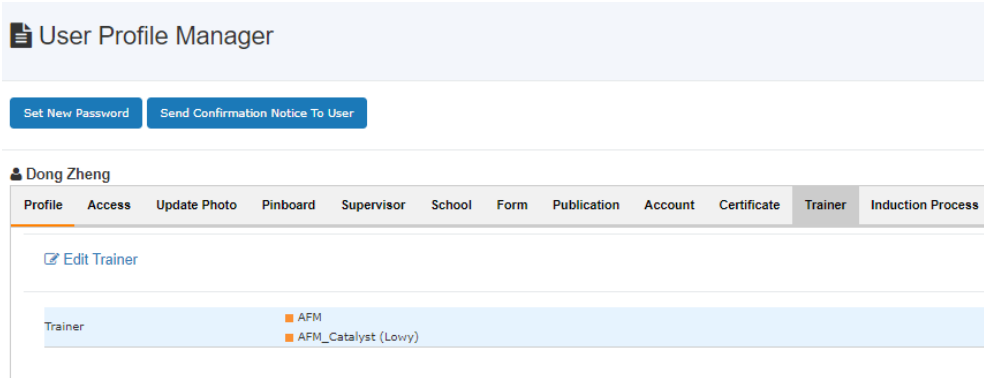
  This setting is subject to global ACLS settings. If you would like to enable booking forms, please refer to the Resource Booking Form chapter.

- Training certificates

  You can add new training certificates and edit current certificates. Please refer to the Resource Training Certificate chapter for further details.

- Trainers

  You can set up trainers here. Please refer to the Resource Trainer chapter for further details.



- Certified users

This tab contains a list of certified users.

- Desktop tracker app

This tab configures the ACLS Tracker. Please refer to Appendix I – ACLS Desktop Tracker for details.

Field	Description
Resource	Resource name
Host ID	Generated unique ID for this resource. Generated upon creation. Can be reset.
ID Type	The type of ID being used e.g Host ID
Block hot-keys	If set to block, then windows hotkeys like START-D are blocked. This prevents users from bypassing the tracker without logging in.
Block task manager	If set to block, the windows task manager will be disabled, so users cannot forcibly close the tracker.
Enable account/project selection	If enabled, users must select an account/project when logging in. This can be disabled if the resource is free of charge.
Enable locking screen	If enabled, the lock function is enabled. The user is able to create a lock screen on a logged in device to prevent anyone else from logging in, so they can leave the computer unattended. Staff members are able to unlock a locked screen.
Enable Show Last Login User	If enabled, the tracker displays the most recent user and the day they logged in.
Enable auto-logout	If enabled, the tracker automatically logs out the user after a set period of time.
Auto-logout hours	Defines the number of hours used for the auto-logout feature.

Enable full-screen mode	If enabled, the tracker's login screen is set to full screen and cannot be bypassed without logging in.
Enable booking first policy	If enabled, a booking is required for the user to sign in to the tracker. This feature ensures users cannot freely use instruments without a prior booking.
Enable data drive mapping	Deprecated feature.
Enable email for sign in and sign out	If enabled, the user and the resource trainers will receive email notifications documenting their sign in and sign out.
Enable sensor app execution with tracker	Enables the ACLS Sensor app, which is used to scan hardware and software information from the resource computer. See the ACLS Sensor section for more details.
Enable Windows account logoff	If enabled, signing out of the tracker will also sign out of Windows.
Enable logoff Windows account button on tracker app login page	If enabled, the tracker login page will show an additional button that signs out of Windows.
Connection Allowed	Enables or disables the tracker.
Note	Free space for notes.

5.4 Permanent of Resource ID and Resource Group ID

ACLS provides **permanent identifiers** for both resources and resource groups to support reliable integration with external systems.

Key Features

- **Permanent Resource ID**
  Each resource is assigned a unique, non-changing identifier

- **Permanent Resource Group ID**
  Each resource group is also assigned a stable identifier

Purpose

These permanent IDs are designed to:

- Enable seamless integration with **third-party systems**
- Support **API-based data exchange**
- Ensure consistency in reporting, analytics, and system interoperability

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Benefits

- IDs remain **unchanged** even if resource names or configurations are updated
- Eliminates ambiguity when linking data across systems
- Supports long-term data integrity for enterprise environments

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Summary

Permanent Resource and Resource Group IDs provide:

- Stable reference points for integration
- Improved system interoperability
- Consistent and reliable data mapping across platforms

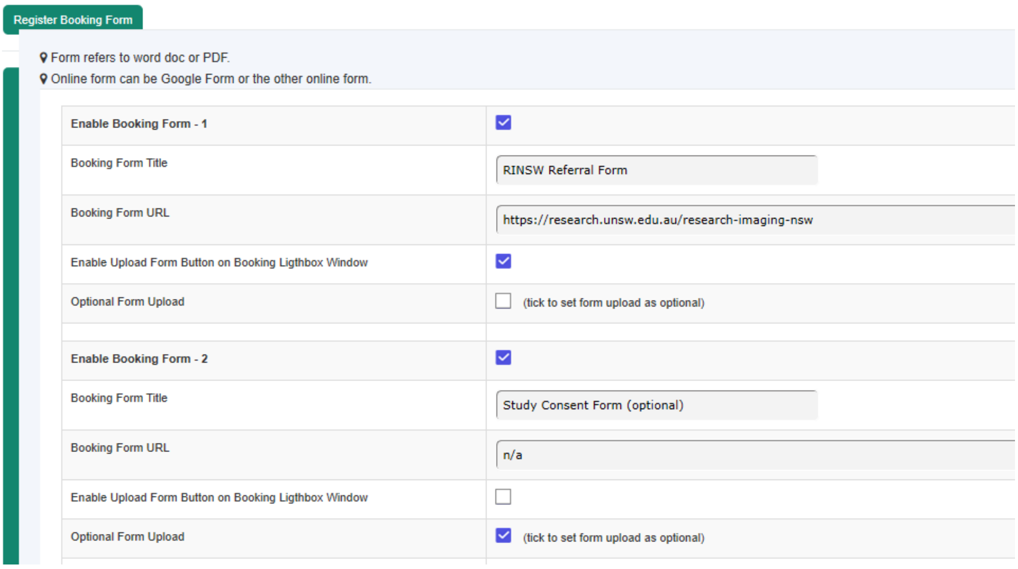
5.5 Resource Booking Forms

ACLS allows administrators to configure booking forms to collect additional information from users during the booking process. Up to **five** booking forms can be configured per resource. Key options include:

- **Optional or Required**: Each form can be set as optional or mandatory.
- **Form URL**: Specify an external link to direct users to an off-site form (e.g. a survey or compliance form).
- **Form Upload**: Enable users to upload completed forms directly during booking. This is useful for approvals, risk assessments, or declaration documents.

If *Form Upload* is enabled, staff must **review and validate** uploaded forms before confirming the booking. All submitted forms can be accessed via: *Utility → Report Manager → Submitted Booking Form Report*

This feature enhances compliance, data collection, and documentation processes related to equipment usage.



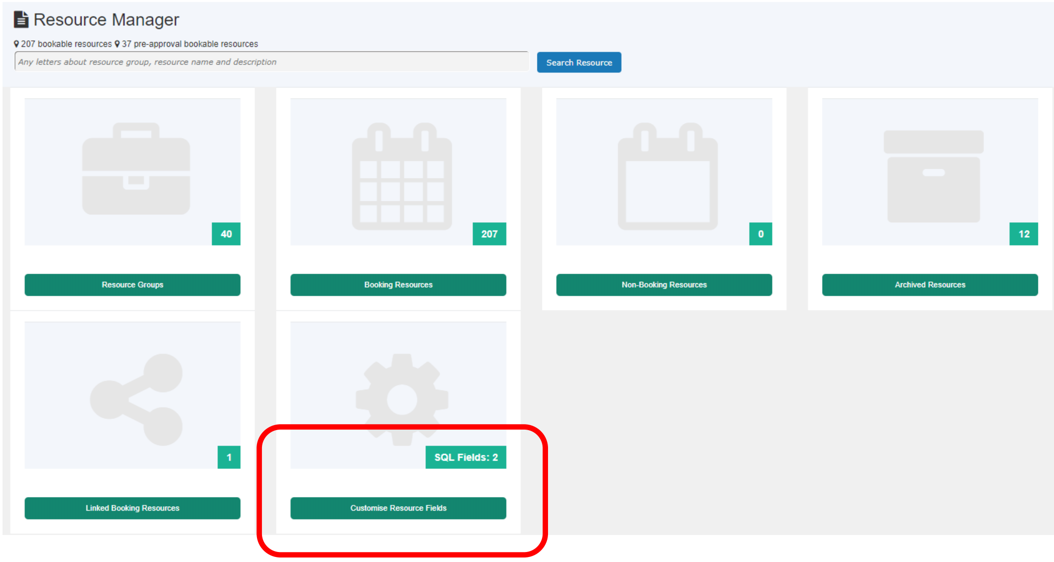
5.6 Customise Resource Fields

ACLS allows you to define **custom resource fields** to capture additional information specific to your operational or reporting needs.

Step 1: Add Custom Fields

To create custom fields:

- Navigate to *Utilities → Resource Manager → Customised Resource Fields*
- Click Add New Field
- Enter the field name and specify the maximum field length (i.e. the maximum number of characters allowed)
- Field names must use letters and digits only — special characters are not supported
- These custom fields will appear on the resource configuration panel and can be used for display, filtering, or internal reference.



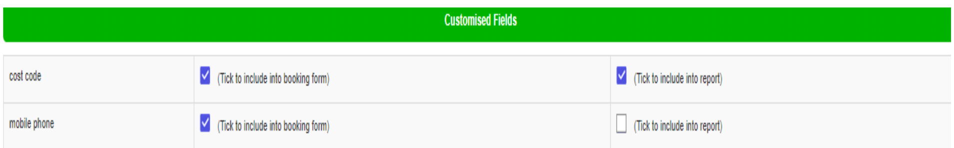
Step 2: Add Custom Fields to Resources

Once custom fields have been created, they must be **enabled for use** on the relevant booking forms and reports.

To do this:

- Navigate to the resource settings panel
- Locate the Custom Fields section
- Check the boxes to specify whether each custom field should appear on:
  - The resource booking calendar (visible to users)
  - The resource report (for administrative and reporting purposes)

Only checked fields will be displayed or included in reports. This allows you to tailor visibility and data collection based on operational needs.



Step 3: Change the Custom Field Order on the Booking Window

To control the display sequence of custom fields on the booking form, you can adjust their order.

- Click the “Set Field Order on Booking Window” button
- Drag and drop or use the interface to arrange the fields in your preferred order
- Save your changes

This ensures that the most relevant information appears in a logical and user-friendly sequence during the booking process.

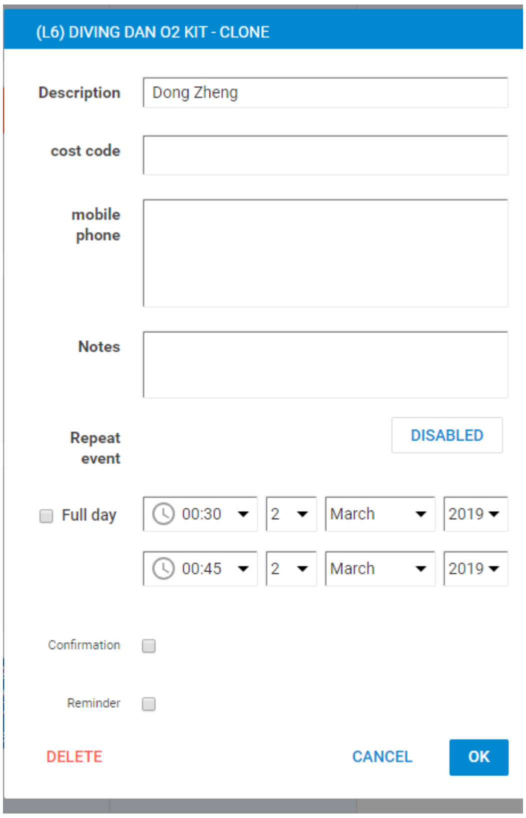
5.6.1 *Customised Resource Fields on Booking Calendar*

Customised resource fields will appear on the **booking calendar interface** based on each resource's configuration settings.

Please note:

- All customised fields are mandatory. Users must provide values for these fields during the booking process.
- If any required field is left blank, the booking will not be accepted.

This ensures that all critical information tied to a resource booking is consistently captured and recorded.



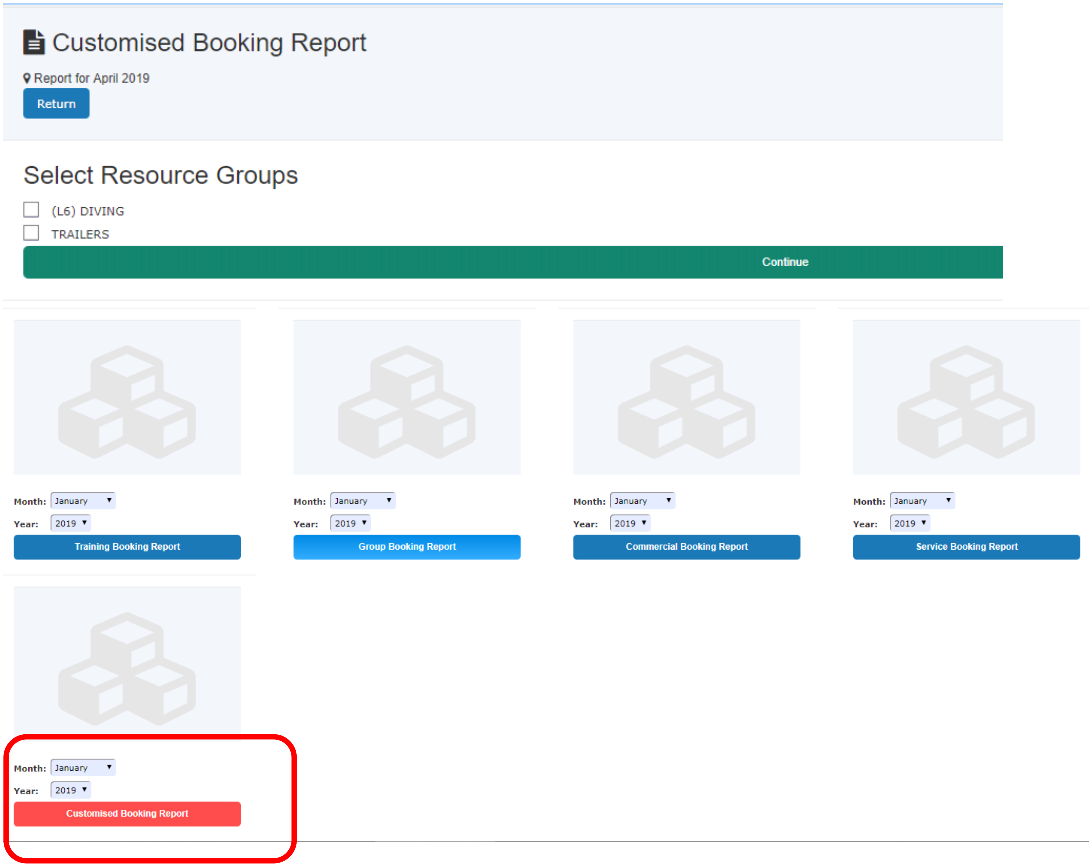
5.6.2 *Customised Resource Fields on Report*

When customised resource fields are enabled, ACLS automatically adds a **new report tile** for each relevant resource in the **Report Manager**. These reports are designed to display the data collected through the customised fields.

Key points:

- Standard reports remain unchanged and are not affected by the addition of customised fields.
- ACLS will automatically shortlist resource groups that have customised fields enabled, making it easier to locate and access the corresponding reports.

This feature allows administrators to generate targeted reports based on custom data, supporting tailored analysis and compliance tracking.



Resource	Resource Group	Booking Type	User	Type of Researcher	Supervisor	Account	School/Org	cost code	mobile phone	Start Time	End Time	Booked Hours	Booked On	Notes
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	Operation Event	Dong Zheng	Academic	Philip Lawrence	Internal Account	Faculty of Science, UTS	1234	5679	25/02/2019 00:00	25/02/2019 00:15	0.25	21/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Abanti Barua	PhD Student		Internal Account	C3	1234	56789	25/02/2019 00:30	25/02/2019 01:15	0.75	23/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Alisha Deo	Hons Student	Maiken Ueland	Internal Account	Faculty of Science, UTS	1234	5674df	25/02/2019 01:30	25/02/2019 01:45	0.25	24/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	Operation Event	Dong Zheng	Academic	Philip Lawrence	Internal Account	Faculty of Science, UTS	1234	5678	26/02/2019 00:00	26/02/2019 00:15	0.25	21/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Abanti Barua	PhD Student		Internal Account	C3	564	987	26/02/2019 00:30	26/02/2019 04:00	3.5	23/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	Operation Event	Dong Zheng	Academic	Philip Lawrence	Internal Account	Faculty of Science, UTS	1234	5678	27/02/2019 00:00	27/02/2019 00:15	0.25	21/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Alexander Solntsev	Academic	Michael Cortie	Internal Account	MaPS	12	56	27/02/2019 00:30	27/02/2019 00:45	0.25	23/02/2019	- changed by staff: Dong Zheng - changed by staff: Dong Zheng
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Anh Ly	PhD Student	Milos Toth	Internal Account	MaPS	wer	56734	27/02/2019 01:00	27/02/2019 01:15	0.25	24/02/2019	- changed by staff: Dong Zheng
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	Operation Event	Dong Zheng	Academic	Philip Lawrence	Internal Account	Faculty of Science, UTS	1234	567810	28/02/2019 00:00	28/02/2019 00:15	0.25	21/02/2019	
(L6) DIVING DAN O2 Kit - Clone	(L6) DIVING	User Event	Ahmad Yusri Mohd Yusop	PhD Student		Internal Account	Faculty of Science, UTS	12	3434	28/02/2019 00:30	28/02/2019 02:00	1.5	23/02/2019	- changed by staff: Dong Zheng - changed by staff: Dong Zheng
Total										**7.5**				

Please note that vehicle charge capping is not implemented. You will need to export the data to Excel for further data processing.

5.7 Access Group Definition

The *Access Group Manager* in ACLS is used to define and manage different levels of user access to resources. The system comes with **eight generic access groups** pre-defined:

- System Administrator Group
- Administrative Staff Group
- Manager Group
- Equipment Supervisor Group
- General Staff Group
- Supervisor Group
- User Trainer Group
- User Group

Each generic group serves as a template and can be **customised into multiple sub-groups** to suit specific booking policies or resource management needs.

Group Attributes

Each access group can be configured with the following attributes:

- Group Name: Display name for the access group
- Maximum Hours per Day: Daily booking limit per user
- Maximum Days per Period: Number of calendar days allowed for booking in a defined period
- Maximum Hours per Period: Total hours permitted during the defined period
- Booking Availability Start Time (per day): Earliest time bookings can begin
- Booking Cutoff End Time (per day): Latest time a user can make a booking
- Booking End Time Offset: Defines a buffer period at the end of bookings. If set to zero, a checkbox will appear on the booking calendar to indicate this offset.
- Booking Cancellation Rule: Defines if bookings can be cancelled, and the minimum notice required (e.g., at least one day in advance)
- Weekend Booking: Indicates whether weekend bookings are permitted
- Public Holiday Booking: Indicates whether bookings are permitted over public holidays
- Group Code: Unique identifier for internal referencing
- Group of Privilege: Access category, such as User, Staff, or Admin

User Trainer Group Use Case

In many labs, especially those with limited staff resources, it is common to appoint senior PhD students or experienced users as equipment trainers. The **User Trainer Group** supports this model by enabling general users to take on the role of resource trainer with restricted administrative privileges.

5.8 Upload System Files

This section allows system administrators to upload various files that customise the appearance and behaviour of ACLS. The following file types are supported:

- Banner Image: Displayed on the main system interface
- Logo Image for Invoice Statement: Appears on all auto-generated invoices
- Terms & Conditions (Text File): Displayed during registration or booking as plain text
- Terms & Conditions (PDF File): Offered as a downloadable file during key interactions
- Customised User Title (Text File): Defines user role titles shown in registration and profiles
- Customised Type of Researcher (Text File): Tailors researcher type options (e.g. academic, clinical, industry)
- Customised Form Type (Text File) (CMCA only): Used to define specific form categories for booking or reporting
- Example: Customised User Title File

The user title text file should include one entry per line, for example:

- Undergrad. Student
- Hons Student
- Visiting Researcher
- Master's Student
- PhD Student
- Postdoc
- Research Assistant
- Professional Officer
- Academic
- Others

These titles will appear in drop-down menus during user registration and can be used for filtering, reporting, and approval workflows.

5.9 Configure Email Receivers

ACLS allows administrators to configure **custom email recipients** for key system notifications. This ensures that relevant staff are promptly informed of important actions or requests.

You can customise the email recipient list for the following notification types:

- Online Registration Requests: Notifications when a new user register
- Access Denied Notifications: Sent when a booking or request is rejected due to insufficient access
- Training and Support Notifications: Triggered when users request training or assistance

Default Behaviour:

By default, these notifications are sent to:

- The user who submitted the request
- The "Contact Us" email address configured in the system settings

To modify recipients, go to:

Utilities → System Settings → Email Receiver Settings

This feature helps route communications efficiently to relevant personnel or teams.

5.10 Configure Email Response Contents

ACLS allows administrators to customise the **content of email notifications** to better align with your lab's communication style, policies, or terminology.

Key Features:

- If no custom content is set, ACLS will use the built-in default message.
- Customised messages are clearly marked as modified. Default messages remain labelled as such for easy identification.
- The interface includes Preview and Default buttons to help compare the customised version with the system default.
- If you delete the customised content of a notification, the system will automatically revert it to the default version.

Customising email responses is especially useful for providing clearer instructions, adding local context (e.g. lab contact info), or tailoring approval language.

To access this feature, navigate to: *Utilities → System Settings → Email Notification Templates*

5.11 Configure School/Org Structure

ACLS supports up to **three levels** of hierarchical school or organisational structures. This allows institutions to map their internal structure for more effective reporting, user categorisation, and administrative control.

Example Structures:

- DVCR → MWAC → BMIF
- University-A → Faculty-B → School-C

Defining an organisational hierarchy enables:

- Deployment of an org structure diagram for visual reference
- Use of analytics tools to monitor user population and distribution across organisational units
- Assignment of access control and resource visibility based on organisational level

Additional Functions:

- Rename Org Levels: You may rename any level, and the change will apply system-wide wherever that entity is referenced.
- Archive Unused Entities: To disable a school or organisation that is no longer in use, click the Archive button. This will retain historical records without displaying the entity in active selections.

To manage school/org structures, go to: *Utilities → School/Org Manager*

6 Operating ACLS

The ACLS operational interface is designed to provide users with efficient access to system functions, real-time information, and personalised workflows. This section outlines the core components used in day-to-day system operation.

6.1 Dashboard

The **Dashboard** serves as the informational workspace in ACLS, offering personalised access to information and system functions based on the user's assigned **access group**. It enables users to monitor activity, manage tasks, and stay informed of key updates.

Dashboard Tiles

My Attention *(Admins Only)*

Displays system alerts requiring administrative attention, including:

- Pending user registration approvals
- Active users without a linked account
- Accounts expiring within one month
- Projects expiring within one month

My Home

Provides access to user-specific operational and informational content, including:

- Lab Events: View events scheduled for the current month. Click on a month to display event details.
- Access Documents: Access general documents (e.g. policies, meeting minutes) and resource-specific files (e.g. training materials).
- Access Forms: View user-submitted forms such as induction, safety, or OHS forms.
- Access Invoices: View and download system-generated invoices.
- Access Sample Job Reports: Access detailed reports related to submitted jobs.
- Access Sample Job Summary: View summarised data on submitted sample jobs.

My Profile

Displays your personal user information and settings. You can update your contact details and change your password here.

There are two ways to access *My Profile*:

- From the Dashboard tile, or

- By clicking your user photo near the Logout button

Profile Fields Include:

- Username
- Student/Staff Number
- Type of Researcher
- Login Name
- School/Organisation
- Access Group
- Supervisor
- Work Phone / Mobile Phone
- Email
- Work Address
- Indicative Project Title
- Account
- Certificates
- Trainers

My Publication

This section is used to manage and track academic publications, which are vital for grant applications and performance reporting.

Publication Fields:

- Publication ID
- Journal Title
- Author List
- Year / Month
- Additional Details

Note: Staff can register publications on behalf of users. Once registered, publications are visible under this dashboard tile.

Approve Bookings ***(For Trainers Only)***

Displays all **bookings pending approval** if the system is configured for pre-approval of resource use.

Only users with trainer roles will see this tile.

My Usage

Provides a summary of your **resource usage statistics**, including:

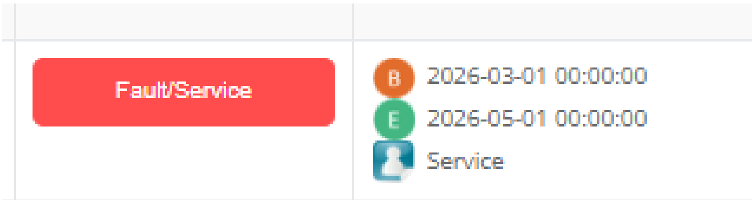
- A detailed data table of past bookings
- A bar chart visualisation showing booking patterns across resources

This section helps users monitor their access trends and manage their engagement with shared facilities.

Resource Status

ACLS provides booking status visibility of resource availability:

- Available – Resource is free for booking
- Running Booking – Currently in use
- Starting Soon – Upcoming booking scheduled
- Fault / Service – Resource unavailable due to maintenance or issues

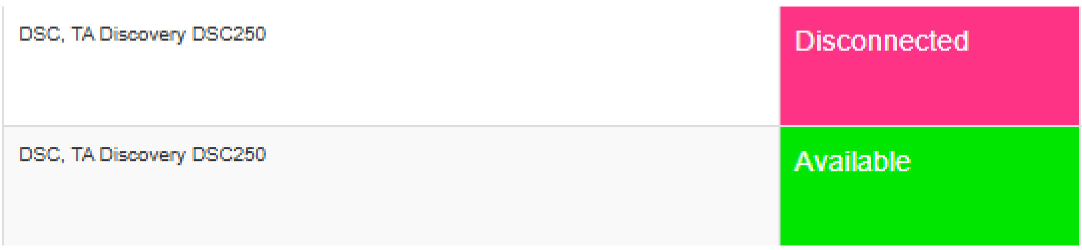


6.2 Real-Time Status Board

The **Real-Time Status Board** provides a live overview of equipment usage within the facility. It displays:

- Active sign-in and sign-out records
- Real-time usage captured via ACLS Tracker and Tap & Go (MoxyTap) devices
- Current operational status of instruments

This feature enhances operational visibility and supports efficient lab management.

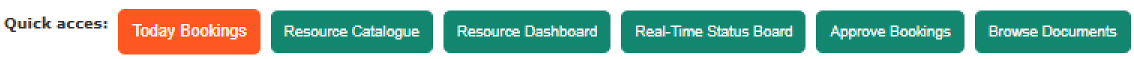


6.3 Quick Access

The **Quick Access** feature provides one-click shortcuts to frequently used functions, tailored to the user's role and permissions.

Benefits include:

- Faster navigation to commonly used features
- Improved workflow efficiency
- Reduced time spent navigating menus

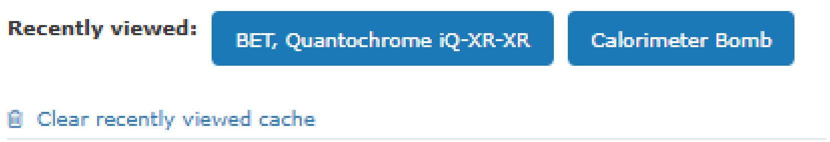


6.4 Recent Viewed

ACLS automatically caches the **last three accessed resource calendars**, allowing users to quickly return to recently viewed items.

This feature:

- Improves usability for frequent users
- Reduces repetitive navigation
- Enhances overall user experience



6.5 Calendar Utility

ACLS provides a suite of calendar tools designed to support efficient booking management across **individual users, staff teams, and shared resources**. These tools enhance visibility, coordination, and operational planning within research facilities.

Calendar Utilities

- Calendar: My Calendar
- Calendar: Outlook Sync
- Calendar: Lab Calendar
- Calendar: Staff Roster

The ACLS calendar utilities enable users and administrators to:

- View bookings across different scopes (personal, staff, and services)
- Identify availability and scheduling conflicts
- Coordinate activities across teams and resources

My Calendar

Displays all **personal resource bookings** in a consolidated view.

Key Benefits:

- Track upcoming reservations
- Review usage history
- Manage individual schedules efficiently

All Staff Calendar

Provides a **shared calendar view of all staff bookings**.

Use Cases:

- Identify common available time slots
- Coordinate meetings and collaborative work
- Support workload planning and staff allocation

All Service Calendar

Displays **all service-related bookings** across resources in a unified view.

Key Features:

- Filter bookings by specific resource via dropdown selection
- View operator-assisted sessions, maintenance, and service bookings

Use Cases:

- Coordinate equipment servicing and calibration
- Manage service team schedules
- Improve visibility of resource utilisation

Staff Roster Calendar

Introduced to support evolving operational needs (including COVID-era coordination), the **Staff Roster Calendar** enables efficient planning and publishing of staff schedules.

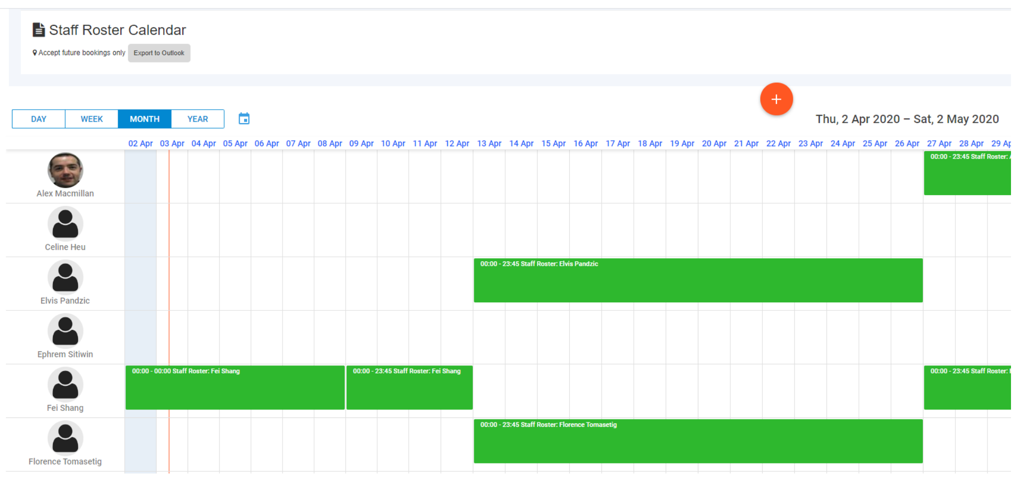
Key Features:

- Centralised staff scheduling
- Integration with Outlook for internal sharing
- Public display via MoxyTouch (physical screens or virtual dashboards)

Benefits:

- Improves staff coordination and visibility
- Supports hybrid and distributed lab operations
- Enhances communication across teams

For more details, refer to the **MoxyTouch chapter**.



6.6 Make Bookings

To create a booking in ACLS, navigate to the **Booking Resources** tab from the main navigation menu. The system will display all resources available to you based on your **training certification and access permissions**.

Note: General users will only see resources for which they are certified.

Resource Display Options

You can choose how resources are displayed:

- **Sorted by Resource Group**:

  Groups resources under their assigned resource groups, helping users navigate based on categories (e.g., Microscopy, Spectroscopy).

- **Sorted by Individual Resource:**

  Displays all resources in a single list, regardless of group, for quicker access when group context is not needed.

Booking Categories by Role

Staff Members can make bookings under multiple categories:

- Operation – Standard user access to equipment
- User Approval Bookings – For managing bookings pending approval
- Training – For scheduling user training sessions
- Group Bookings – Shared or collaborative sessions
- Commercial – For external or paid bookings
- Service – For staff-assisted or technical service sessions

General Users are limited to:

- Operation Bookings only
- Bookings for themselves only, not on behalf of others

6.6.1 *Operation Booking (Unassisted Booking)*

Operation Booking is the most common booking type, allowing certified users to independently reserve resources.

Calendar Features

- **Colour Scheme**: colours represent different booking categories or statuses for easy visual identification.

- **View Modes**: switch between Day, Week, or Month views using the Date button. The List View provides a summary of bookings for the selected month.

- **PDF Export**: Click the PDF button to export the current calendar view. This is useful for printing or offline reference.

- **Booking Filters**: If the calendar is crowded, use the Filter By option to isolate bookings for a specific user.

How to Add a Booking

You can add a booking using either method below:

- Click the orange plus (+) button to open the booking window
- Or click directly on a specific date in the calendar to create a booking for that day

Then:

- Fill out the booking form using the resource-specific template
- Click 'OK' to save the booking

Note: While each resource may have a unique template, the process for creating, editing, and saving bookings is consistent across all resources.

6.6.2 *Booking Quota*

The booking interface displays quota and usage information for the selected resource.

Users can view:

- Current usage

- Booking limits such as:
    - Maximum hours per day
    - Maximum hours per period
    - Maximum booking duration

This ensures compliance with facility policies and supports resource planning.

6.6.3 Information Panel

The Information Panel provides contextual details and configuration options.

Resource Details

Displays key information about the selected resource, including:

- Resource Group
- Location
- Assigned Trainers

This allows users to quickly understand the resource’s classification and who to contact for training or access support.

Calendar Settings

Users can customise their booking calendar experience with the following options:

- Calendar View: Set the default view to either Weekly or Monthly
- Calendar Popup: Choose between single-click or double-click to open the booking event window
- Calendar Background Colour: Personalise the background colour of your calendar interface for better visibility or accessibility

---

User Contacts

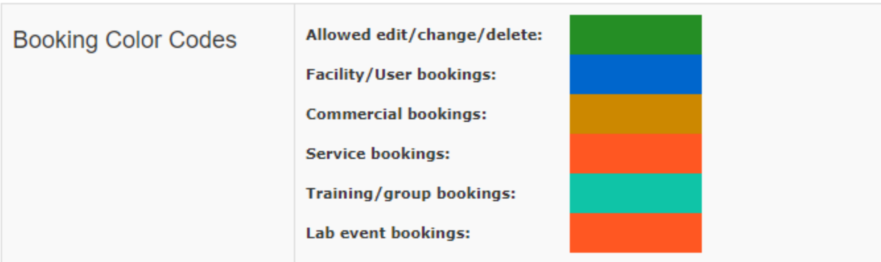
Displays contact details for users associated with bookings, enabling coordination.

System admins can turn off user contacts to users in the general user access group if required.

Booking Colour Codes

The calendar uses colour coding to visually distinguish between booking types:

Colour	**Meaning**
Green	Editable booking – user can modify/delete
Blue	Facility/User booking
Brown	Commercial booking
Red	Service booking or lab event booking
Teal (Light Blue)	Training or group booking



Email Notifications

Users can subscribe to alerts when bookings are cancelled, allowing quick rebooking of newly available slots.

- Notification settings can typically be enabled from the Information Panel or resource calendar page.
- Alerts are sent in real time, allowing users to respond promptly.

Uploaded Booking Forms

Available only when enabled for the resource.

- Staff can access all forms
- Users can access their own submissions

The access button for uploaded booking forms is located **above the calendar page**, offering quick access to associated documentation for verification, training, or compliance purposes.

6.6.4 User/Approve Booking (Assisted Booking)

The **User/Approve Booking** tool is available **to staff only**. It serves two main purposes:

- Booking on behalf of other users (excluding other staff members)
- Approving pending bookings, where pre-approval is required

Key Features:

- Staff can select a user from the list and book a resource on their behalf
- Upon clicking Save, the system automatically sends a booking confirmation email to both:
    - The **user** for whom the booking was made
    - The **staff member** who submitted the booking

This tool is especially useful for managing bookings for students, trainees, or users without booking privileges, and for overseeing resource access under controlled workflows.

6.6.5 Training Booking (Assisted Booking)

The **Training Booking** tool allows **staff members** to schedule training sessions for users on specific resources.

Key Differences from Standard Bookings:

- A user-initiated booking is classified as a standard Operation Booking
- A staff-created training booking is recorded as a Training session and appears as such in reports and calendars

Booking Process:

- Select the resource and user requiring training
- Schedule the session using the Training Booking tool
- Click OK to save

The system will send a **booking confirmation notice** to:

- The booked user, and
- The staff member who created the booking

This ensures all parties are informed and training records are properly classified for reporting and compliance tracking.

6.6.6 *Group Booking (Assisted Booking)*

The **Group Booking** tool allows **staff members** to schedule a single booking for **multiple users** at once, ideal for group training sessions, workshops, or shared experiments.

How It Works:

- Select the resource and booking time
- Use the user selection list to add participants
- Hold the Ctrl key (Windows) or Command key (Mac) to select multiple users
- Click OK to save the booking

Notifications:

Once saved, the system sends a **booking confirmation email** to:

- All selected users, and
- The staff member who created the group booking

This ensures that all participants are informed, and the session is properly recorded in each user's calendar.

6.6.7 *Commercial Booking*

The **Commercial Booking** tool is available **only to staff members** and is used to reserve resources for **commercial or externally funded operations**.

Key Characteristics:

- Designed for bookings associated with industry partnerships, consulting services, or external clients
- These bookings are typically subject to different pricing models, reporting requirements, or access policies

Commercial bookings are clearly marked in the calendar (e.g. **brown colour**) and can be filtered or reported separately for financial and administrative tracking.

6.6.8 *Service Booking*

The **Service Booking** tool is available **only to staff members** and is used to reserve resources for **maintenance, repair, or technical servicing**. This function ensures critical downtime is recorded and properly managed within the system.

Key Features:

- Service bookings override existing user bookings
- When a service booking conflicts with user bookings, the system will:
  - **Automatically cancel** affected bookings
  - **Send email notifications** to all impacted users

How to Create a Service Booking:

You can overwrite existing bookings using either method:

- **Manual Overlap:**
  - Create a new service booking that overlaps with an existing user booking
  - Click OK

  The system will automatically cancel the original booking(s)

- **Drag-and-Drop:**
  - Drag the service booking box into the desired time slot
  - Click OK

  Conflicting bookings will be replaced

Types of Service Bookings:

- **Scheduled:** For planned or routine maintenance (e.g. calibration, upgrades)
- **Unscheduled:** For urgent or unplanned downtime due to equipment malfunction

Visual Indicators and Flexibility:

- **Service bookings appear in green, indicating they can be edited or deleted**
- Unlike user bookings, service bookings can be made for past or future dates, allowing for accurate historical tracking

6.6.9 Account in Booking Details

ACLS allows users and staff to view and confirm the **account associated with each booking**, ensuring correct cost allocation and financial tracking.

Key Features:

- Hovering over a booking on the calendar will display a tooltip showing the account used for that booking.
- When making a booking, users will always be prompted to select or confirm an account before proceeding to the calendar page—regardless of the number of accounts linked to their profile.

Compulsory account selection ensures accurate financial reporting and cost recovery, especially in shared or multi-project environments.

6.6.10 About Offset Setting behaviour in Calendar

The **Offset Time Booking** feature in ACLS is designed as a **shortcut function** to automatically extend booking blocks beyond standard business hours. It is particularly useful for managing after-hours usage or reserving time for maintenance.

Use Case Example:

- **Standard business hours: 9:00 AM – 5:00 PM**
- **Offset time: 3 hours**

If a user makes a booking that **ends within the last hour of business hours** (e.g. 4:00 PM – 5:00 PM), and the offset feature is activated, ACLS will automatically **block out the next 3 hours** (i.e. until 8:00 PM).

Common Applications:

- Reserving overnight downtime for instrument maintenance or cooling
- Preventing bookings during post-session recovery or calibration periods
- Ensuring no bookings occur immediately after critical usage sessions

This feature helps labs maintain equipment integrity and enforce operational policies without manual intervention.

Example 1:

Booking start time	8am
Booking end time	6pm
Offset	4 hours
Description	The offset extends the end time by 4 hours, moving the end time to 10pm.

Example 2:

Booking start time	8am
Booking end time	6pm
Offset	10 hours
Description	The offset extends the end time by 10 hours, moving the end time to 4am. However, the offset feature will not let you book an event spanning multiple days, so this booking will fail.

6.6.11 Repeat Booking

The **Repeat Booking** feature allows users to schedule **recurring bookings** for a resource. Availability of this feature and the type of recurrence options depend on your **permissions and access group settings**.

Repeat Booking Options:

- **Recurring Daily (default):**

  Creates a daily booking based on the specified time range. Example: Book every weekday from 10:00 AM to 12:00 PM.

- **Recurring Weekly:**

  Available **only if** your access group permits bookings **more than 2 weeks in advance**.

- **Recurring Monthly:**

  Available **only if** your access group permits bookings **more than 2 months in advance**.

The recurrence logic (daily, weekly, monthly) follows the same conventions as used in tools like Microsoft Outlook.

End Date Control:

- The system will automatically assign an "End By" date based on the maximum days per period defined in your certificate or access group settings.

- You may shorten the repeat sequence by selecting an earlier end date but cannot exceed the system-defined limit.

This feature helps streamline repetitive workflows while respecting access and booking policy constraints.

6.6.12 Booking confirmation email

Administrators can configure ACLS to send **automatic booking confirmation emails** to users upon successful booking.

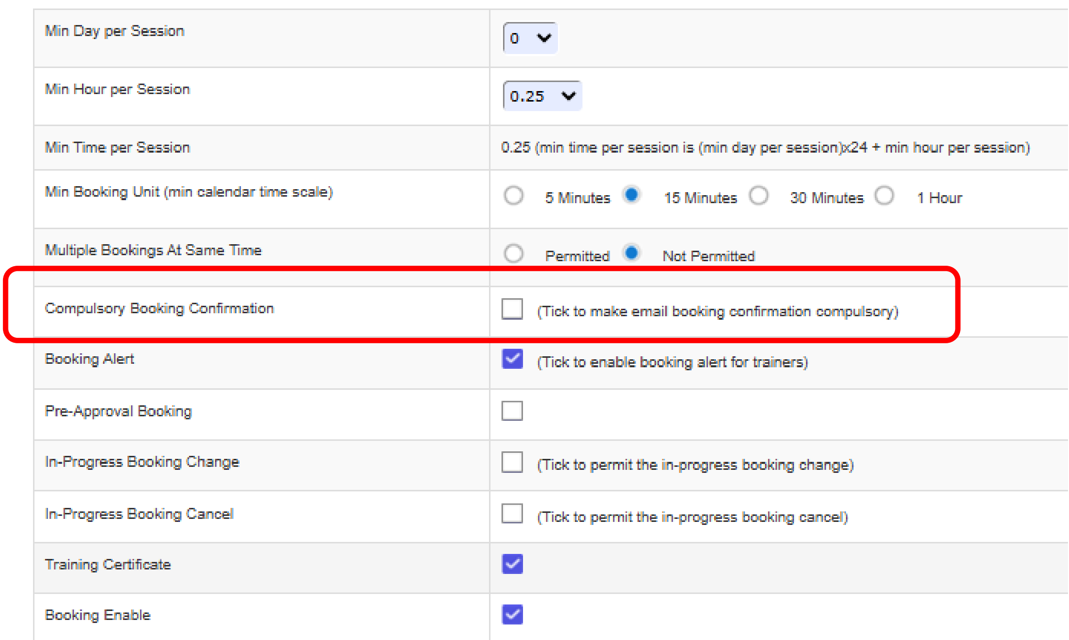
How to Enable:

- Navigate to *Utilities → Resource Manager → Resource Settings*
- Locate the Booking Confirmation option
- Check the confirmation checkbox to enable automatic email notifications for that resource

Once enabled, users will receive an email confirming:

- Booking time and date
- Resource details
- Any relevant notes or requirements

This feature helps improve communication, reduce booking errors, and ensure users are properly informed of their reservations.

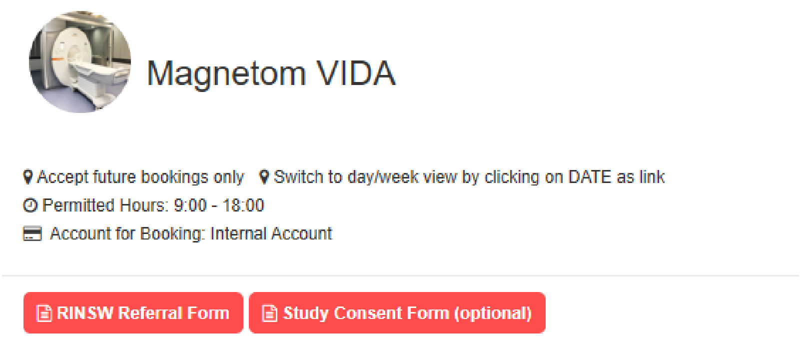


6.7 Booking with Forms

In some cases, resource bookings may require users to submit **supporting forms** as part of the booking process. These forms may include:

- Referral forms
- Consent forms
- Sample submission forms
- Safety declarations
- Risk assessments

How It Works:



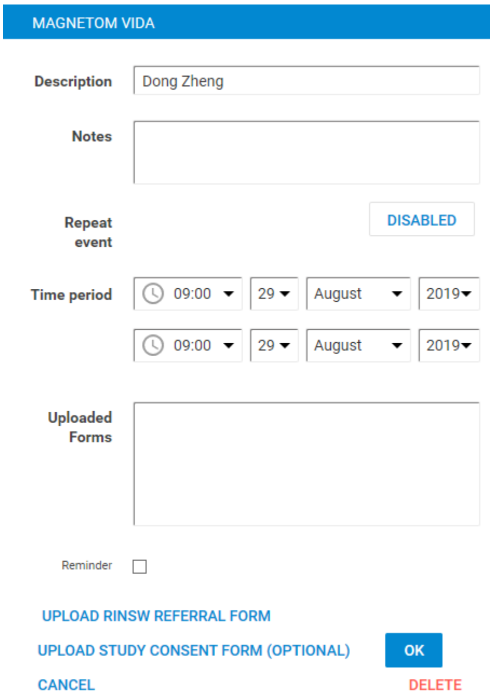
Once one or more **booking forms** are configured via the **Resource Manager**, a **Form** button will appear on the booking calendar page for that resource.

- Users will be prompted to complete a form or upload a document when making a booking
- Depending on configuration, the form may be:
  - A **URL link** to an external form
  - A **file upload** section for submitting completed forms

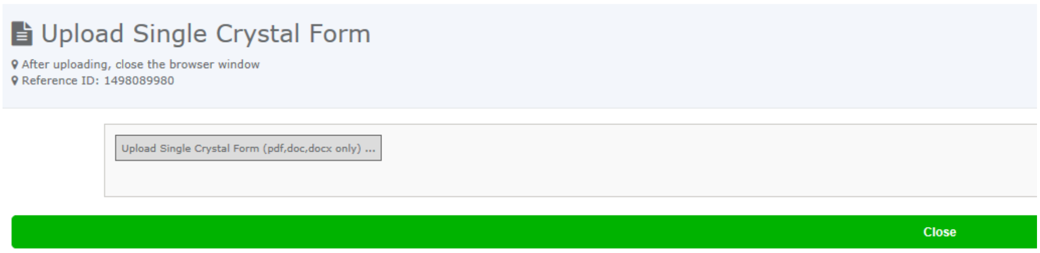
This ensures all required documentation is collected and validated before the booking is approved or confirmed.

To Attach a Form:

The booking window shows the appropriate form buttons, according to the settings in Resource Manager. For example, “Upload Study Consent Form (Optional)”.



Click on Upload [form name] Form to upload the form.



6.8 Interactive Booking Confirmation

While users are typically allowed to create and cancel bookings in advance, unattended bookings can lead to underutilised resources and associated opportunity costs. To reduce this, ACLS provides an interactive **Booking Confirmation** feature that ensures users reconfirm their intent to attend.

If enabled, ACLS will send a confirmation email to users prior to the scheduled booking. For example, if configured to send a reminder 3 days in advance, users must confirm their attendance via the provided confirmation link. If the user does not confirm within the specified timeframe (e.g., by the end of the confirmation day), the system will automatically cancel the booking.

This feature is optional but can significantly improve resource usage efficiency.

Enable User Booking Confirmation:

To activate this feature, go to: *System Settings → Configure System*, enable the parameter: Enable User Booking Confirmation.

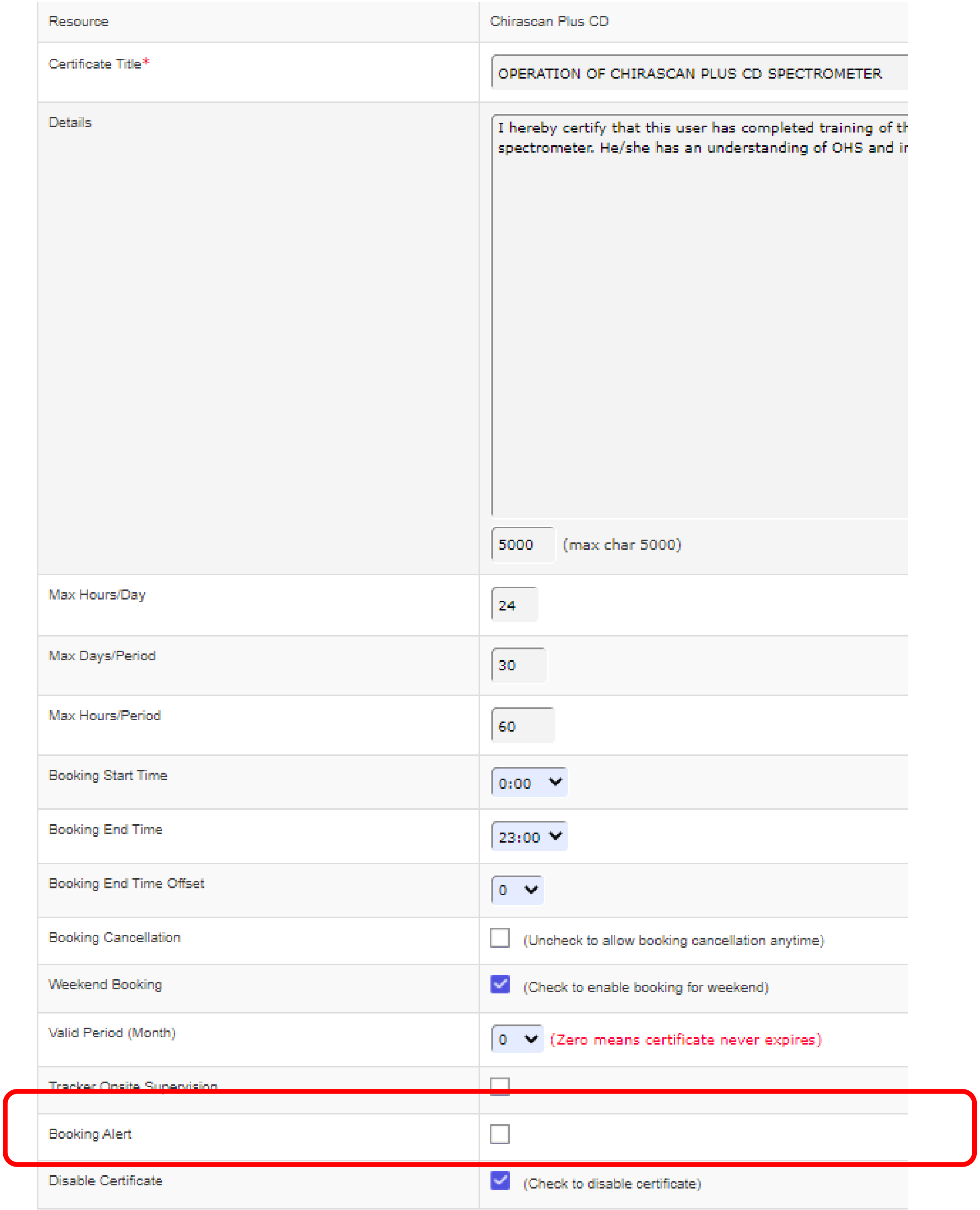
Enable Confirmation for All Users Across All Certificates:

To apply booking confirmation requirements system-wide across all training certificates, go to: *System Settings → Configure System*, enable: Enable Certificate Confirmation; To disable confirmation for all users, deselect this setting.

Enable Confirmation per Training Certificate:

To configure confirmation requirements for specific resources or training certificates, go to: *Resource Manager → select the desired resource → Edit*

In the resource settings, check the box titled: Booking Alert. This allows finer control and is suitable for high-demand or limited-availability resources.



Resource	Chirascan Plus CD
Certificate Title*	OPERATION OF CHIRASCAN PLUS CD SPECTROMETER
Details	I hereby certify that this user has completed training of th spectrometer. He/she has an understanding of OHS and ir 5000 (max char 5000)
Max Hours/Day	24
Max Days/Period	30
Max Hours/Period	60
Booking Start Time	0:00
Booking End Time	23:00
Booking End Time Offset	0
Booking Cancellation	(Uncheck to allow booking cancellation anytime)
Weekend Booking	(Check to enable booking for weekend)
Valid Period (Month)	0 (Zero means certificate never expires)
Tracker Onsite Supervision	
Booking Alert	
Disable Certificate	(Check to disable certificate)

Additional parameters:

- User Booking Confirmation: to enable or disable confirmation reminders for this certificate
- User Booking Confirmation Days: The amount of days prior to the booking when the confirmation URL is sent.

A reminder email will be sent out with full details of the bookings, including resource and booking time. Two links will be provided: a confirmation link, and a cancellation link. The email contains a reminder that the booking will be cancelled automatically if the confirmation link is not used.

Dear Abhirup Das,

This is a confirmation notice for the following booking:

Booking Resource: Eclipse Ti-E

Booking Start: 12/02/2018 00:00

Booking End: 12/02/2018 00:15

Your booking will be automatically cancelled at midnight unless you confirm the session using the link below.

TO CONFIRM BOOKING, click http://129.94.165.9/userconfirmationscript/userconfirmation-1517102227585.php

TO CANCEL BOOKING, click http://129.94.165.9/userconfirmationscript/usercancellation-1517102227585.php

Kind regards.

Mark Wainwright Analytical Centre: Bioanalytical Mass Spectrometry Facility

THIS IS SYSTEM GENERATED USER CONFIRMATION NOTICE. PLEASE DO NOT REPLY.

The system scans confirmation responses once a day at 12am. It is at this time that outstanding bookings are cancelled. For cancelled bookings, system sends out a cancellation email to the appropriate users. Also, the confirmation URL page is deactivated and cannot be used anymore.

6.9 Change Bookings

This feature allows designated staff to modify other users' future bookings via the User/Approve Booking calendar. By default, this capability is disabled to prevent unintended alterations.

Important:

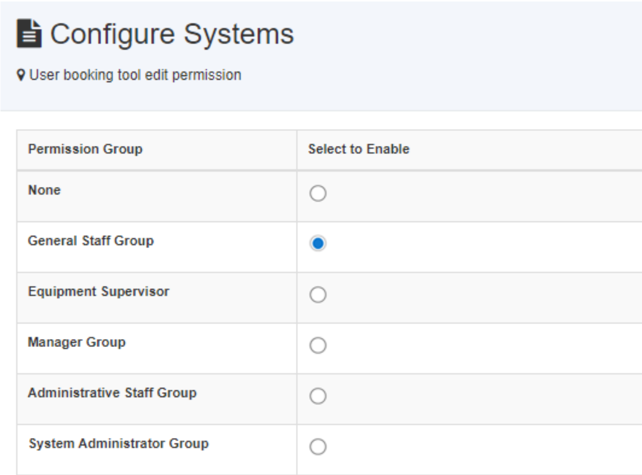
Normally, only the user who made a booking can modify or cancel it. Enabling staff-level edit permissions introduces the risk of changing bookings without the original user's knowledge or consent. This may lead to confusion, loss of booking time, or conflict.

Recommendation:

Enable this feature only if there is a clear operational need and designated staff are aware of the implications.

Configuration (System Administrators Only)

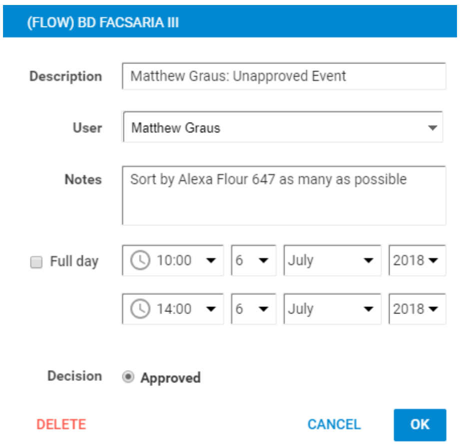
To enable booking modification permissions for specific staff groups: *System Settings → Configure System → Right Function Menu,* click on: User Booking Calendar Editable Permission, select (tick) the staff groups that should have permission to **edit bookings made by others**.
These staff will be able to access and modify any future bookings via the User Booking Calendar interface.

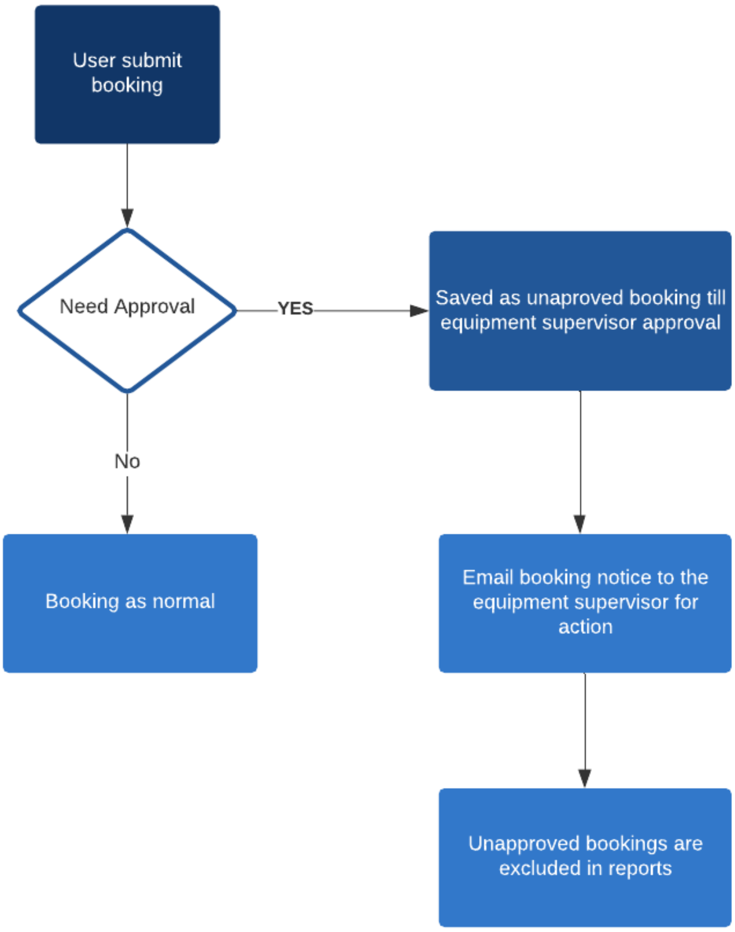


6.10 Pre-Approval Bookings

Some resources may require **trainer approval** before bookings are confirmed. In such cases, bookings are initially flagged as **"unapproved"** events. These bookings:

- Trigger email notifications to all qualified trainers for that resource.
- Are excluded from booking reports and invoices until approved.
- Cannot be used until explicitly approved.





Workflow for Trainers:

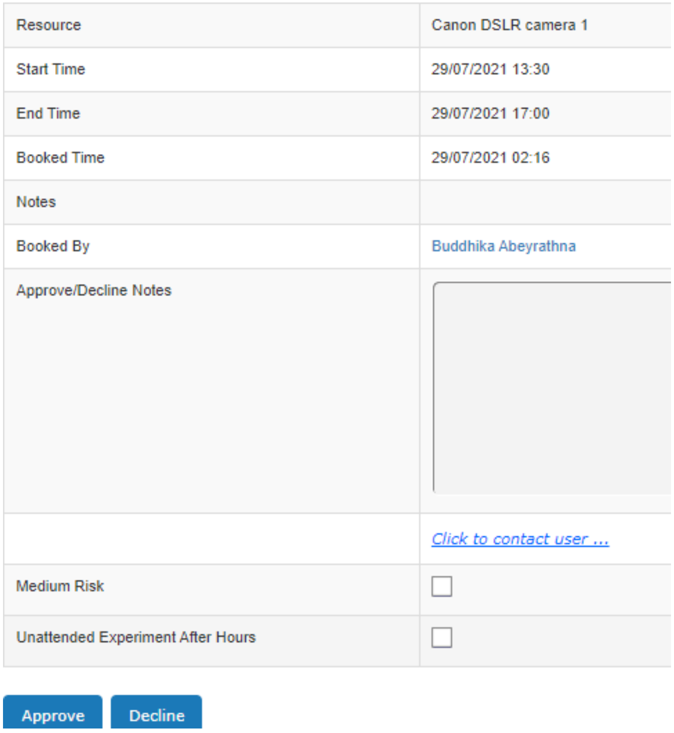
Approve Bookings:

Trainers can approve unapproved bookings via: *User/Approve Booking* or *My Dashboard → Approve Bookings.*

- Click on the unapproved event to open the booking approval form.
- Select the "Approved" radio button and click OK.
- The user will be automatically notified upon approval.

Decline Bookings:

- Declining a booking is done by simply deleting the unapproved event.
- No separate "Decline" button is required.



Resource	Canon DSLR camera 1
Start Time	29/07/2021 13:30
End Time	29/07/2021 17:00
Booked Time	29/07/2021 02:16
Notes	
Booked By	Buddhika Abeyrathna
Approve/Decline Notes	
	Click to contact user ...
Medium Risk	☐
Unattended Experiment After Hours	☐

Approve Decline

Quick Access for Trainers:

Dashboard Access:

Trainers can access pending approvals via: *My Dashboard → Approve Bookings*

- This section highlights outstanding approvals.
- Bookings can be approved or declined directly from this page.
- Trainers can also contact the user by clicking the "Click to contact user" link.

Email Notifications:

Trainers receive email alerts when a new unapproved booking is made. Each email contains a **direct link** to process the booking—either approve or delete.

Reporting and Invoicing

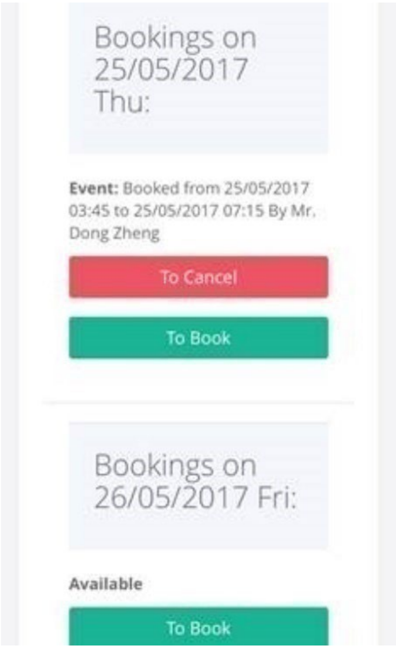
Unapproved bookings are **not counted** in:

- Booking reports
- Usage metrics
- Invoices

Only approved bookings are considered valid.

Mobile App and Browser Access

- Trainers can approve or decline unapproved bookings via the mobile app or mobile browser.
- Users can cancel their own unapproved bookings.
- When booking, users are notified that the selected session is subject to trainer approval.



6.11 About the Minimum Booking Unit

The **Minimum Booking Unit** defines the smallest time block that can be used to create a booking. This setting controls both the duration and the start time options available to users when booking a resource.

Available Options:

- 5 minutes
- 15 minutes
- 30 minutes
- 60 minutes (1 hour)

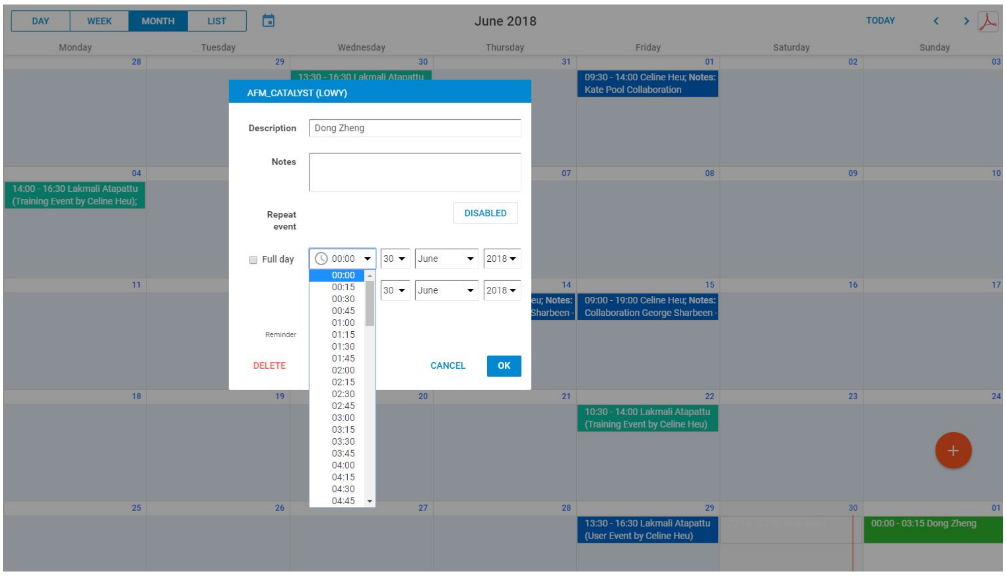
Example:

If the minimum booking unit is set to **15 minutes**, bookings must be made in increments of 15 minutes—e.g. 15, 30, 45, or 60 minutes.

Valid start times would be aligned to the nearest unit from **00:00**, such as:

- 00:00, 00:15, 00:30, 00:45, 01:00, etc.

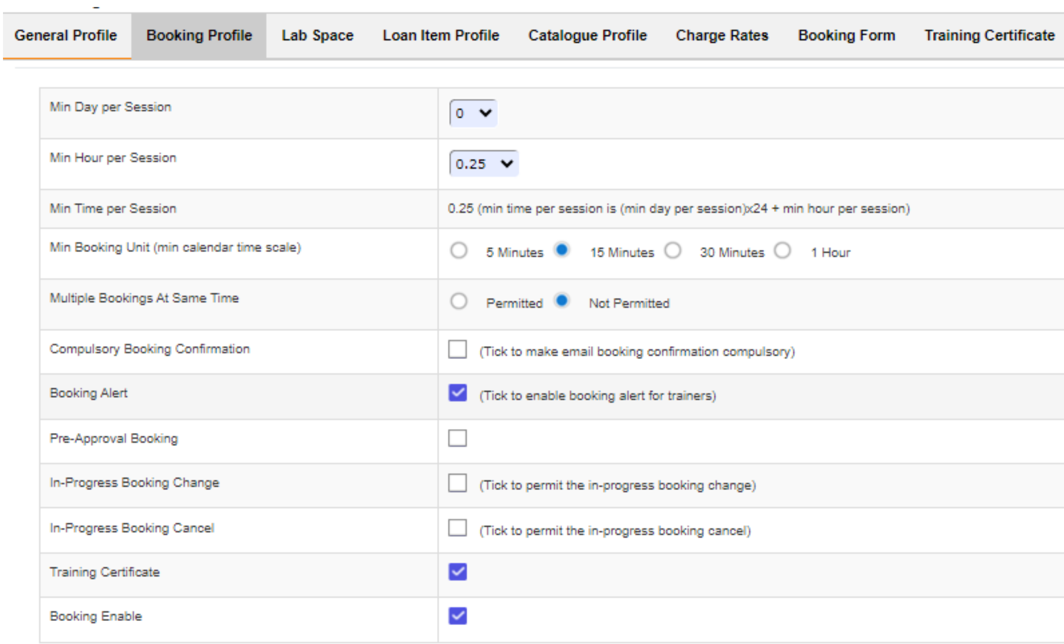
This ensures consistent time-slot alignment across the calendar.



Configuration (Admins Only):

To set or modify the minimum booking unit for a resource: ***Utilities → Resource Manager → Select Resource → Edit,*** set the field: Min Booking Unit.

This setting can be configured individually per resource to reflect the precision and duration requirements specific to that equipment or facility.



6.12 About Min Time Per Session

Min Time Per Session is a safeguard to prevent users from making bookings that are too short to be meaningful or efficient. It defines the minimum allowable duration for any single booking session on a resource.

Components of Min Time Per Session:

Min Time Per Session is composed of two values:

- Minimum Days per Session
- Minimum Hours per Session

These are combined using the formula: **Min Time Per Session = (Min Days per Session × 24) + Min Hours per Session**

Example:

If **Min Time Per Session** is set to:

- Min Days per Session = 0
- Min Hours per Session = 2

Then the **minimum session length is 2 hours**.

Booking Validation:

Each time a user makes a booking, ACLS checks whether the session duration meets the MTPS threshold:

- If the session meets or exceeds the MTPS, the booking is accepted.
- If the session falls below the MTPS, the booking is automatically declined.

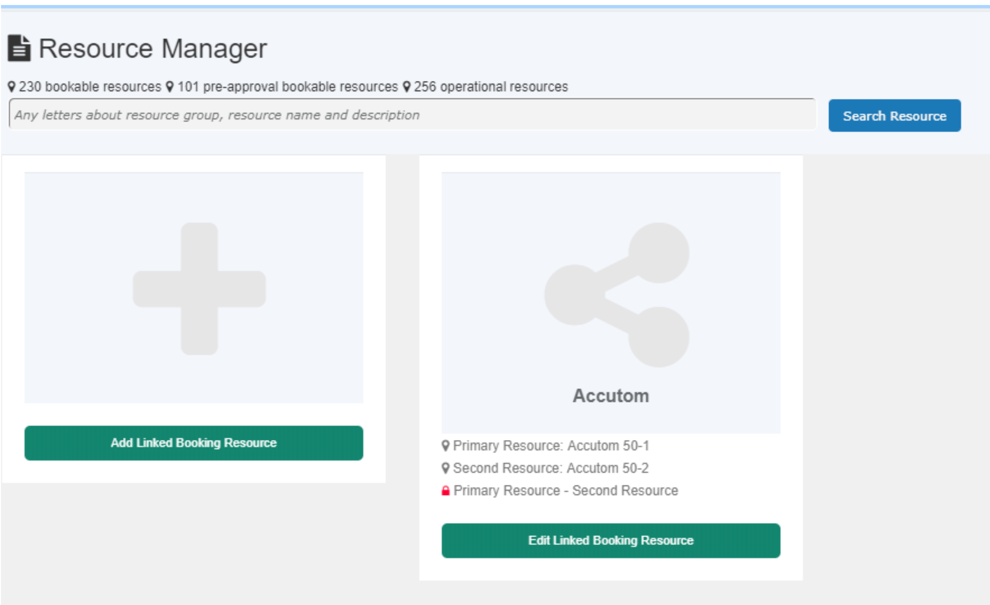
Configuration (Admins and Managers Only):

To set or update the MTPS for a specific resource: *Utilities → Resource Manager → Select Resource → Edit,* set the fields: Min Day Per Session and Min Hour Per Session.

This setting can be tailored for each resource, depending on operational requirements or cost-efficiency considerations.

6.13 Linked Booking Resources

The Linked Booking Resources feature allows you to associate two resources so that creating a booking on one resource will automatically create a corresponding booking on the other. This is useful for scenarios where equipment must be used in tandem or where support facilities need to be reserved simultaneously.



How It Works:

One-way linking:

A link is created between a **primary** and a **secondary** resource.

- Booking the primary resource will automatically book the secondary resource for the same timeslot.
- Booking the secondary resource does not affect the primary resource.

Availability check:

The system checks availability on **both** resources before completing the booking.

Setup Instructions

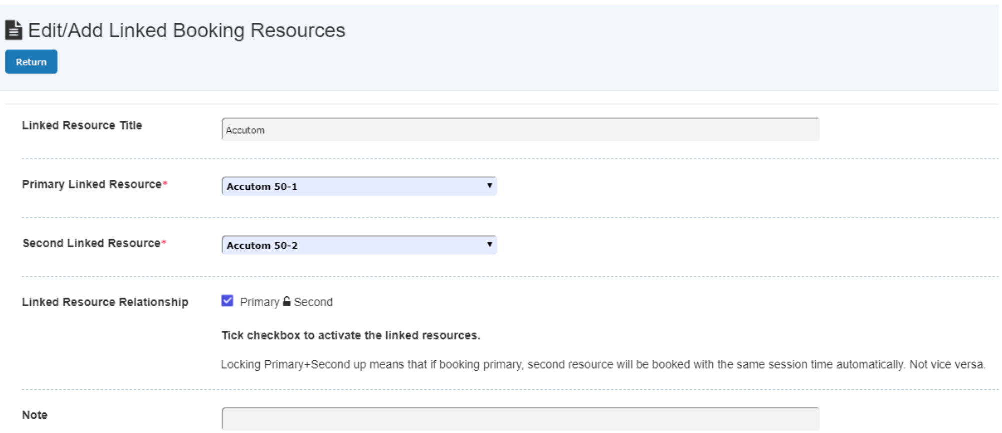
To configure linked resources: *Utilities → Resource Manager → Select a Resource → Linked Booking Resource.*

- Choose a primary resource.
- Select the linked (secondary) resource.
- Tick the lock checkbox to activate the link. If the checkbox is **unchecked**, the link is considered inactive.

Example Scenario:

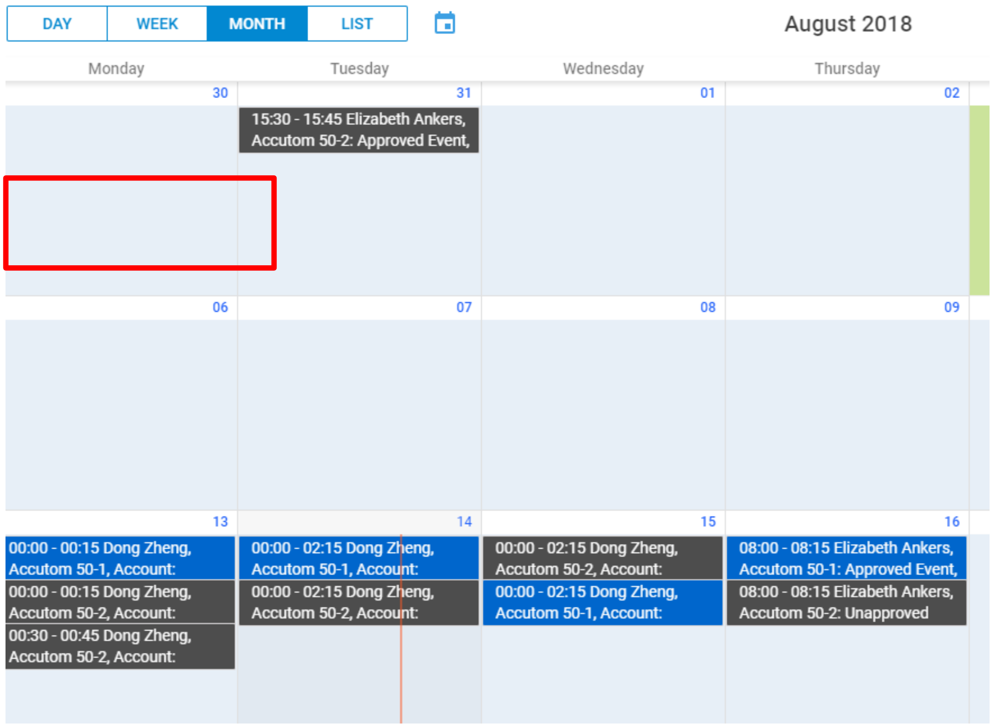
If **Resource A** is linked to **Resource B**:

- Booking Resource A automatically books Resource B for the same period.
- Booking Resource B does not trigger a booking on Resource A.



Calendar Display:

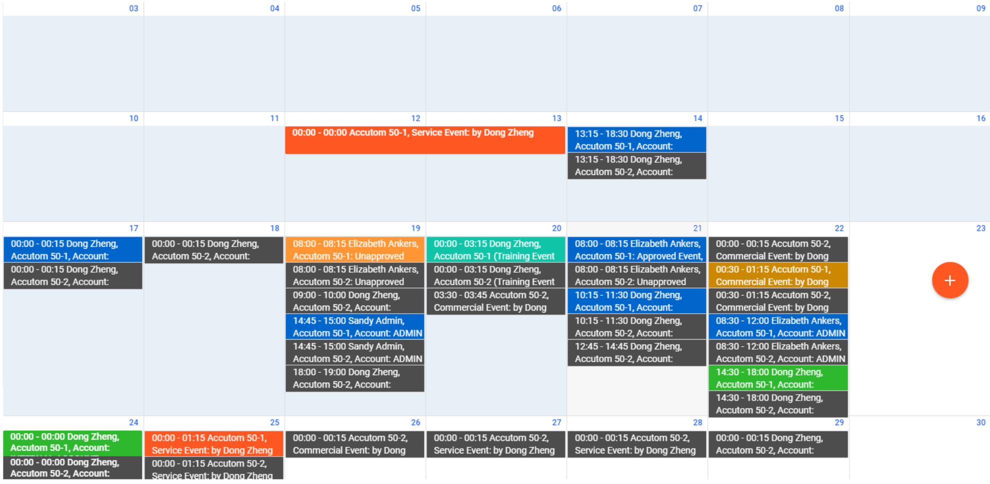
- Linked bookings appear as grey-coloured booking blocks on the calendar.
- This visual distinction helps users quickly identify automatically created linked bookings.



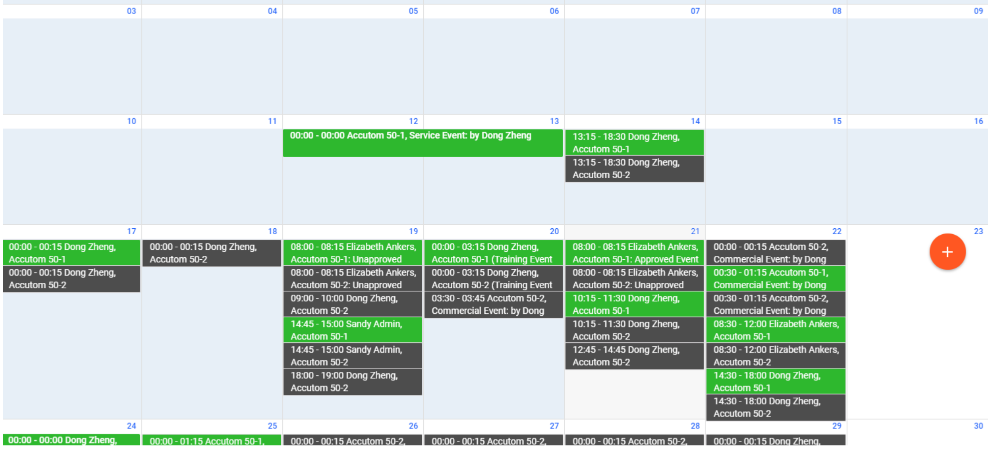
6.13.1 Making a booking for a linked resource

When a resource is configured as a **linked resource**, bookings created on the **primary resource** will automatically generate a booking on the **linked (secondary) resource** for the same timeslot.

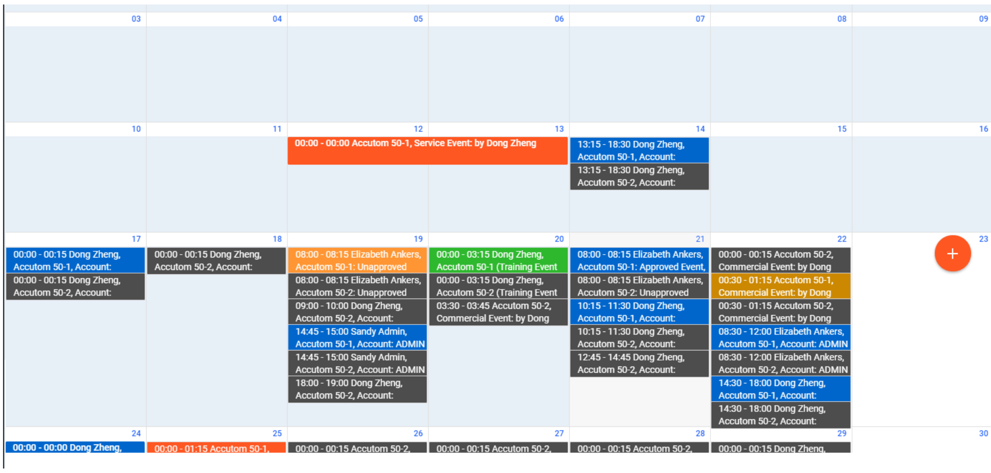
- Operation calendar



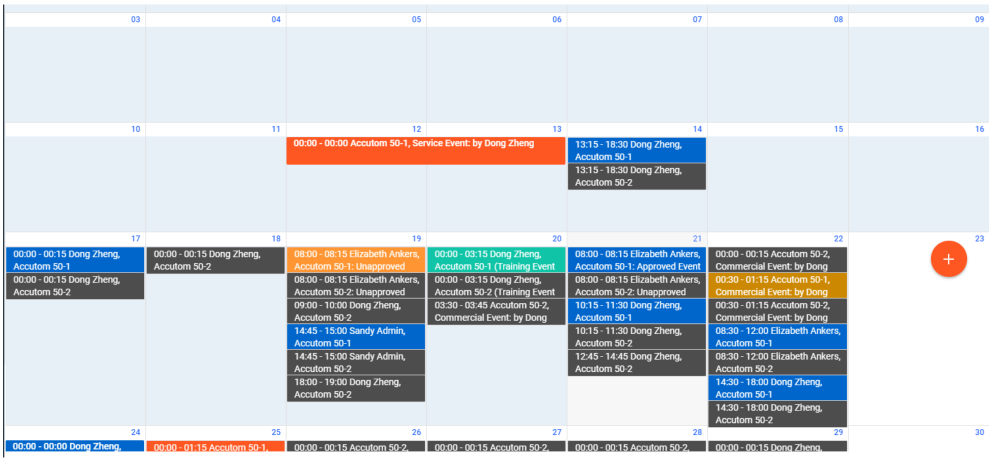
- User booking calendar



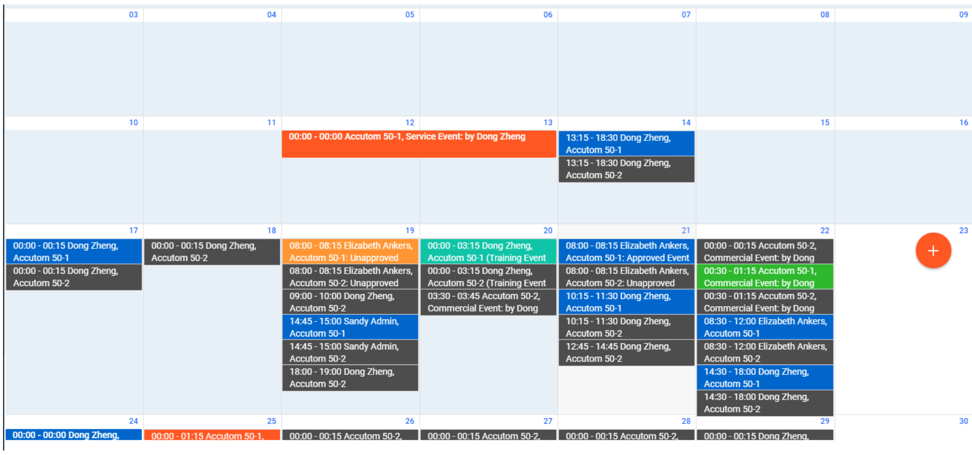
- Training calendar



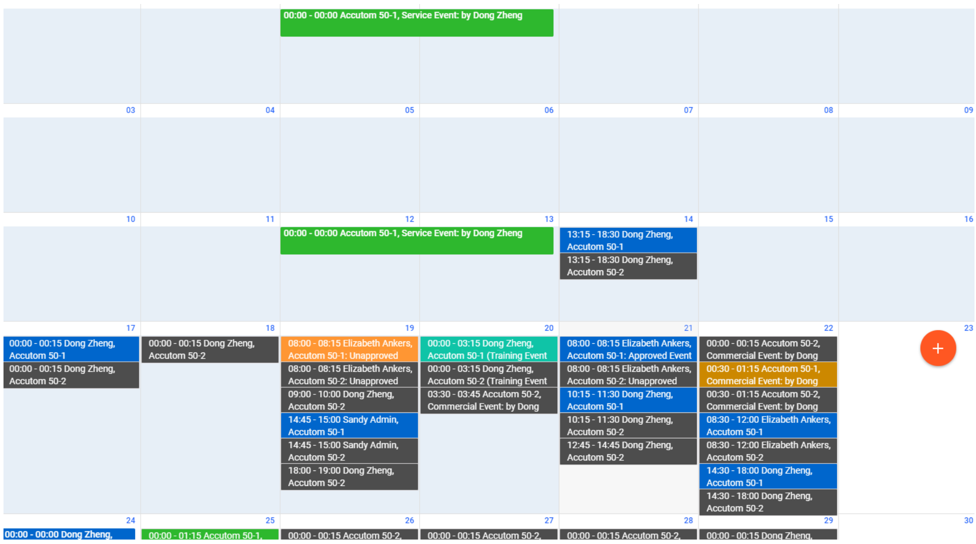
- Group calendar



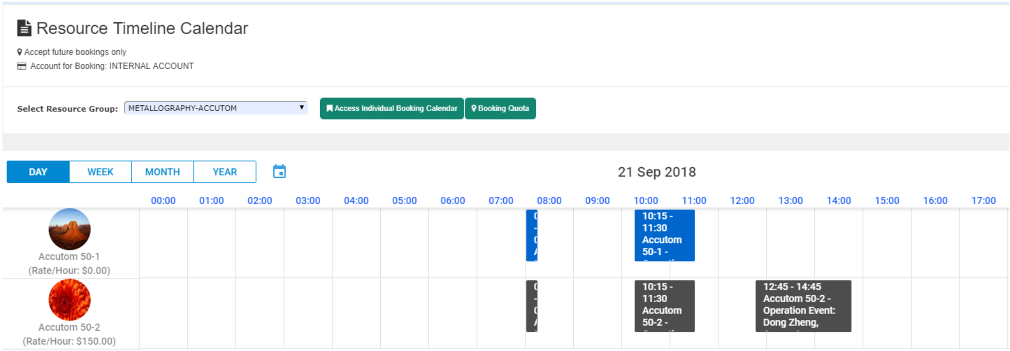
- Commercial calendar



- Service calendar



- Timeline calendar



6.14 Sync ACLS calendar to Outlook calendar

ACLS provides a feature that allows you to **sync your ACLS bookings** with your **Outlook calendar** (or any modern calendar application that supports URL-based subscriptions). This integration enables you to view and manage your ACLS bookings alongside your other personal or professional appointments.

How to Access the Sync URL:

Navigate to *Booking Resources → Calendar Utility → Outlook Calendar Sync*

- Copy the personalised calendar URL provided on the page.
- This URL is unique to your ACLS account and can be used to subscribe to your ACLS bookings in external calendar applications.

General Setup Instructions (e.g., Microsoft Outlook):

- Sign in to your Outlook or preferred calendar application.
- Go to Add calendar → Select Subscribe from web.
- Paste the ACLS calendar URL into the field provided.
- Optionally, assign a name and colour to distinguish your ACLS calendar.
- Click Import or Subscribe.

Your ACLS bookings will now appear as read-only events in your Outlook calendar and will update periodically according to the calendar application's refresh schedule.

Compatibility:

This calendar sync feature works with most calendar apps that support calendar subscription via URL, including:

- Microsoft Outlook (web and desktop)
- Google Calendar
- Apple Calendar (macOS and iOS)
- Other iCal-compatible apps

6.15 Set up accounts

The **Account Manager** module in ACLS allows administrators to manage financial or operational accounts used for tracking bookings, billing, usage, and reporting.

Account Manager Sections:

The interface consists of the following key sections:

- **Add Account**: Create a new account profile for use in booking and reporting.
- **Active Accounts**: View and manage currently active accounts in the system.
- **Archived Accounts**: Access historical or inactive accounts for record-keeping or reactivation.
- **Active Account Analytics**: View usage data and summaries across all active accounts.
- **Single Account Analytics**: Drill down into detailed metrics for an individual account.

Required Information for Creating an Account Profile:

When adding a new account, the following data must be entered:

Parameter	Description
Account	Account number or name provided by the user upon registration
Account Type	Internal or external
Used for consumable order	Lab admins can set up an account for consumable orders. By default, all accounts are for consumable orders.
Charge rate per hour	Charge rate, depending on the business model. If you are using the resource charge rate scheme, you don't need to set this field up.
Note	Any extra remarks
Expiry Date	Expiry date of account
Recorded Created	Creation date of account
Last Update	Timestamp of most recent modification, with the name of the user who made the change.

This information ensures each account is clearly defined and suitable for billing, reporting, and analytical purposes.

6.16 Resource Dashboard

The **Resource Dashboard** provides a consolidated view of key information and tools related to individual resources. It serves as a central access point for both users and staff to monitor activity, retrieve supporting materials, and access operational features.

The Resource Dashboard delivers a comprehensive suite of information packages, including:

Today's Bookings / Appointments

Displays all bookings scheduled for the current day, providing:

- A quick overview of resource utilisation
- Visibility of upcoming sessions
- Improved coordination for users and staff

Resource Catalogue

Provides access to the resource catalogue, including:

- Resource descriptions and specifications
- Associated documentation and requirements
- Links to booking calendars

This helps users understand resource capabilities before making bookings.

Quick Access (Staff & Administration)

Offers shortcut links to frequently used administrative and operational functions, such as:

- Resource configuration
- Booking management
- User and access control tools

This enhances efficiency for staff and system administrators.

Document Repository Browser

Enables access to documents associated with the resource, including:

- User guides and SOPs
- Training materials
- Safety documentation

Supports compliance and user readiness.

Mobile App Information

Provides details and access links for the ACLS mobile application, including:

- Features and usage instructions
- QR code integration guidance
- Notifications and remote access capabilities

Video Clip Access

Offers embedded or linked video content to support users, such as:

- Training demonstrations
- Equipment operation tutorials
- Safety procedures

This enhances user onboarding and reduces reliance on in-person training.

6.17 Default User Registration Account

For labs that do **not require account-based billing**, ACLS allows you to assign a **default account** during user registration approval. This streamlines the onboarding process by automatically linking new users to a default account, enabling them to book resources immediately without manual account setup.

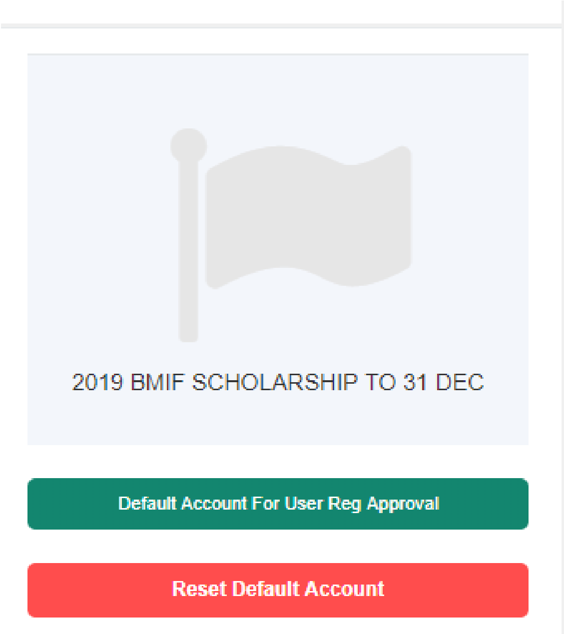
Key Features:

- A default account is automatically assigned to each new user profile upon approval.
- This eliminates the need to process account details individually for every new user.

- Ideal for non-billing environments or shared facilities with simplified access workflows.

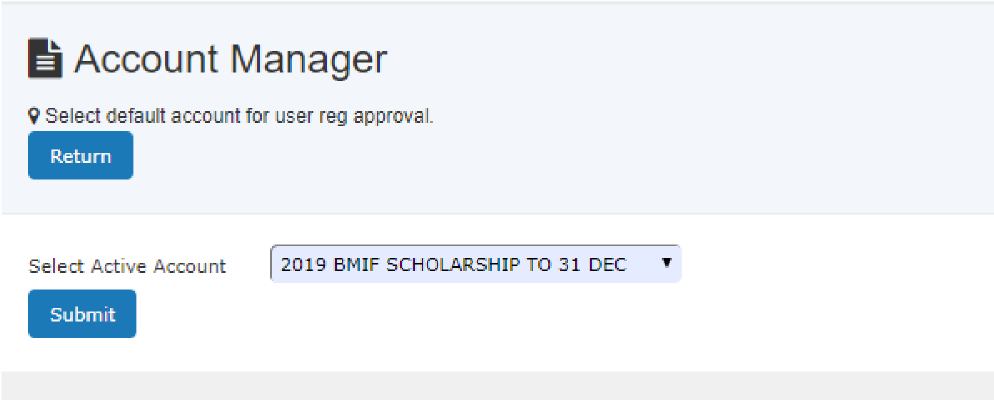
How to Set Up a Default Account:

- Go to the Accounts section.
- Click on: Default Account for User Reg Approval
- Select the desired account to designate as the default.
- Once set, this account will appear with the label: "Default Account For User Reg Approval"



Clearing or Changing the Default:

- To remove the default account assignment, click Reset in the accounts page.
- You can then assign a different default account if needed.



6.18 Register a Project

If ACLS is configured in **project-based mode** (as implemented at institutions like **UNSW**), each user must be associated with at least one **registered project** before accessing the system.

This ensures that all bookings and usage are correctly tracked against valid project and funding sources.

How to Register a Project

To create a new project, administrators must enter the following details:

Parameter	Description
Project short title	Project title, used for project listing
Project full title	Project long title
Ethics number	Research Ethics Committee Reference Number means the number allocated to the study by the National Research Ethics Service
Project supervisor	Project point of contact or coordinator
Other researchers	Nominated project researchers
Available accounts	Nominated project billing accounts
Project description	Description details
Project due date	Expiry date of project
Recorded Created	Creation date of account

Once submitted, ACLS generates a **printable project summary**, which can be used for record-keeping or auditing purposes.

Example Scenario

A researcher is charged **$50/hour** for equipment usage. The project is linked to two accounts:
- Account A: contributes 80%
- Account B: contributes 20%

For a one-hour session:

- $40 is billed to Account A
- $10 is billed to Account B

This split is automatically applied during usage reporting and invoicing.

Project Search and Management:

- Use the search bar to quickly locate existing projects using keywords (e.g., search for "mole" to find projects related to molecules).
- Click the Edit button to modify existing project details.

6.19 Project Forms

ACLS allows you to **upload and manage project-related documents**, such as:

- Ethics approval forms
- Animal use protocols
- Funding documentation
- OHS or risk assessment forms
- Statements of Work (SOW) or regulatory approvals

These documents ensure all relevant compliance and safety information is accessible to users involved in the project.

How to Upload a Project Form:

Go to the **Project Details** page.

- Click Add/Delete Form.
- Upload a file in PDF or Word (.doc/.docx) format.
- Click Save Form to Project to complete the upload.

Make sure to press **"Save Form to Project"**, otherwise the document will not be saved.

Where Forms Can Be Viewed:

- My Profile (for users assigned to the project)
- User Profile Editor (for admins and managers)

This ensures users can easily access important documentation, including the **project's Statement of Work (SOW)** and any **regulatory or safety requirements**.

6.20 How Project Works

In the **UNSW version** of ACLS, the system connects **projects directly to each user profile**, ensuring that:

- All bookings and usage are associated with a valid project.
- Usage is tracked through the ACLS Tracker at the time of sign-in.
- Cost recovery is based on the assigned project and its linked account(s).

This setup allows precise tracking of:

- Who used what resource
- When it was used
- Which project and accounts were charged

By enforcing project linkage, ACLS ensures **financial accountability**, **accurate reporting**, and **compliance with funding and regulatory requirements**.

6.21 Search Users

There are several ways to search for users in ACLS, depending on your role and the information you're looking for:

- User Profile Manager: Allows search by name, email, org ID, and other filters. Used for general user management tasks.
- Find User Training Records: Used to look up a user's completed and pending training.
- Find User by Supervisor: Quickly retrieve all users under a specific supervisor.
- Newly Registered User Summary: Lists users who recently completed registration and are pending approval or training.

Each method is subject to access control based on your user role. The table below outlines typical access rights:

Note: Some access may be further restricted based on organizational hierarchy or configuration settings defined during system deployment.

Level of Access	
User Profile Manager	▪ The User and Supervisor group are only allowed to edit their own profile ▪ The Staff group and Lab Manager group can search and view user profiles, and issue training certificates ▪ The Admin group can search, edit, add user profiles, and edit user accounts
Find User Training Records	▪ Explore user training records ▪ The Staff group and any higher groups can access this function
Find By Supervisor	▪ The Supervisor group can view the profile of a user under their supervisionThe Staff group and any higher groups can access this function
Newly Reg User Summary	▪ The Staff group and any higher groups can access this function

6.21.1 User Profile Manager

The User Profile Manager in ACLS offers both a Quick Search and a Full Search functionality to help staff locate user profiles efficiently.

- **Quick Search:**

This is the default option, allowing you to search by basic fields such as name, email, or user ID. It is ideal for rapid lookups.

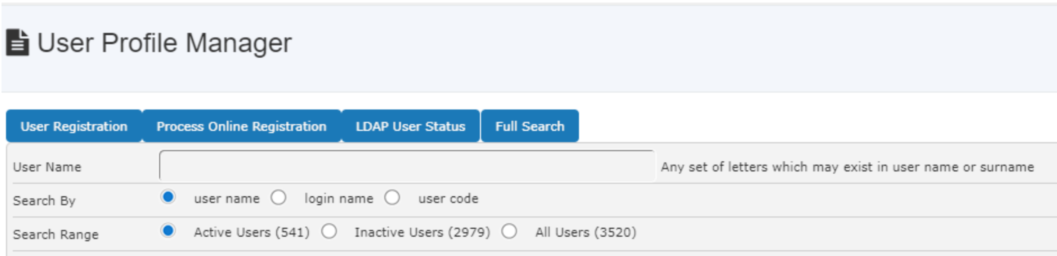
- **Full Search:**

Available to staff with appropriate access, this mode provides advanced filters including:
  - School/Organization
  - Financial Account
  - Project Association
  - Access Group
  - Training Certificates
  - Phone Number
  - User Status (Active/Inactive)

You can toggle between **Short Form Results** and **Full Form Results**:

- Short Form displays key summary details (e.g., name, email, role).
- Full Form includes complete user profile data, such as access rights, project associations, training records, and group memberships.

Tip: Use Full Search when conducting audits, reviewing access compliance, or assigning users to groups or projects.



6.21.2 Find User Training Records

Staff and administrators with the appropriate access can search for and view any user's training records in the system.

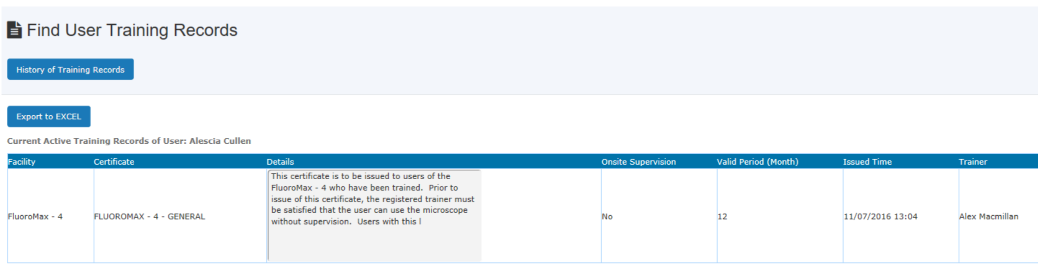
This function is commonly used to:

- Verify completion of required training before granting access to resources
- Review upcoming or expired training certificates
- Audit training compliance across a lab, group, or facility
- Search filters include:
- User name or email
- Supervisor
- Training type
- Certificate status (completed, expired, pending)

The results display key details such as:

- Training module name
- Completion date
- Expiry date (if applicable)
- Certificate number or document link (if uploaded)

Note: Users can only view their own training records unless granted additional access as staff, supervisor, or admin.



6.21.3 Newly Reg User Summary

The **Newly Registered User Summary** function allows staff and administrators to view a summary of users who have registered within a specified date range.

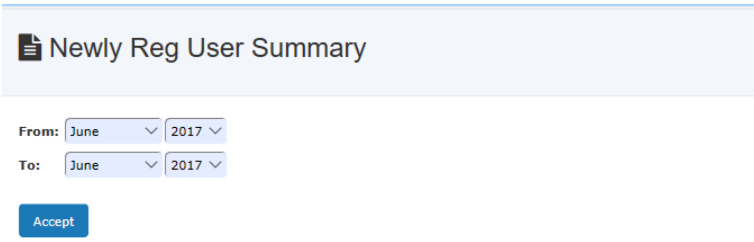
This tool is useful for:

- Tracking registration activity over time
- Monitoring onboarding trends
- Identifying users who may require training, project assignment, or approval

Key features:

- Filter by date range (e.g., last 7 days, custom range)
- Results display user details including name, email, registration date, and current status (e.g., pending approval, incomplete training)
- Export options are available for reporting or follow-up tasks

Note: Access to this function may be restricted to lab admins and system administrators based on role permissions.



6.22 Export User Data

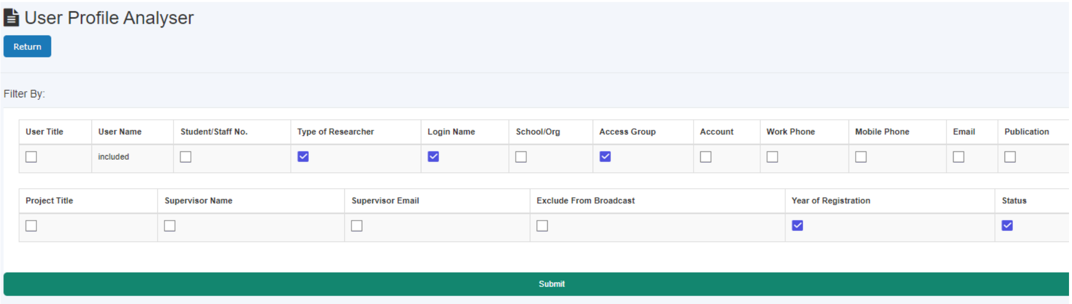
ACLS allows authorized staff to export user data into an Excel file for reporting, analysis, or record-keeping purposes.

To export user data:

- Navigate to *User Profile Analyser → Grid Charts*.
- Select the data fields you wish to include (e.g., name, email, role, training status, organization).
- Apply any desired filters (e.g., by access group, project, or registration date).
- Click Submit to generate the data grid.
- Use the Export to Excel button to download the results.

Tip: This feature is especially useful for generating training compliance reports, usage summaries, or access audits.

Note: Export access is limited to users with reporting or administrative privileges.



6.23 Broadcast Email Notices

ACLS allows staff and administrators to broadcast email notices to specific groups of users based on training status, access group, or custom criteria.

Sending a Broadcast Email:

- Navigate to Broadcast Messages.
- Select the target group, such as:
  - All users trained under a particular certificate
  - All users in a specific access group or project
  - A custom group (see *My Mailing List* below)
- Fill out the email subject and content.
- (Optional) Attach documents to include with the message.
- Click Send to dispatch the email.

Email Signature:

You can configure a **personal email signature** to automatically appear at the bottom of every message, similar to common email clients like Microsoft Outlook. This adds consistency and professionalism to your communications.

My Mailing List:

Use the **My Mailing List** feature to manually create and save a custom list of users. To do this:

- Choose "My Mailing List" in the Type of Group dropdown.
- Add users manually or from existing system lists.
- Once created, you can:
  - Broadcast directly to this list.

- Generate a list of email addresses for external use.

Generate Email List

If you prefer to use your own email client for advanced formatting or attachments, you can generate a full list of user emails for a selected group.

To generate an email list:

- Check the box "Generate Email List".
- Click Send Message — the system will compile and display the list of email addresses, which you can then copy and paste into your external email program.

Note: Use this function with discretion and only if you have the appropriate permissions to contact the selected user group.

6.24 Contact User

Staff can directly contact individual users through their **User Profile Page** in ACLS.

To use this feature:

- Navigate to the user's profile via User Profile Manager.
- Click on the Contact User tab.
- Enter the subject and message content.
- (Optional) Attach a document if needed.
- Click Send to deliver the message to the user's registered email address.

This feature provides a quick and convenient way to communicate directly with users regarding access, training, bookings, or compliance issues—without leaving the system.

Note: All sent messages are logged in the system for reference and audit purposes.

6.25 Edit Historical Booking Data and Tracker Log Data

ACLS provides administrative staff with tools to correct or manage historical booking and tracker log data when necessary.

6.25.1 Historical Booking Data

Staff members with the appropriate access can **edit**, **delete**, or **add** bookings for up to **two months in the past**.

For example, if a user was unable to attend a scheduled session due to illness, a staff member can delete or adjust the booking accordingly to reflect actual usage or free up resource time.

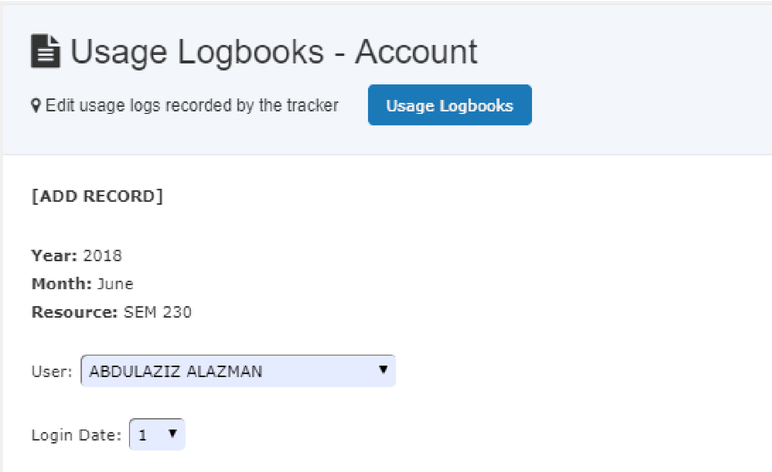
Steps:

- Go to Data Logbook Manager.
- Locate the relevant booking by filtering by resource, user, or date.
- Choose the appropriate action:
  - **Edit**: Modify booking time, duration, or project.
  - **Delete**: Remove an invalid or unused booking.
  - **Add**: Create a new booking record for past usage.

Note: Any changes to booking data are logged and may require justification depending on your system configuration.

6.25.2 Tracker Log Data

Staff can view and correct **ACLS Tracker** login and logout records to ensure accurate usage logging and reporting. The system automatically highlights anomalies, such as **missing logout times**, to help staff identify records requiring attention.



Common Causes of Missing Logout Times:

- The user logs off the computer instead of clicking the Logout button on the tracker.
- The user reboots the computer without logging out.
- Network or server failures during logout prevent the tracker from recording the event.

Key Features:

- The system displays all tracker log data for a selected date.
- Erroneous entries are highlighted in red for easy identification.
- If there are no errors, the correction table will be blank.

Fix Error Logs:

- Navigate to the Tracker Log Error Table.
- Click “Click to Fix” next to an erroneous log.
    - This adds a placeholder logout time of **0.1 hours**.
- Edit the usage time to reflect the actual session duration.

Tip: Use the following steps to determine the correct usage time:

- Contact the user involved in the session.
- Check their booking records for that day.
- Apply a reasonable estimate based on lab policy or typical usage patterns.

Best Practice: Perform error corrections monthly—ideally in the **first week of the month** for the **previous month's data**.

Additional Notes:

- Logs with 0.1h usage are placeholders that require adjustment.
- Occasionally, 0-hour logs may appear. These are not necessarily errors—some users may log in and out within a few minutes for minor tasks.
- You can save or print the error table before and after making corrections for audit purposes.

Important:

- The error-fixing tool may not resolve all issues.
- If an error cannot be fixed, you may:
    - **Delete the log** and
    - **Manually add a new session**.

Only system administrators can delete tracker logs, as this is a **non-reversible action**.

6.26 Generate Reports

ACLS provides a comprehensive **Report Manager** to generate a variety of reports based on booking or usage (tracker log) data. The availability of reporting functions may vary depending on how your system is configured.

To access reports:

- Navigate to Report Manager.
- Choose the desired report type.
- Apply filters such as date range, user, resource, group, or organization.
- Generate the report on screen or export it as an Excel file for further analysis.

6.26.1 *Resource booking report*

This report consolidates resource booking data over a **specified month or custom period**. It is useful for monitoring usage trends, evaluating resource demand, and supporting internal reporting or invoicing.

Key features:

- Select a monthly view or define a custom date range
- Filter by:
    - User
    - Resource
    - Group
    - Project
    - School/Organization
- Export results as an Excel spreadsheet for offline analysis

Specialized report types include:

- User Booking Report – Summarizes bookings made by a specific user
- Resource Booking Report – Lists all bookings for a selected resource
- School/Org Booking Report – Aggregates booking activity by organizational unit

Tip: Use these reports to support billing, utilization analysis, or internal planning.

6.26.2 *Resource tracker usage report*

For institutions that deploy the **ACLS Tracker desktop application**, user **actual usage data** is collected in addition to booking records. This allows for precise tracking of how long a resource is used—regardless of what was originally booked.

For example:

A user may have booked a resource for **2 hours**, but the **actual usage** recorded by the tracker may be **3 hours**. The usage log report captures this discrepancy and provides a more accurate picture of operational time.

Purpose of the Tracker Report:

- Report actual usage duration per session
- Compare booking time versus real usage time
- Support billing, compliance, and equipment utilization analytics

Reporting Options:

- By Resource: Lists total and individual usage durations for each resource
- By User: Lists usage durations across all resources for each user

Key Features:

- Select reporting period (monthly or custom)
- Filter by user, resource, lab group, or project
- Export results to Excel for further analysis or reconciliation

Tip: This report is especially useful for facilities that bill based on actual usage or need to evaluate equipment demand across different user groups.

6.26.3 Resource MoxyTap log report

For institutions that deploy the **MoxyTap** devices, it is mandatory (**MoxyTap-PLUS**) for users to tap type to sign in to operate the instruments, then **actual usage data** is collected in addition to booking records. This allows for precise tracking of how long a resource is used—regardless of what was originally booked.

Key Features:

- Select reporting period (monthly or yearly)
- Filter by user, resource
- Export results to Excel for further analysis or reconciliation

6.26.4 Resource batch report

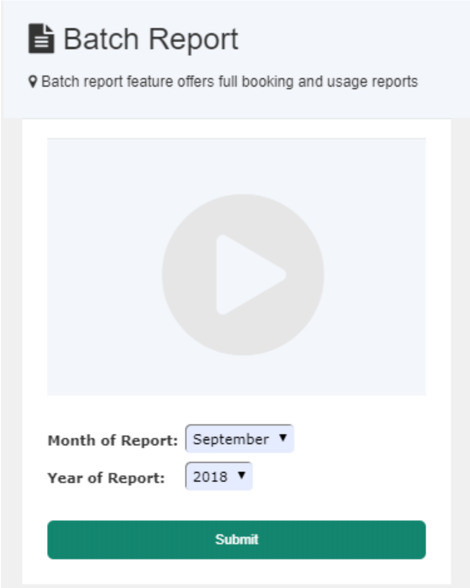
The **Resource Batch Report** is an automated monthly reporting tool designed to consolidate booking data for a selected period. It is especially useful for routine reporting, billing, and facility usage reviews.

Admins can choose to generate reports either **immediately** or as a **scheduled overnight task**.

Step 1: Generate a Report

- Select the Month and Year.
- Choose the execution mode:
    - **Now** – Generate the report immediately.
    - **Overnight** – Schedule the report for automated overnight processing.

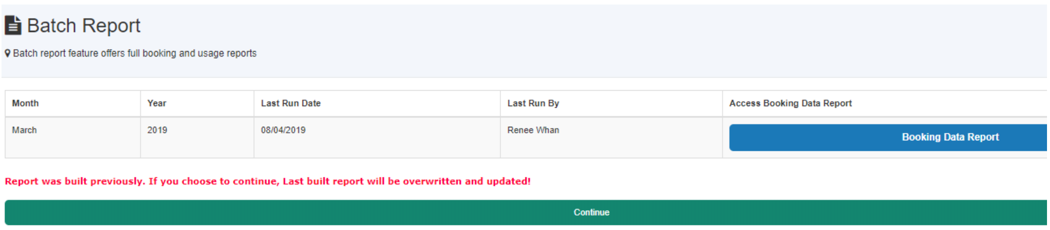
- Click Accept to begin.



Step 2: System Checks and Report Access

- If a report for the selected month already exists, the system will prompt for confirmation before overwriting.
- If this is the first report for the selected period, the system will proceed to generate it.

Once generated, reports can be retrieved using the **Access Batch Data Reports** button, where reports are organized **by year** for easy reference.



Available Report Functions and Sorting Options:

- Sum session booked hours – Totals all booking durations for the month.
- Filter by custom period – Limit the report to a specific date range within the month.
- Additional sorting and export options may be available based on your system configuration.

Tip: Use batch reports to streamline monthly reporting tasks, especially when working with large datasets across multiple resources.

6.26.5 Sample Report

The **Sample Report** function provides a summary of all **closed sample jobs** within a specified **monthly period**.

This report is useful for:

- Tracking the number and type of processed samples
- Reviewing turnaround times and user activity
- Supporting billing and reporting for sample-based services

Key Features:

- Filter by month and year
- Group data by:
  - User
  - Sample type
  - Project
  - Instrument or service
- Export results to Excel for further analysis

Note: Only sample jobs marked as **"Closed"** will be included in the report. In-progress or draft jobs are excluded to ensure data accuracy.

6.26.6 Training Certificate Report

The **Training Certificate Report** provides managers and administrators with a comprehensive summary of user training status, including active and expired certificates. This report is essential for monitoring **OHS compliance**, **training currency**, and **user readiness**.

To access the report:

- Navigate to *Report Manager → Training Certificate Report*.

You can filter and export data using various parameters such as certificate type, expiry status, organization, or time period.

Available Report Types:

- Monthly Active Training Certificate Report: View all valid training certificates within a specific month.
- Period Active Training Certificate Report: Generate a list of active certificates over a custom date range.
- Active User Training Certificate Report: List users who currently hold at least one valid training certificate.
- Expired Training Certificate Reports:
    - **Expired Monthly Training Certificate Report:** Identify certificates that expired within a specific month.
    - **Expired Period Training Certificate Report:** Track expired certificates across a custom date range.

Tip: These reports are useful for identifying users who need refresher training or renewal, ensuring compliance with lab access policies and safety regulations.

6.27 Generate Invoice Statement

ACLS provides flexible invoicing options through the **Invoice Manager**, allowing staff and administrators to generate invoice statements based on **booking data**, **usage (tracker) log data**, or **sample jobs**. Invoices are organized and generated **per supervisor**, ensuring each research group receives a consolidated statement.

Accessing Invoicing Tools:

- Navigate to Invoice Manager.
- The available invoicing methods depend on your system configuration and permissions.

Invoicing Options:

Manual Invoicing:

- Manually generate invoice statements for:
    - Booking data
    - Usage log data (if Tracker is enabled)
    - Sample jobs

Batch Invoicing:

Use the **Resource Batch Invoicing** tool to generate monthly invoices in bulk with minimal effort.

Note: Supervisors can view their own invoice statements when logged into ACLS. These include:

- Booking Invoice Statements
- Usage Invoice Statements
- Sample Service Invoice Statements (if applicable)

6.27.1 Supervisor Invoice Snapshot: Booking Data

To generate a detailed invoice snapshot for a specific supervisor:

- Go to Individual Booking Invoicing.
- Select the supervisor name from the dropdown list.
- Choose the billing period (monthly or custom).
- The system compiles all bookings or session durations by users under that supervisor's group.

This report helps supervisors track:

- Individual and total usage per user
- Resource-specific costs
- Project-based cost distribution (if enabled)

The output can be exported for reconciliation, record-keeping, or submission to finance.

Tip: Encourage supervisors to log in periodically to review their group's usage and ensure alignment with project budgets.

6.27.2 Supervisor Invoice Snapshot: Sample Jobs

To generate invoice statements for completed sample jobs under a specific supervisor:

- Navigate to Sample Job Invoicing from the Invoice Manager.
- Select the supervisor name from the dropdown list.
- The system will display a list of all completed sample jobs associated with that supervisor.

Each listed job includes an **information box** that can be clicked to view more detailed job information, such as:

- Sample type
- Processing time

- Service performed
- Associated user and project (if applicable)

Creating an Invoice:

- Tick the checkboxes for the jobs you want to include.
- Click Continue to generate a consolidated invoice.

The **Sample Job Invoice** presents:

- A detailed breakdown of each selected job
- Grouped totals in a structured table format
- Exportable output for billing or reconciliation purposes

Tip: Use this function at the end of each billing cycle to ensure all completed sample jobs are invoiced promptly and accurately.

6.27.3 Resource Batch Invoicing

The **Resource Batch Invoicing** feature enables administrators to generate invoice statements for all resources and supervisors in a selected month—either **immediately** or as an **overnight batch job**.

Running a Batch Invoicing Job:

- Navigate to Resource Batch Invoicing.
- Select the Month and Year.
- Choose whether to run the job Now or Overnight.
- Click Submit to start the process.

You will receive an **email notification** once the batch invoicing job is complete. A small **information box** on the right-hand side of the screen provides step-by-step guidance.

Accessing Generated Invoices:

- Go to Access Month Invoice Statements.
- Click on Invoice Statements to view all invoices for the selected month.
- Invoices are presented in a tabular format, with individual links to each supervisor's invoice.

Distributing Invoices:

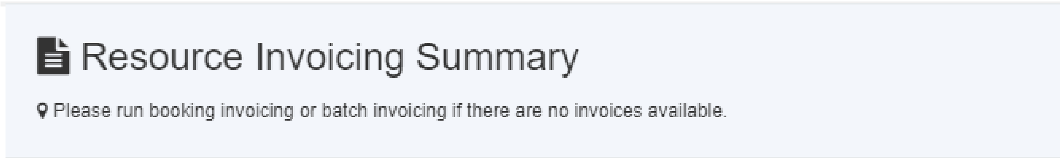
You can distribute the generated invoice statements via email:

- Select individual supervisors or email all supervisors on the list.
- Optionally, send a copy to yourself for record-keeping.

Tip: Use batch invoicing for efficient end-of-month billing across multiple labs, projects, and supervisors.

6.28 Invoicing Summary

The **Invoicing Summary** feature provides lab managers and administrative staff with a consolidated view of all invoice activities over a defined period. It is designed to streamline the reconciliation and reporting process.



Key Features:

- **Monthly or Annual Consolidation**

Combine all generated invoices for a selected **month** or **year** into a single summary.

- **Comprehensive Coverage**

The summary includes:

  - **Usage charges** (from booking or tracker data)
  - **Consumable charges** (if applicable)
  - **Original invoice details** for reference

- **Export Options:**

The summary can be exported as an Excel report to support:

  - Financial reporting
  - Internal cost recovery
  - Supervisor or grant-level billing reconciliation

Tip: Use this tool at the end of each billing cycle or financial year to verify that all usage has been invoiced and to ensure consistency across financial records.

6.29 Set Up Trainers and Certificates

ACLS provides two methods to assign trainers and manage training certificates:

- **Option 1:**

Navigate to **Utilities → Training Manager**

- **Option 2:**

Navigate to **User Profile Manager ➔ User Profile**

Both methods allow staff to assign training roles and manage certificates based on individual resources or resource groups.

6.29.1 Training Manager

The **Training Manager** offers a centralized interface for managing training configurations across your facility.

Types of Certificates:

- Certificate per Resource – Issued for individual instrument or equipment use.
- Certificate per Resource Group – Covers all instruments within a defined group.

Types of Trainers:

- Trainer per Resource – Designated to train users on a specific resource.
- Trainer per Resource Group – Authorized to train users on all resources within the group.

Key Features:

- Use the Resource/Resource Group dropdown to select where to apply training roles or certificates.
- Click List All to view a comprehensive list of all trainers and certificates configured in the system.

Hierarchy Note:

Group certificates and **group trainers** take precedence over individual resource assignments.

For example, if a group certificate is granted, it automatically applies to all resources in that group, regardless of the user's individual training status on specific instruments.

Enabling Disabled Certificates:

If a certificate has been previously disabled, it can be re-enabled:

- Go to *Training Manager ➔ List All Certificates*
- Locate the relevant certificate and click the Enable button next to its entry

Tip: Always verify group-level assignments before issuing individual resource certificates to avoid redundancy or access conflicts.

6.29.2 Preapproval of Booking Controls by Training Certificates

This feature allows administrators to enforce **booking preapproval rules** at the **training certificate level**, offering granular control beyond the general resource-level settings.

Tracker Onsite Supervision	Booking Alert	Preapproval Booking
Yes	No	**Enabled**

Operational Principles:

- **Certificate-level control is conditional:**

  The training certificate's preapproval control is effective only when the resource's preapproval booking feature is enabled.

- **Certificate-level setting takes precedence:**

  If both the resource and the training certificate define preapproval requirements, the training certificate setting overrides the resource-level setting.

Configuration Methods:

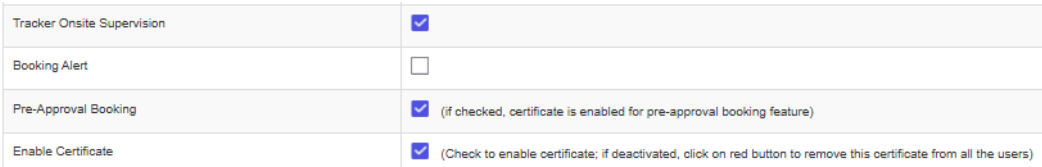
Preapproval controls on training certificates can be configured in two modules:

- **Resource Manager:**

  Edit the relevant training certificate under the associated resource profile.

- **Training Manager:**

  Manage preapproval settings directly within the user's training certification records.



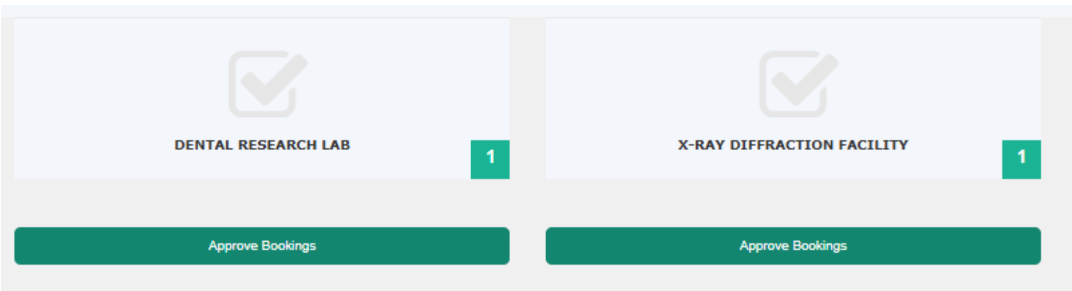
Booking Calendar Behaviour:

- When a user attempts to book a resource, the system checks:
  - Whether the user has a valid training certificate for the resource.
  - Whether that certificate includes a preapproval booking requirement.
- If the certificate mandates preapproval, the booking will be flagged for approval, regardless of the resource's default setting.

Dashboard Approval Redesign:

The **"Approve Bookings"** dashboard feature has been redesigned to improve role-based control:

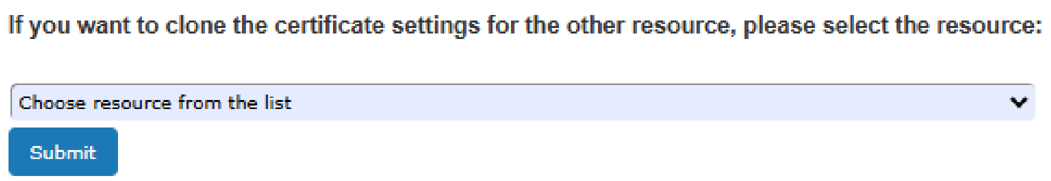
- Approvals are now displayed in separate resource group tiles.
- Each group manager only sees and manages booking approvals for their own assigned resource group(s).



6.29.3 *Clone training certificates in Training manager*

The requested clone-feature is implemented so admin can clone one resource training certificate settings to the other resource training certificate settings.

Upon clone the certificate, admin can select the other resource to create the a new training certificate with the being cloned resource training certificate.



6.29.4 *Trainer Registration*

Trainers can be assigned or managed using either the **Training Manager** or directly through the **User Profile Manager**.

Using Training Manager:

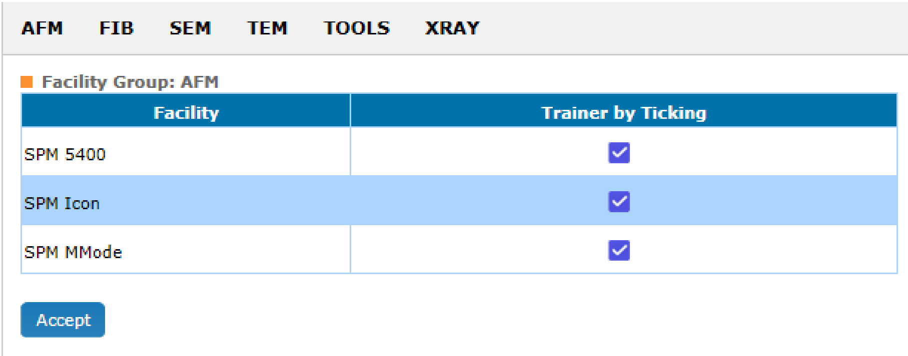
- Multiple staff members can be assigned as trainers for a single resource or resource group in one action.
- Trainers can also be **removed** or **suspended** as needed, allowing flexibility in managing training responsibilities.

Using User Profile Manager:

- Go to User Profile Manager.
- Click Edit on the staff member’s profile.
- Navigate to the Trainer tab.
- Use the checklist to:
    - **Check** a resource to assign trainer status.
    - **Uncheck** a resource to remove trainer status.

This method is especially useful when assigning one staff member to train across **multiple resources** or groups in a single operation.

Tip: Regularly review trainer assignments to ensure they reflect current staff responsibilities and resource availability.



6.29.5 *Set Up Primary Trainer*

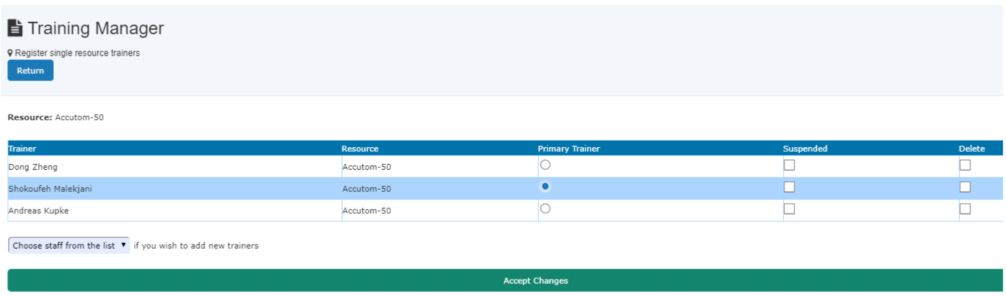
When assigning trainers in the **Training Manager**, you can designate one staff member as the **Primary Trainer** for a resource or resource group.

The **Primary Trainer** appears at the **top of the trainer contact list**, making it easier for users to identify the main point of contact for training.

Key Points:

- The primary trainer is assigned during trainer allocation in the Training Manager.
- Only one primary trainer can be set per resource or group.
- The trainer list is displayed in:
  - The **Resource Details** section on the booking **Calendar**
  - The **Resource Catalogue**

Tip: Set the most active or experienced trainer as the primary trainer to ensure timely and reliable user support.



6.29.6 *Find Resource Trainers*

To view all resources and their assigned trainers, navigate to: *Booking Resource → Resource Utility → Resource Trainer*

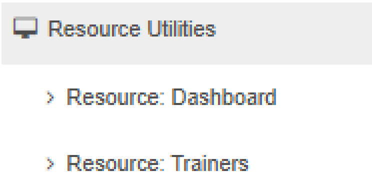
This section provides a complete list of:

- Resources (individual instruments or equipment)
- Assigned Trainers for each resource
- Primary Trainers, where applicable

This tool is useful for:

- Quickly identifying who is responsible for training on each resource
- Reviewing and managing trainer assignments across the facility
- Supporting user inquiries about training contacts

Tip: Use the filter or search options to locate specific resources or trainers efficiently.



6.29.7 Certificate Registration

Before registering a new training certificate, it is recommended to first plan the certificate **structure and access rules**. This ensures consistent control over bookings and training compliance.

Certificate Setup Options:

- You can register a certificate manually through Training Manager.
- Alternatively, use the Certificate / Group Certificate Wizard for a guided, step-by-step setup process.

Required Certificate Parameters:

Parameter	Description
Certificate Title	Suggested to include the resource name for easy identification.
Content/Details	Description of training requirements or certificate details.
Max Hours/Day	Maximum number of hours a user is allowed to book per day.
Max Days/Period	Defines the rolling date window (e.g., 14 days from today) for usage limits.
Max Hours/Period	Maximum total booking hours allowed within the specified **Max Days/Period**.
Booking Start Time	Earliest allowed start time for a session.

Booking End Time	Latest allowed end time for a session.
Booking End Time Offset	Adjusts the end time limit relative to standard session end. See Booking Offset chapter.
Booking Cancellation	If **checked**, bookings can only be cancelled up to **24 hours before** start. If **unchecked**, cancellations are allowed at any time.
Weekend Booking	If **checked**, allows weekend bookings. If **unchecked**, weekends are blocked.
Public Holiday Booking	If **checked**, allows bookings over public holidays. If **unchecked**, bookings are blocked over public holidays.
Valid Period	Certificate expires if the user hasn't logged in for this many months (e.g., 2 = 2 months).
Tracker Onsite Supervision	Works only with ACLS Tracker—enforces trainer presence.
Booking Alert	If **checked**, trainers receive email notifications for each booking made under this certificate.
Certificate Invalid	Expiry date of the certificate (optional).
Last Update	Shows the last modification date and the user who made the change.

Tip: Use **group certificates** when training requirements apply to multiple related instruments, reducing the need to manage separate certificates individually.

6.29.8 Edit User Certificates

To manually assign or update training certificates for a user:

- Go to User Profile Manager.
- Click Edit on the desired user profile.
- Navigate to the Edit User Certificate tab.

Use the **live search box** to quickly locate the certificate you wish to assign. Once selected, you can:

- Add a certificate to the user
- Update or remove existing certificates if required
- View current certificate status, including issue date and expiry (if applicable)

Tip: This function is especially useful for granting certificates after in-person training sessions or manually updating training records outside of automated workflows.

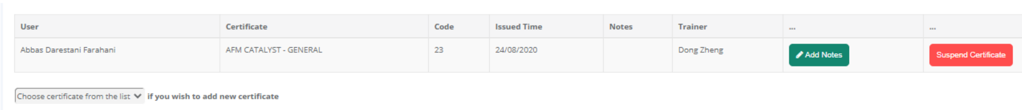
6.29.9 User Certification Notes

When assigning a certificate to a user, you have the option to **record a certification note**. This note is stored alongside the user's training record and can include relevant details such as:

- Date and method of training (e.g., in-person, online, external)
- Trainer comments or assessment outcomes
- Special conditions or exceptions

Visibility:

Certification notes are **only visible to staff** and are not accessible to general users.
This feature helps maintain a clear audit trail and provides context for future reference or compliance reviews.



User	Certificate	Code	Issued Time	Notes	Trainer	...	...
Abbas Darestani Farahani	AFM CATALYST - GENERAL	23	24/08/2020		Dong Zheng	Add Notes	Suspend Certificate

Choose certificate from the list if you wish to add new certificate

6.30 Appoint a User As Resource Trainer

Some labs may require **non-staff users**—such as experienced students, postdocs, or external trainers—to be appointed as **resource trainers** for training, induction, or teaching purposes.

ACLS supports this by allowing designated users to be granted trainer privileges through a secure and controlled process.

6.30.1 Set up a user as a trainer

Follow the steps below to assign a non-staff user as a resource trainer:

Step 1: Go to Access Group Manager and create a new access group.

- Set the Group of Privilege to: User Trainer Group
- This special group grants the user training permissions.

Step 2: In User Profile Manager, edit the target user's profile.

- Assign the user to the newly created User Trainer Group access group.

Step 3: Go to Training Manager.

- The user will now be available for selection as a trainer.
- Appoint the user as a trainer in the same way you would appoint a staff member.

6.30.2 User trainer login

Once appointed, the **user trainer** gains access to a **User Certificate Overview** page. This interface allows the trainer to view and manage training status for other users.

Key Features:

- A table showing all users and their assigned certificates
- The ability to assign certificates by clicking the certificate button on each user's row
- Restricted access to certificate data only—user trainers do not have access to broader admin features

Note: This functionality is designed to support structured peer training while maintaining proper administrative control and oversight.

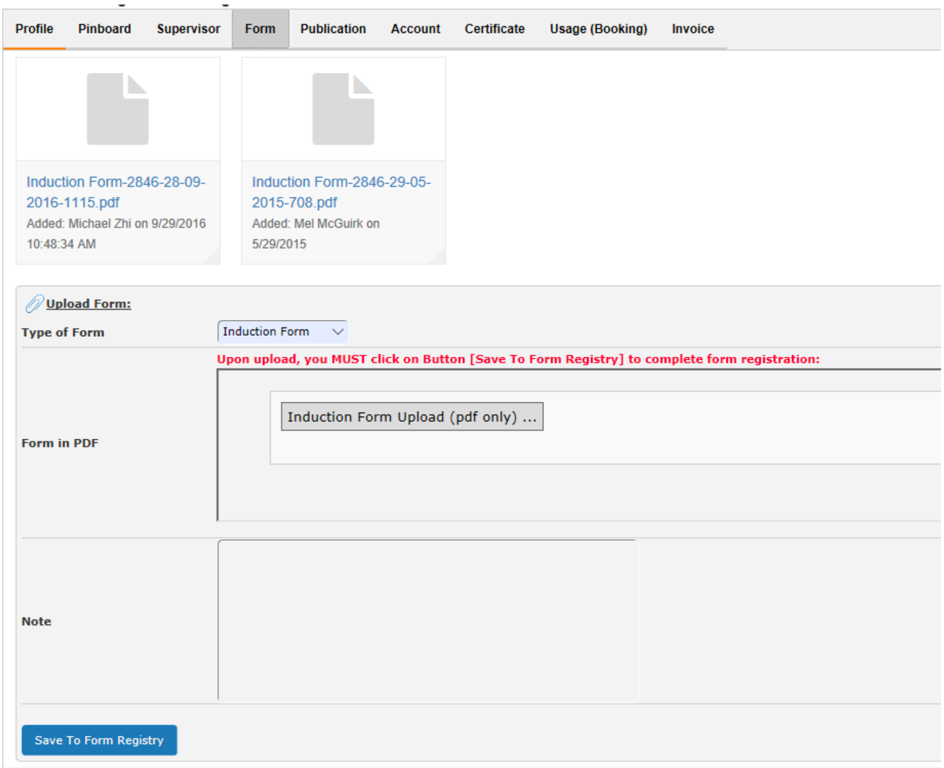
6.31 Record and Upload User Forms

ACLS allows institutes to **store and manage user-related forms**, such as training records and billing authorizations, directly within user profiles. This ensures that critical documentation is accessible for reference, compliance, and auditing purposes.

Uploading Forms to a User Profile:

To upload a form for an individual user:

- Go to User Profile Manager.
- Navigate to the Forms section.
- Use the file upload tool to attach documents to the user's profile (PDF or Word format).
- Previously uploaded forms are listed in the same section for easy reference.

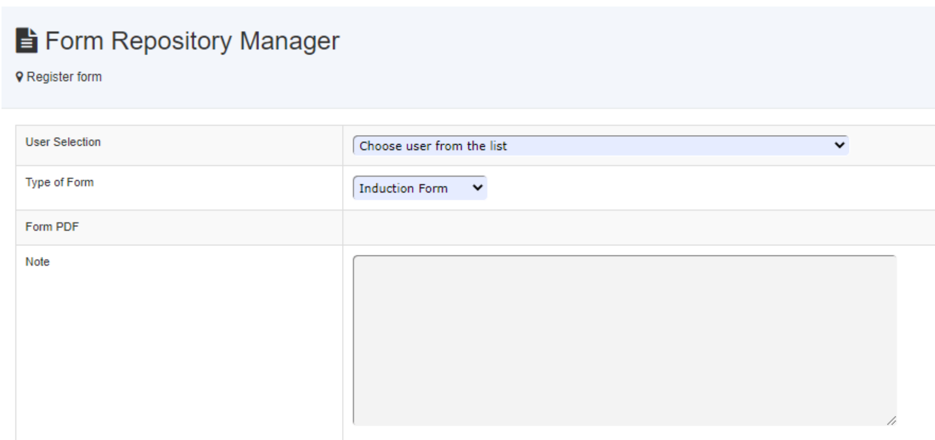


Form Repository Manager:

The **Form Repository Manager** provides centralized storage for procedural documents and institutional forms.

Common use cases include:

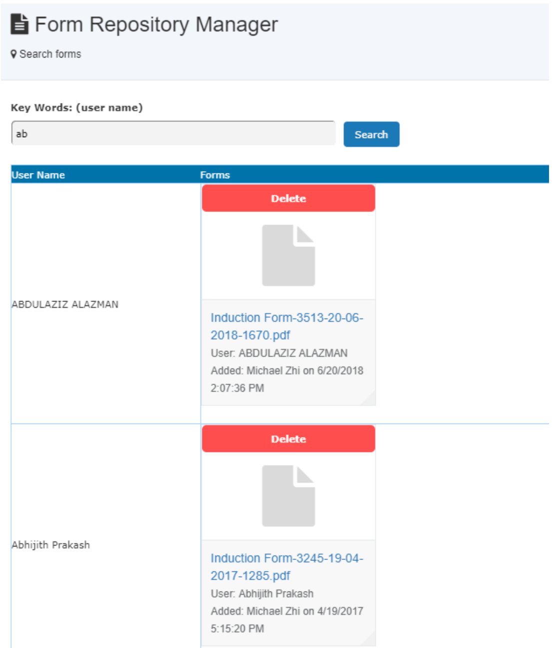
- Induction Forms
- OHS Compliance Forms
- Equipment Access Agreements
- Subscription or Billing Authorizations



Key Features:

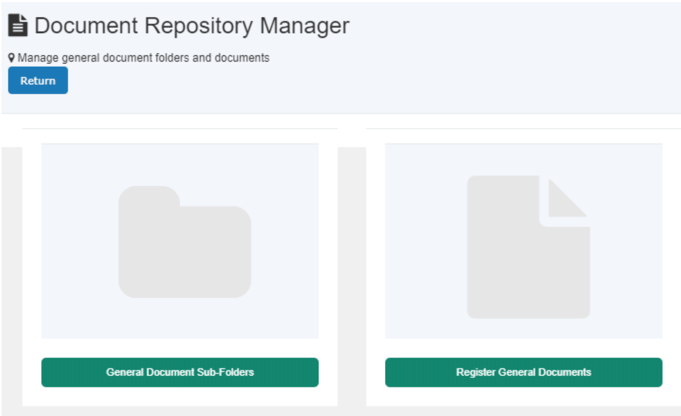
- **Register Forms**: Upload and assign PDF forms to individual users. No file limit applies.
- **Search and Access**: Staff can use the Dashboard to search for forms by user and view historical uploads.
- **User Access**: If a form is categorized as an Induction Form, the associated users can also view it from their profiles.
- **Form Management**:
    - **Delete**: Forms can be removed using the **Delete** button.
    - **Restore**: Deleted forms are retained in a **Form Repository Archive**, allowing for recovery if needed.

Tip: Use consistent naming and categorization when uploading forms to streamline future searches and audits.



6.32 Store and Share Documents

ACLS provides a secure and organized way to store and share documents through the **Document Repository Manager**. Documents can be categorized as either *general* or *resource-specific*, each with designated access permissions.



Types of Documents:

- **General Documents:**

Not linked to a specific resource. Accessible via the *Documents* section on the main **Bookings Resources** page.

- **Resource Documents:**

Assigned to a specific resource. These appear on both the *Resource Catalogue* and the *booking calendar* of the corresponding instrument.

- **Access Permissions**

Document Type	Registered Users	Registered Staff
General Documents	Accessible to all registered users	Accessible
Resource Documents	Accessible only to users with a valid training certificate for the resource	Accessible

Document Repository Manager Functions:

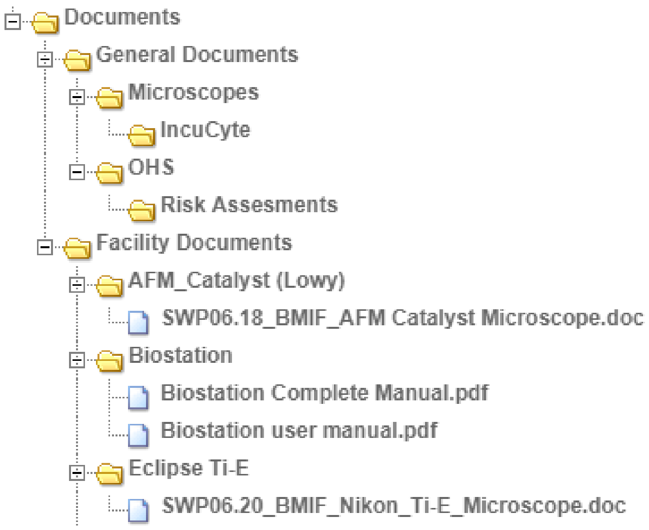
Within the **Document Repository Manager**, you can perform the following tasks:

- Register General Documents
- Register Resource Documents
- Add/Edit sub-folders for General Documents
- Search documents by name or resource
- View deleted document records

Registering a General Document:

- Click General Documents to enter the registration section.
- (Optional) Edit or create a folder structure for organizing your general documents.
- Select the document from your computer and click Open.
- Click Save To Doc Registry to complete the upload.

Once saved, the uploaded document will appear on the Document Repository home page and under *Booking Resources -> Resource Utility ->Browse Documents*.



Registering a Resource Document:

The process is the same as registering a general document, with one additional step:

- You must select the associated resource before uploading the document.

Searching Documents:

To locate a document:

- Enter part of the document name or resource name into the Search Documents field.

Deleting Documents:

To remove unwanted files:

- Go to Delete Unwanted Documents.
- Select the files to delete.
- Confirm deletion.

Deleted documents remain visible in the **View Deleted Document Records** section for auditing or recovery purposes.

6.33 Resource Documents

Resource Documents are documents associated with specific instruments or facilities and are visible to users who have completed the relevant training for that resource.

Where Resource Documents Appear:

- **Catalogue Page**: Displayed in the Resource Documents column for each listed resource.
- **Calendar Page**: Displayed below the booking profile of the instrument, allowing users to access the documents at the time of booking.

Recommended Document Types:

It is recommended to upload documents that support the safe and effective use of the resource, such as:

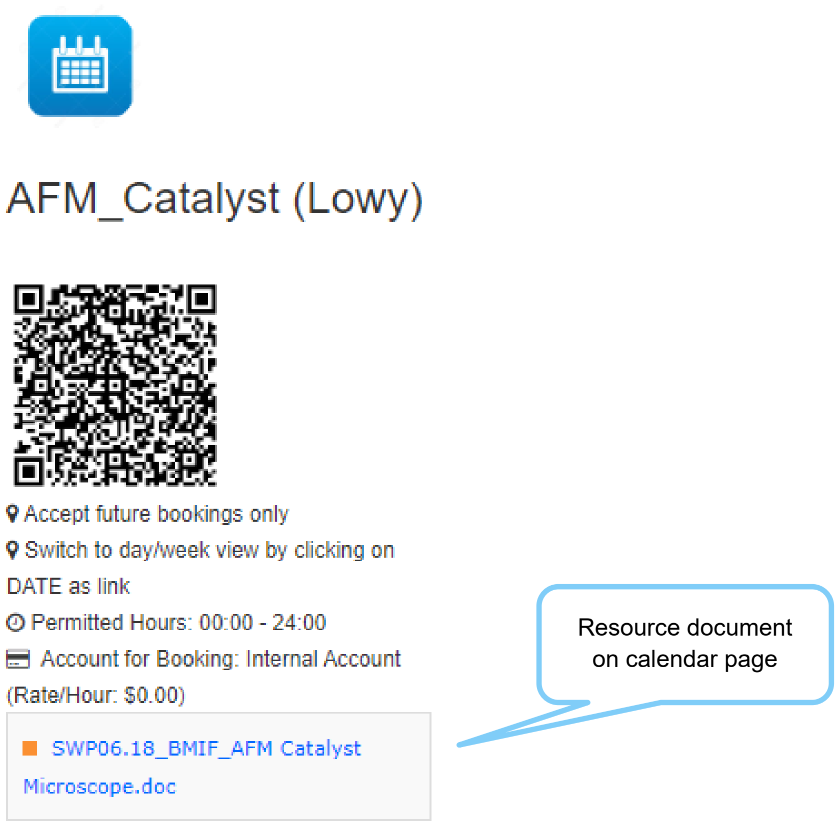
- OHS documents
- Training notes
- Safety instructions
- Operational tips and procedures

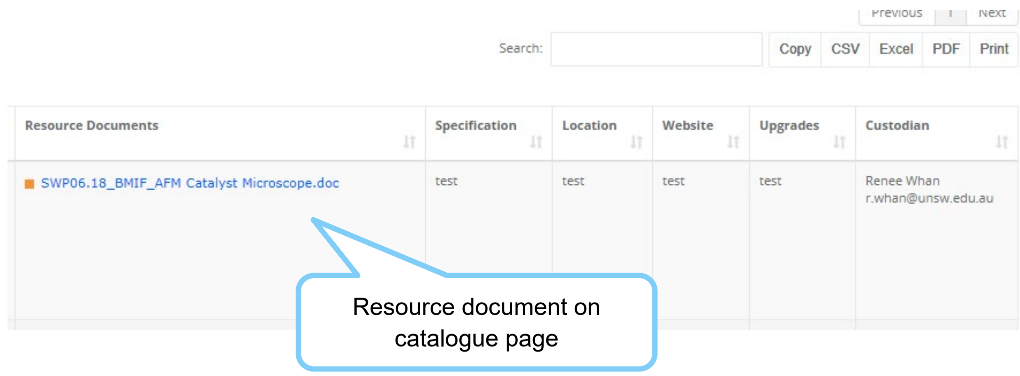
Uploading Resource Documents:

All resource documents must be uploaded via the **Document Repository Manager**. To do this:

- Go to Register Resource Documents.
- Select the relevant resource.
- Upload the document.
- Click Save To Doc Registry.

Only users with a valid training certificate for the resource will be able to view these documents.





6.34 Samples

The Samples module provides a streamlined system to manage different types of sample-based work and analysis. It supports both internal lab operations and commercial services, enabling secure tracking, result archiving, and billing generation.

The system supports multiple modes of sample submission:

- **Enclosed Lab Work:**

Users submit prepared samples for internal analysis and processing.

- **Commercial Work:**

  Users submit unprepared samples for analysis and processing as part of a commercial service.

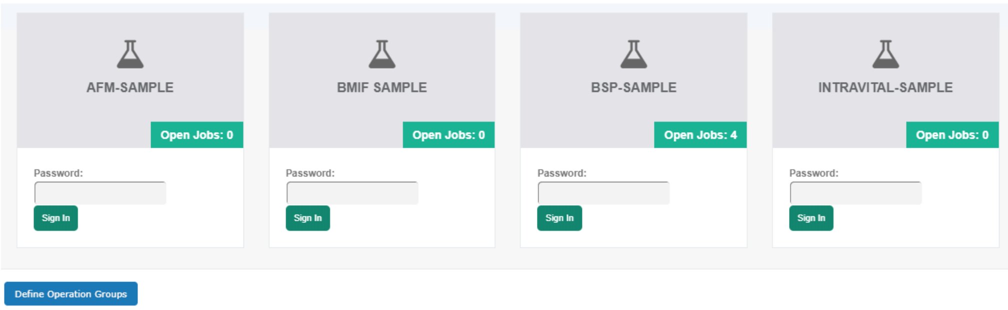
Using the Samples module, you can record the full analysis workflow, manage results, and generate cost recovery reports with ease.

6.34.1 Sample-Based and Time-Based Working Group

The Samples module supports labs with multiple internal groups or units. For instance, if a laboratory consists of three distinct research or testing units, each unit can:

- Manage its own samples independently.
- Perform analyses using the same sample job entries.
- Maintain separation of access via group-specific passwords.

This design ensures flexibility in multi-user or multi-division environments.



Configuration Steps:

Create Groups (System Administrator only):

Each group must be linked to an operation group and assigned a password to prevent unauthorized access.

Two sample working can be established for sample-based and time-based.

- **Sample-based:**

  Sample job cost is calculated with the processed sample quantity.
- **Time-based:**

  Sample job cost is calculated with the processed time for bulk of samples.

6.34.2 Archive Sample Working Group

System administrators can archive **Sample Working Groups** that are no longer in use.

Key Behaviour

- Archiving removes the working group from active selection and operational use
- Historical data associated with the working group remains intact

Impact on Data

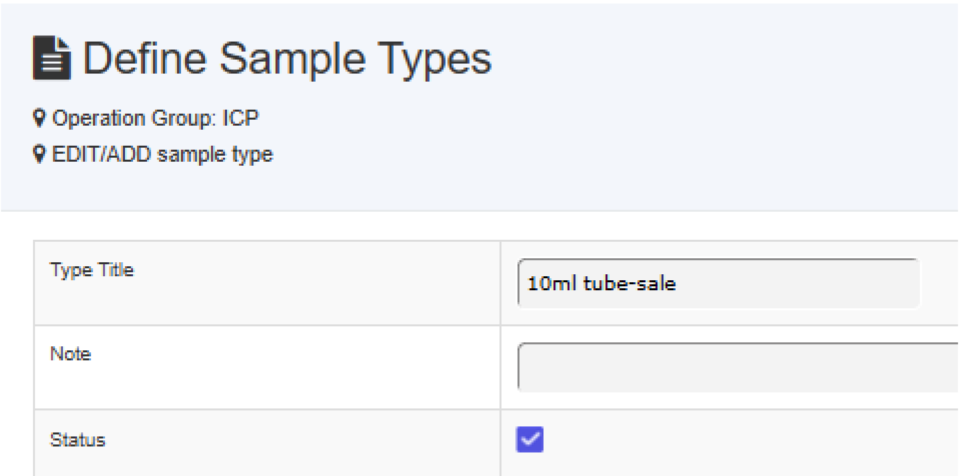
- **No impact on sample reports**
- **No impact on invoicing records**

Archived working groups are preserved for **audit, reporting, and historical reference**, ensuring data continuity while maintaining a clean and manageable operational environment.

6.34.3 Define Sample Types

- Sample types represent categories of material (e.g., steel sample, tissue sample).
- You can freely define and add new types at any time.

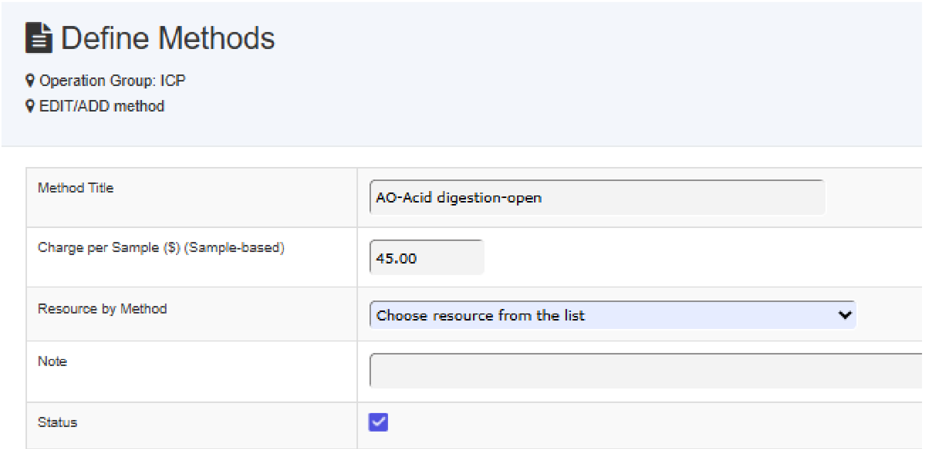
Once created, sample types cannot be deleted, but they can be archived by unchecking the Status checkbox.



6.34.4 Define Methods of Analysis

- Each analysis method should be named clearly—e.g., referencing the instrument or technique used.
- Every method must be linked to a resource and assigned a charge per sample.
- Subject to working group configuration, cost tags can be sample-based or time-based.

Like sample types, methods can be archived via the Status checkbox but not deleted.



6.34.5 *Sample Check-In and Tracking:*

Once sample types and methods are configured:

- You can begin checking in new samples.
- The system allows you to track sample progress, assign analysis steps, and archive results.
- Billing reports can be generated based on the analysis performed and rates defined per method, be sample based, be time-based.

6.34.6 *Check-in Samples*

When a new sample is checked in, ACLS automatically generates a unique **Job Number** to track the request.

The format is: **Group Name – Current Year – Sequential Number**
Example: ICP-2024-19

This job number allows systematic tracking of all sample submissions and their progress.

Check-in Process:

- **Open the Check-in Form**

Navigate to the *Samples* module and select **Check-in Samples**.

- **Fill in Required Fields**

  - **Customer**: Select the user or client submitting the sample.
  - **Billing Account**: Choose the relevant billing account for cost recovery.
  - **Sample Type**: Choose the defined type from the dropdown list.

- **Submit the Job**

Click **Accept** to register the job. A new job number will be created.

6.34.7 Assign Methods of Analysis:

Once the sample job is registered:

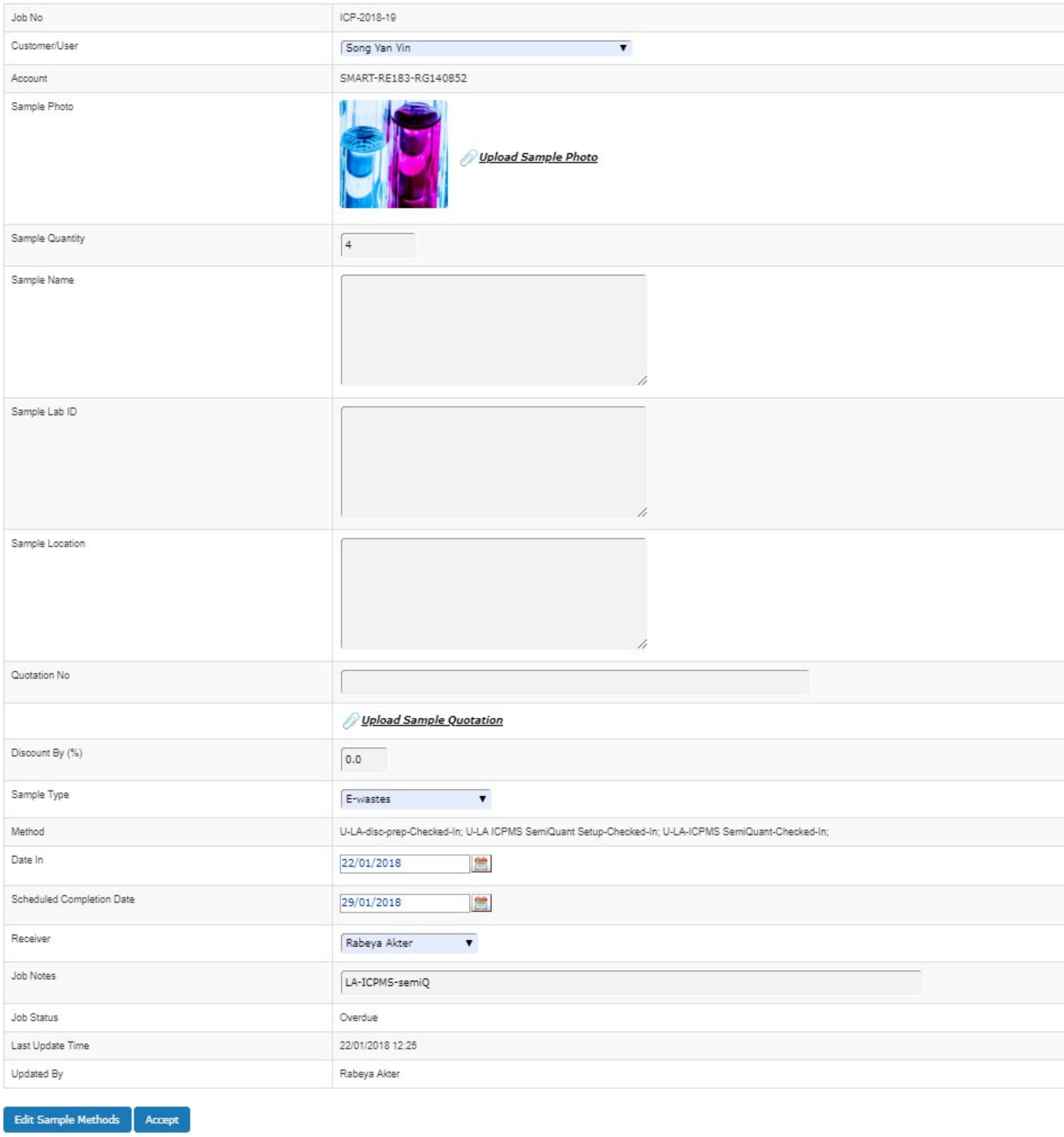
- **Click Edit Sample Methods to:**

  - Add or remove methods of analysis
  - Edit job details (e.g., notes, pricing, priority)

- **In the methods section:**

  - Choose from the dropdown list of available **analysis methods** (linked to resources)
  - You may add **multiple methods** to the same job
  - Each job must be associated with **only one sample type**

- **(Optional) Apply a discount to the total charge if required.**



6.34.8 Process Jobs

Before samples can be checked out, each job must be processed. Processing updates the job status, applies method-specific charges, and tracks analysis progress.

- **Steps to Process a Job**
- **Navigate to Update Jobs**

Go to the *Samples* module and select **Update Jobs**.

- **Select a Job**

Choose the job you wish to process. This will open the job details page, including:

  - Customer and billing information

  - Sample type
  - Assigned analysis methods

- **Select Methods to Process**

  - Each assigned method is listed with a checkbox.
  - If the job has multiple methods, process them **one at a time** by selecting the checkbox for a single method.

- **Adjust Sample Quantity (Optional)**

  - By default, ACLS includes the **entire quantity** of samples assigned to the method.
  - You may reduce the number of samples to be processed for partial runs.

- **Enter Time used for process (Optional)**

  - Enter time spent to process the assigned method.

- **Confirm Processing**

  - Click Confirm to proceed.
  - The selected method's status will be updated to **Processing**.
  - The system will apply the relevant **charges per sample** as defined in the method configuration.

6.34.9 Check-out Samples

A job can only be checked out **after all assigned methods have been processed or updated**. ACLS will prevent check-out if any method remains unprocessed.

- **Steps to Check Out a Sample Job**
- **Verify Job Completion**

Ensure that all analysis methods for the job have been fully processed or marked as updated.

- **Go to Check Out Tab**

Navigate to the *Samples* module and select the **Check Out** tab.

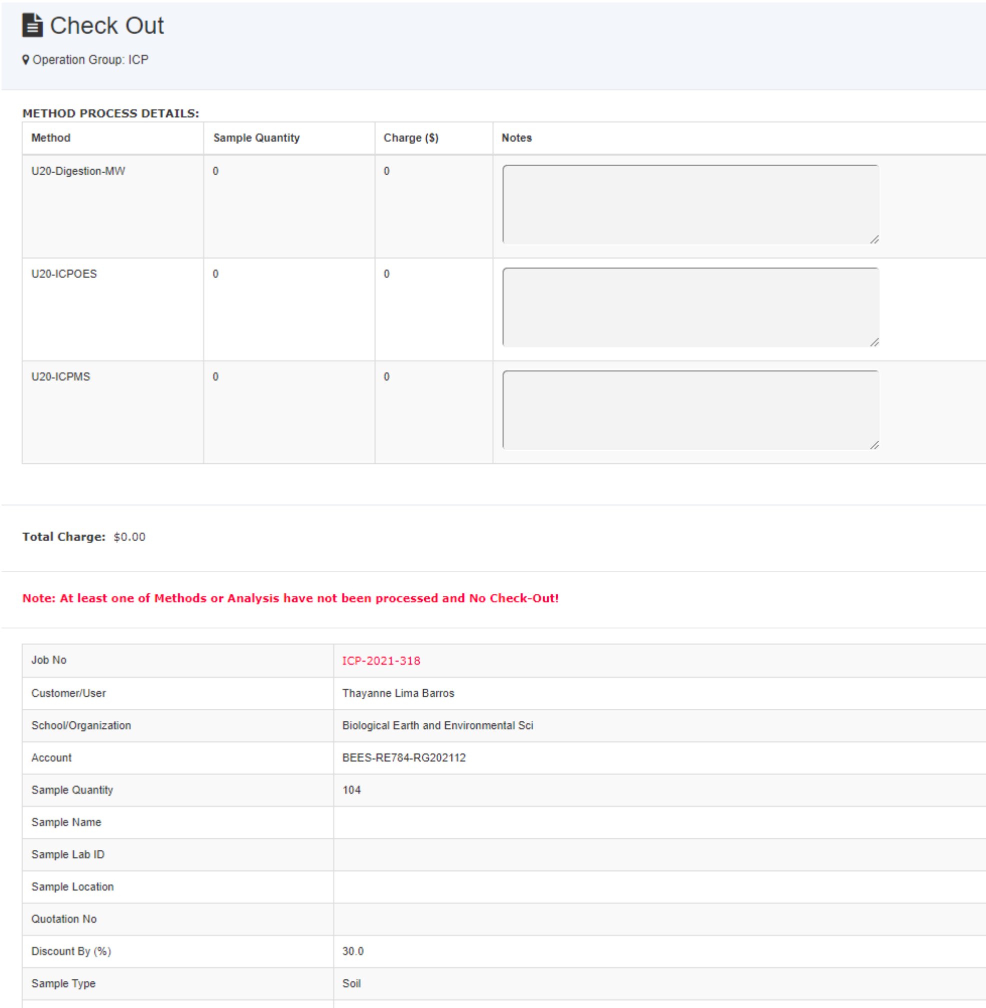
- **Select the Job**

Choose the job you wish to check out. The system will display all related job details for final review.

- **Confirm Check-Out**

Click the **Check-out** button to finalize the job.

Note: Once a job is checked out, **no further updates** can be made to its data.


Check Out

Operation Group: ICP

METHOD PROCESS DETAILS:

Method	Sample Quantity	Charge ($)	Notes
U20-Digestion-MW	0	0	
U20-ICPOES	0	0	
U20-ICPMS	0	0	

Total Charge: $0.00

Note: At least one of Methods or Analysis have not been processed and No Check-Out!

Job No	ICP-2021-318
Customer/User	Thayanne Lima Barros
School/Organization	Biological Earth and Environmental Sci
Account	BEES-RE784-RG202112
Sample Quantity	104
Sample Name	
Sample Lab ID	
Sample Location	
Quotation No	
Discount By (%)	30.0
Sample Type	Soil

6.34.10 Upload Reports for Archival

ACLS supports the secure upload and archival of reports or documents associated with sample jobs. Uploaded files are stored and backed up on the central ACLS server for long-term reference and compliance.

File Type Limitation:

ACLS enforces a **one-file-per-type** rule per job.

For example, a single job (e.g., *Job #1*) may have:

- Doc_ICP_2009_1.doc
- Doc_ICP_2009_1.xls

- Doc_ICP_2009_1.pdf
- Doc_ICP_2009_1.zip

...but **not two .doc files** for the same job.

Steps to Upload a Report:

- **Select Document Type**

Use the dropdown menu to choose the appropriate file type (e.g., Word, Excel, PDF, ZIP).

- **Enter a Download Link Description**

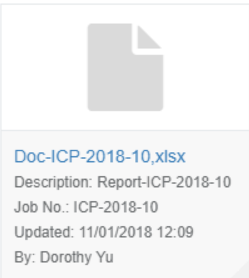
This description will appear alongside the file's download link in the system. It should clearly identify the document (e.g., *Final Report - ICP Analysis*).

- **Upload the File**

  - Click **Browse** to locate the document on your local computer.
  - Click **Upload** to complete the process.

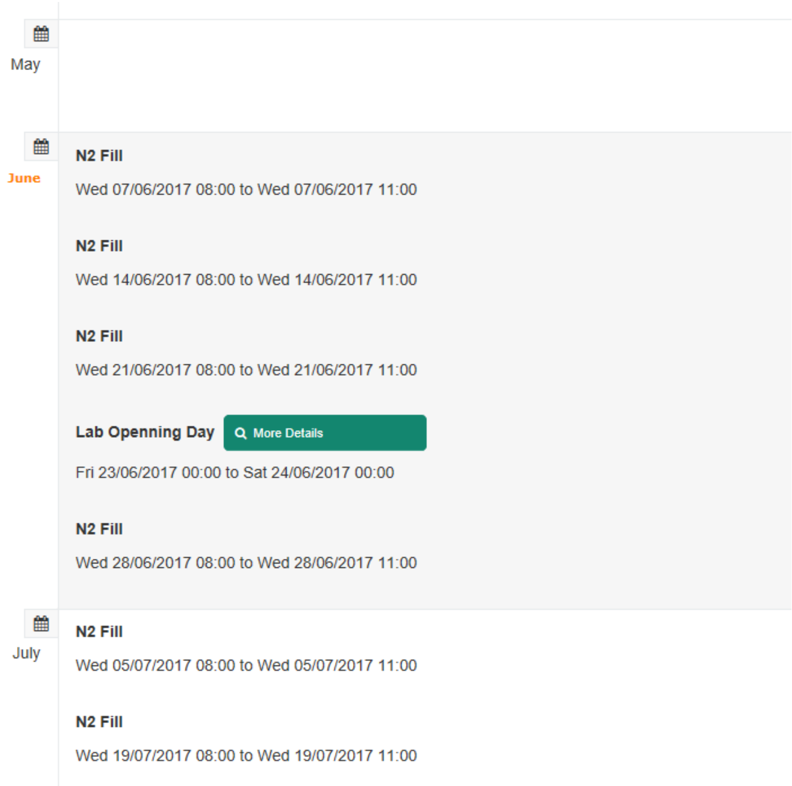
- **Verify Upload**

After upload, click the link in the **Download Link Description** column to ensure the file opens correctly.



6.35 Set Up Lab Calendar

The **Lab Calendar** is a useful tool for notifying users about lab events. Events are shown on the **calendar** for visibility to all the users.



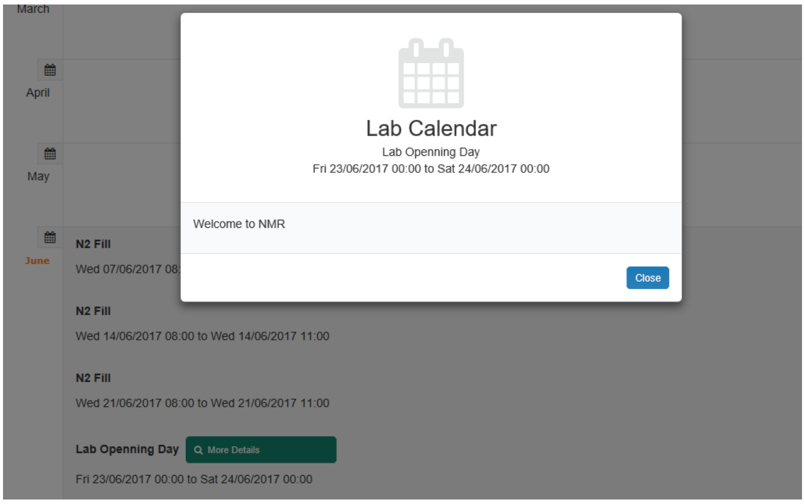
Accessing the Calendar:

Navigate to: *Booking Resources → Calendar Utility → Lab Calendar*

You can configure events for:

- The current year
- The previous year
- The next year

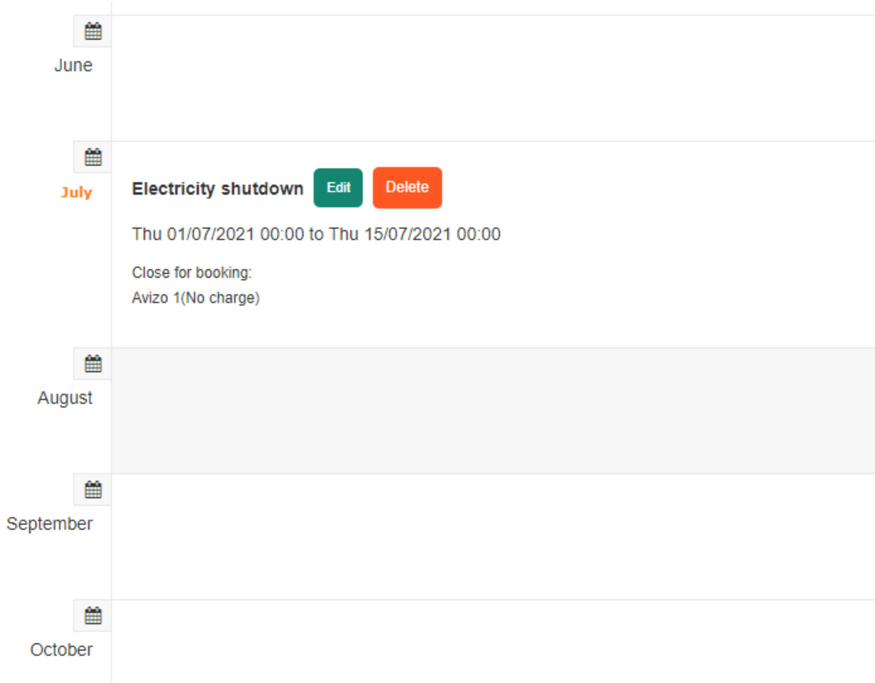
Users can also view the **Lab Event Calendar** on their **My Home** page. If additional information has been provided, clicking **More Details** will display this in a pop-up window.



Disabling Bookings for Events:

You can temporarily disable booking access to specific resources for the duration of an event.

- The availability status for each resource is shown when editing an event.
- Use Select All or manually check boxes to choose which resources to block.
- To re-enable bookings, you must delete the corresponding lab event.



6.36 Request Ticketing System

ACLS includes a built-in **ticketing system** to facilitate training and support requests. Users can submit tickets under the following categories:

- Request for training
- Request for support
- Request for sample submission

Users can track the **status of their tickets** and view **staff responses** within the system.

Ticketing System Functions:

Function	Access Level	Description
New Request	All Users	Submit a new support or training request
My Requests	All Users	View and track submitted requests and responses
Open Requests	Staff Only	View and manage open requests assigned to staff
Search Tickets	Staff Only	Search through submitted user requests

6.36.1 New Request

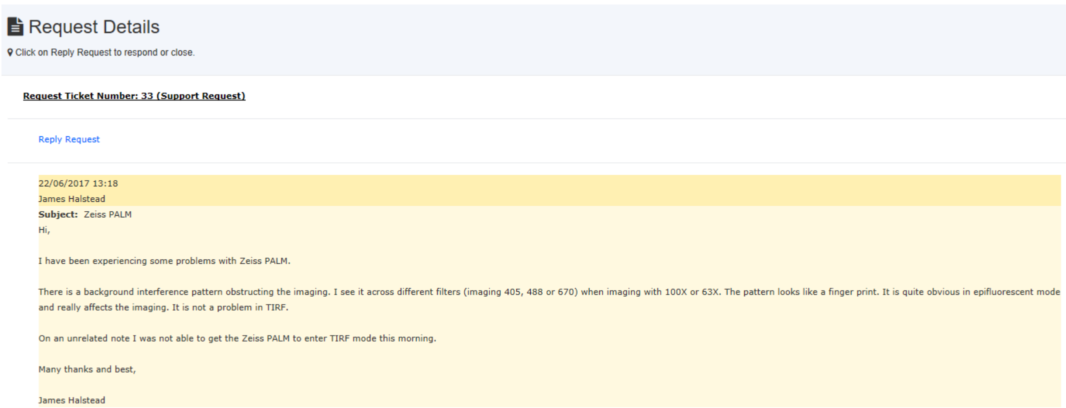
All users and staff can submit a new request by providing:

- A subject
- A message body
- An optional PDF attachment
- A selected staff recipient

6.36.2 My Requests

Users can view their submitted requests and the corresponding responses from staff.

- Yellow: User-submitted requests
- Blue: Staff responses
- Navigable links allow users to view the full conversation thread.



6.36.3 Open Requests (Staff Only)

This section is accessible to staff only and allows them to view and respond to **pending/open user requests**.

6.36.4 Search Requests (Staff Only)

Staff can use this feature to **search all submitted tickets**, enabling efficient tracking and follow-up.

6.36.5 Set up staff for assistance

Admins can assign staff members to handle support requests through:

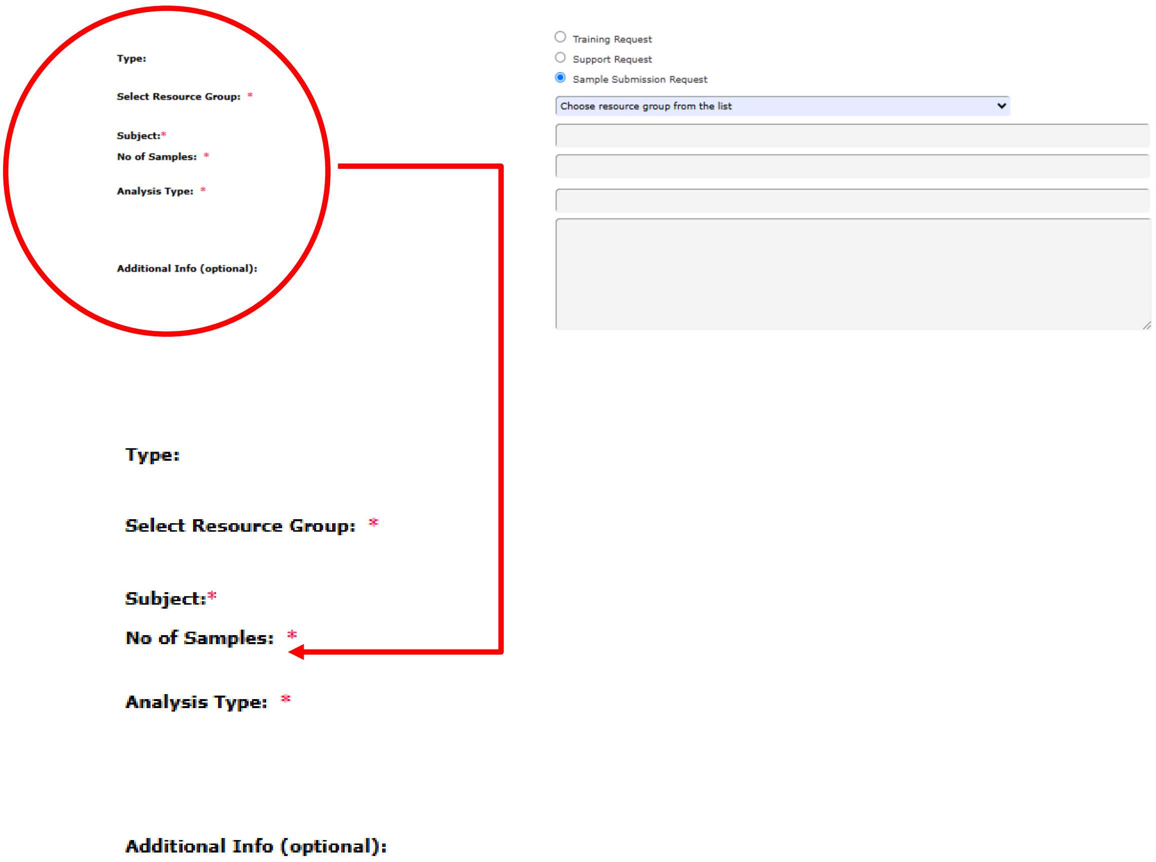
Path: *Utility Manager → Support Ticket Staff Manager*

Steps:

- Select a staff member.
- Enter a role description.
- Save the entry to enable the staff member to process tickets.

6.36.6 Sample submission request

Upon selecting the sample submission request, the following sample data entries are shown up.

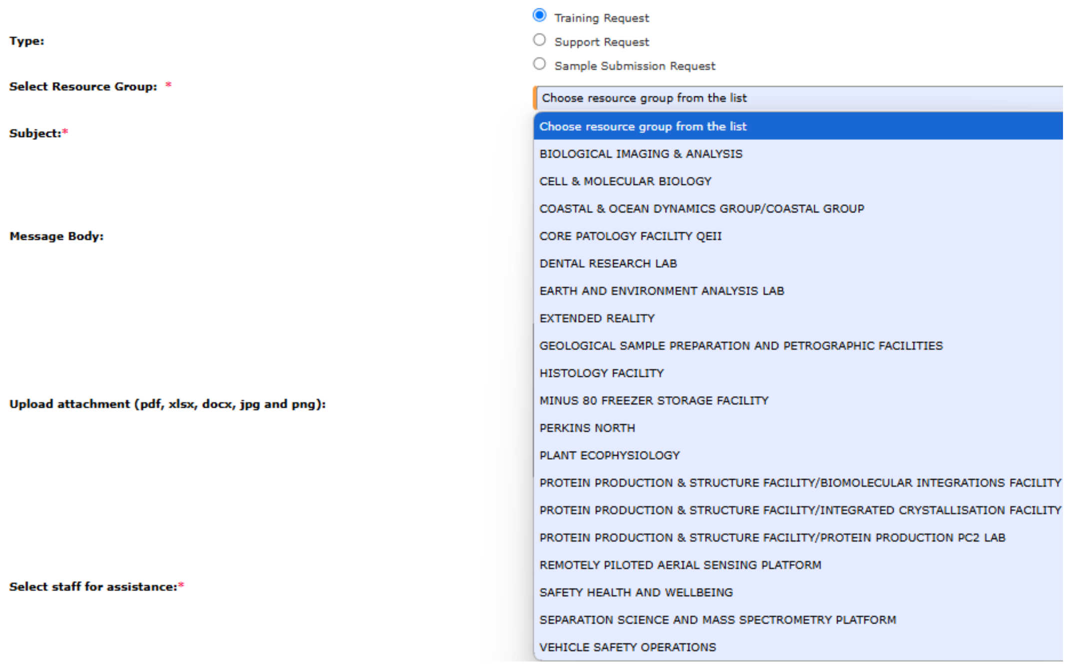


6.36.7 Attachment doc type

The attachments allow multiple file types including excel, pdf, word.

6.36.8 Resource group to the ticket lodge page (RIMS only)

Upon lodge ticket, resource group owners receive email notifications.



6.37 Analyse Publications

ACLS provides built-in tools to analyse publications submitted through the system. These tools offer insights into publishing trends across journals and organizational units.

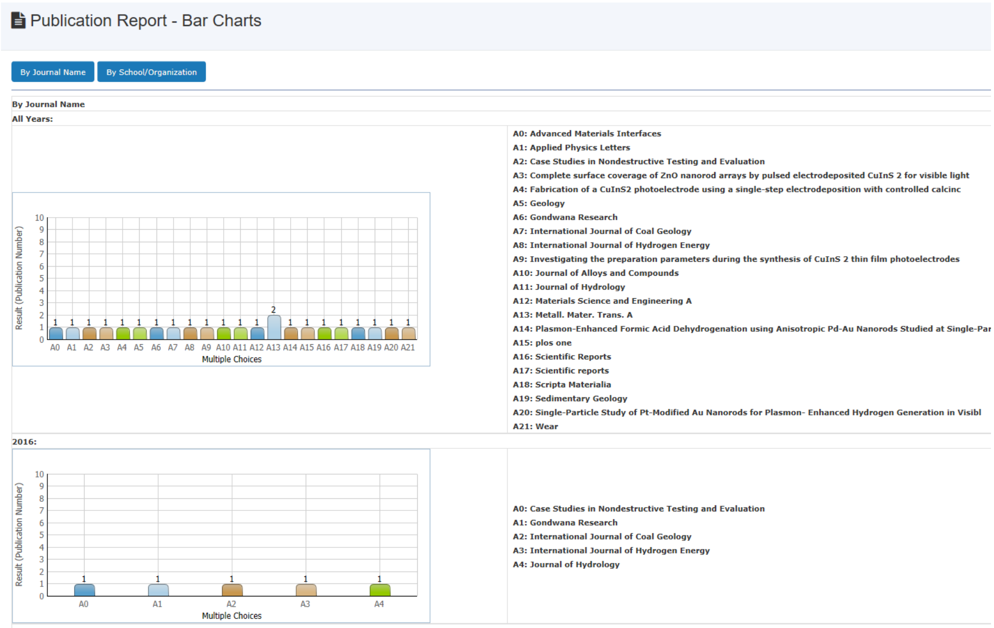
Available Analysis Tools:

- Search Publications

Use the publication search tool to filter and locate publication records. Results can be **exported to Excel** for further analysis or reporting.

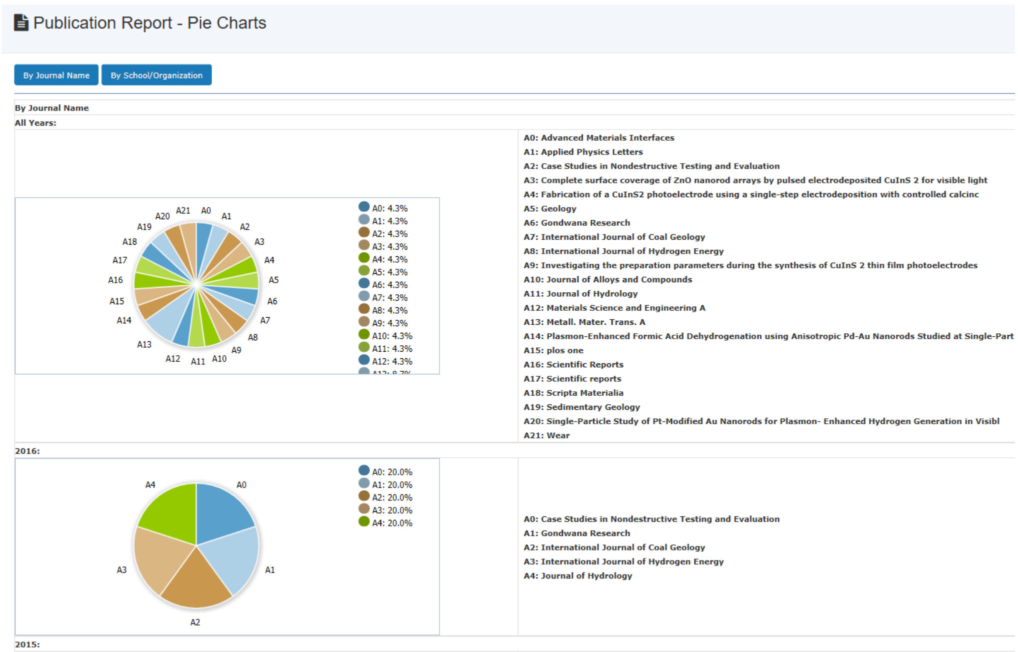
- ## Bar Charts

Bar charts visually present key statistics such as the **number of publications by journal** or **by school/organization**, helping identify publishing trends and output concentration.



- ## Pie Charts

Pie charts display **percentage-based statistics**, allowing for a quick overview of publication distribution across **journals** or **schools/organizations**.



6.38 Mobile App

The ACLS mobile app serves as a **single gateway** for accessing all ACLS nodes within the research community. It supports both iOS and Android devices and provides convenient access to core ACLS functions.

App Download Links:

- **iOS: AC Lab System on App Store**

  https://apps.apple.com/au/app/ac-lab-system/id1084979585

- **Android: AC Lab System on Google Play**

  https://play.google.com/store/apps/details?id=au.com.aclsMobile

6.38.1 Organisation page

Upon launching the app, the **Organisation Page** lists the organisations associated with your account.

- Tap an organisation to view its ACLS nodes.

6.38.2 Node list page

After selecting an organisation, you'll see a list of **ACLS nodes** you have access to (e.g., UNSW's EMU).

- Tap a node to proceed to its ACLS sign-in page.

6.38.3 Sign in page

Enter the **email address** associated with your ACLS account for the selected node.

- No password is required—sign-in is handled via a one-time code.

6.38.4 One-time code page

The app uses a **secure one-time code** sign-in process:

- After entering your email, a code is sent to your inbox.
- Enter this code to complete the sign-in.

6.38.5 Landing page upon sign in

Once signed in, you'll be taken to the **ACLS node landing page**, where commonly used features are available:

- Resource List
- Consumable List
- My Bookings
- Desktop Version (staff only)

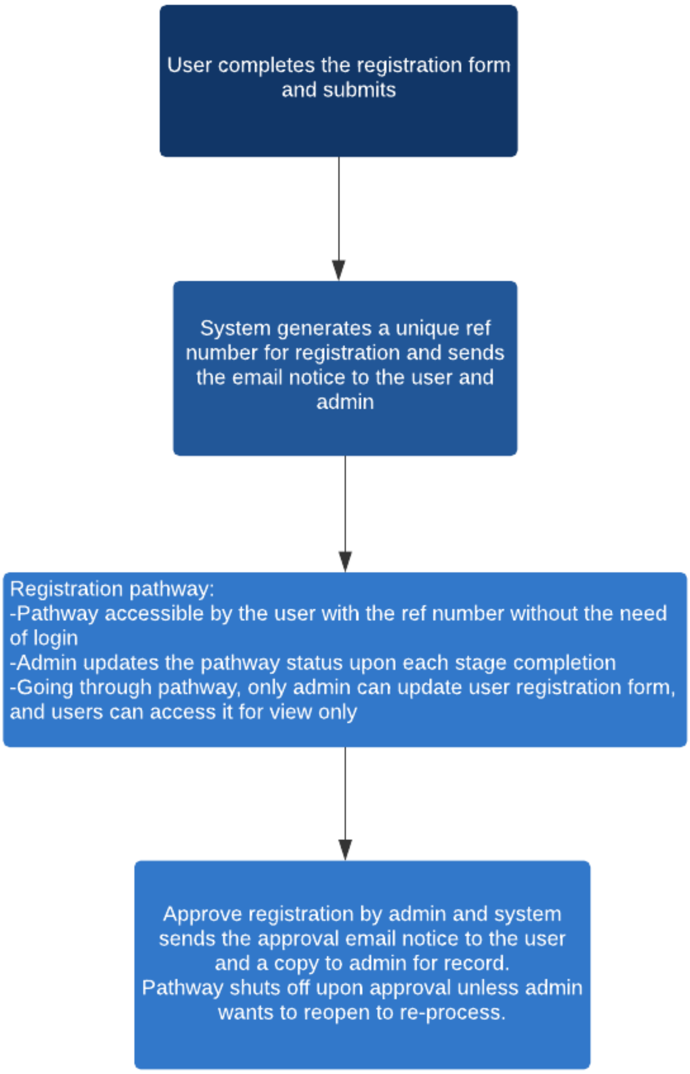
6.39 Registration Pathway

ACLS supports both **single-step** and **multi-step** registration workflows to accommodate varying lab requirements, especially where **OHS compliance** and approvals are critical.

By default, ACLS uses a **single-step registration** process:

- Users complete and submit a registration form.
- The staff-in-charge can then approve or reject the request.

However, for labs requiring **multiple levels of review**, the **Registration Pathway** can be enabled to manage and track the approval process more transparently.



Overview: Registration Process Flow:

A flowchart is available in the system to illustrate the multi-step registration process. This helps both users and staff understand the progression of approvals.

Enabling the Registration Pathway:

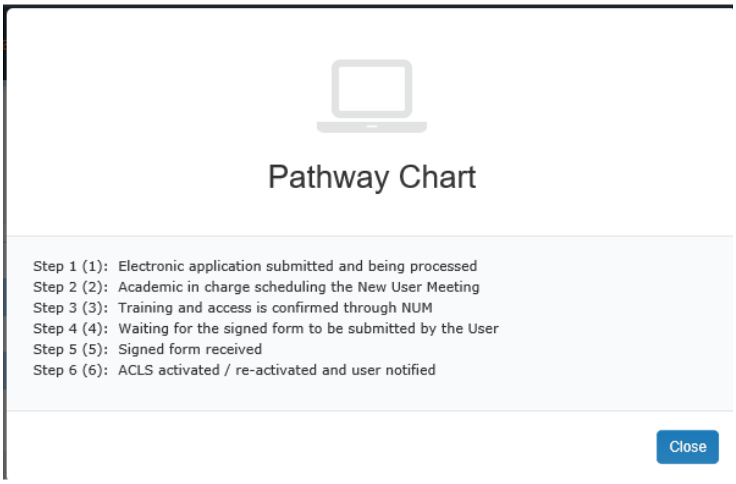
By default, the pathway feature is **disabled**. To enable:

- Go to *System Settings → Configure System*
- Enable the Registration Pathway option

Setting Up the Registration Pathway:

Navigate to: *System Settings → Registration Pathway*

- The system includes the first default step: Received Registration
- Admins can add, remove, or rename pathway steps to suit local lab workflows
- Each step is assigned a step number, which defines its sequence in the pathway
- ACLS supports up to 20 steps in total



Displaying the Pathway to Users:

Once set up, the **registration pathway status** is visible to users on the **registration page**:

- Users can track the progress of their registration through each approval step
- They will need their registration reference number to check the status
- A registration notice is also sent to the Contact Us email (defined in Configure System)

To include more recipients for registration alerts, go to: *System Settings → Email Receiver*

Approving User Registration:

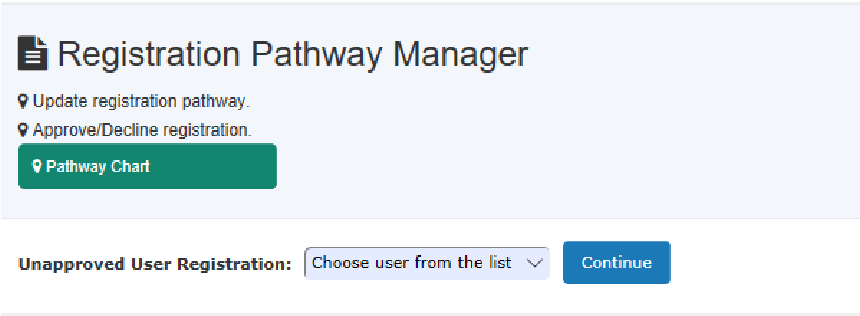
To manage and approve user registrations with the pathway:

- Go to *User Profile → Registration Pathway Manager*
- Select the user whose registration you want to process

- On the next page, view the status of each Registration Pathway step
- Continue the approval process until the registration status is closed

Additional tools on this page:

- Contact User: Communicate with the user if needed
- Access Registration Form:
  - **Admins** can edit form content
  - **Staff** can view only



On the next page, you see the status of each Registration Pathway. You can approve user registrations until the status is closed.

Should you need to contact the user, simply go to Contact User.

6.40 Resource Catalogue

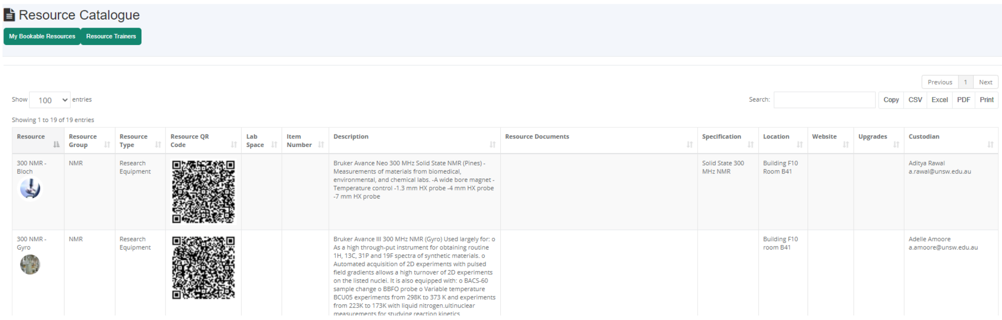
ACLS provides a built-in **Resource Catalogue** that lists all **active resources** by default. Laboratories may also catalogue **additional items** beyond active bookable instruments if desired.

This tool allows **users and staff** to:

- View detailed resource information
- Access booking availability and related details

Catalogue Features:

- The resource list is displayed in a tabular format
- The default landing page shows the total number of active resources
- Users can navigate through the catalogue to find instruments or items relevant to their work



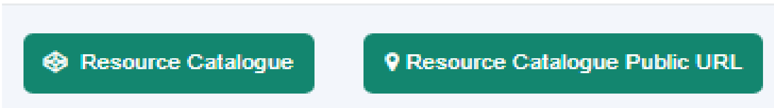
Public Access to Catalogue:

To share the catalogue with external users or link it from your lab homepage:

For Admins:

- Go to Resource Tab → Resource Catalogue Public URL
- Copy the public URL provided for the catalogue

This link can be distributed to provide read-only access to your lab's resource list without requiring login credentials.



6.41 Manage and Track Consumables

ACLS supports the management of **lab consumables** such as tools, reagents, or chemicals, enabling labs to track usage, stock levels, and user orders efficiently.

Note: The Consumables module is only available when ACLS is configured with **account-based charge models**. It is not supported in environments using the **project-based charge model**.

Key Features:

- **Consumable stock tracking**

ACLS maintains up-to-date records of consumable quantities.

- **User ordering system**

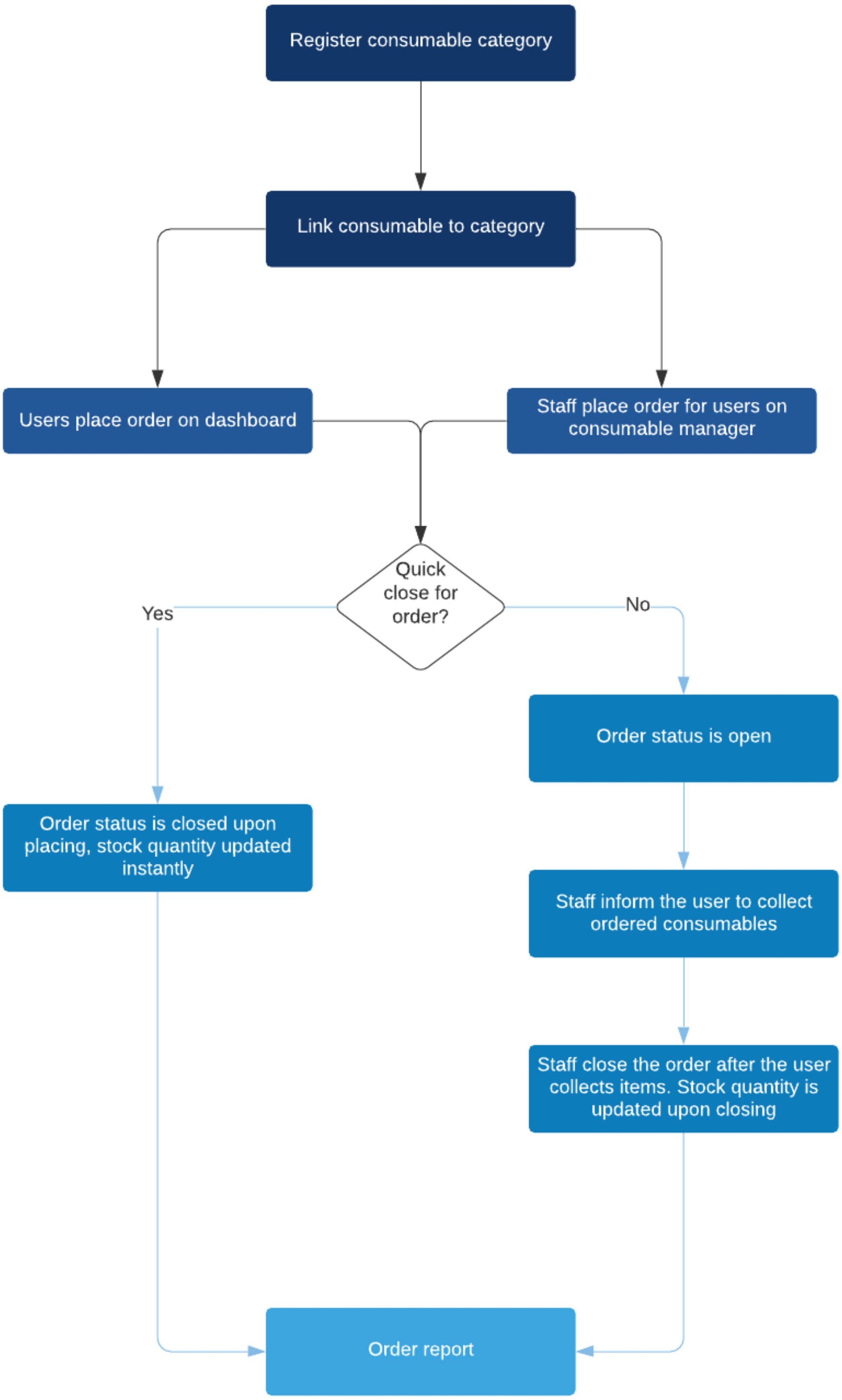
Users can place orders for consumables through the system.

- **Order lifecycle management**

Orders can be managed through open and closed states or completed instantly.

How It Works:

- **Register a Consumable Category**
  - Categories help organise consumables (e.g. Cleaning Supplies, Chemicals, Lab Tools).
- **Add Consumables to Category**
  - For each item, define stock quantity and unit details.
- **User Places an Order**
  - Users select the item and submit an order.
  - The order status is initially marked as **Open**.
- **Staff Manages the Order**
  - When the user collects the item, staff update the order to **Closed**, which also adjusts stock levels.
- **Quick Close Option**
  - For fast processing, staff can use **Quick Close**, which immediately finalises the order and updates inventory—**bypassing the Open/Closed workflow**.



6.41.1 Register consumable categories

To begin managing consumables in ACLS, you first need to define one or more **consumable categories**. These categories help group related items (e.g. *Cleaning Supplies*, *Solvents*, *Glassware*) for easier tracking and ordering.

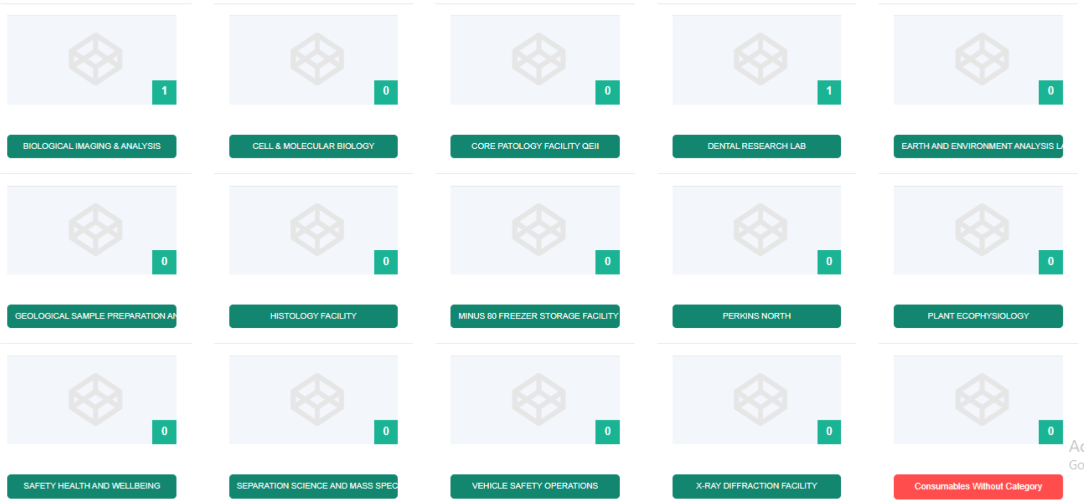
Steps to Register a New Consumable Category:

- Navigate to the Consumable tab.
- Click on Register Consumable Categories.
- Enter the name and an optional description of the new category.
- Save the entry.

Once registered, you can begin adding consumables under the defined category.

6.41.2 Auto-managed consumable category groups (RIMS only)

System auto-populates the consumable categories based on the main resource group. Amin can not add the consumable categories.



Edit consumables:

- Admin can edit all consumables regardless of the categories
- Resource group owners can ONLY edit his/her own resource group consumables

Show 100 entries

Showing 1 to 2 of 2 entries

...	Consumable Code	Consumable Description	Consumable Category	Supply Details
Edit	2,3-DIMETHYLBUTANE	DIMETHYLBUTANE	BIOLOGICAL IMAGING & ANALYSIS	Order code: Buy-in price: $0.00 Supplier:
--	1-HEPTENE	HEPTENE	DENTAL RESEARCH LAB	Order code: Buy-in price: $0.00 Supplier:

Access consumables:

- Admin and resource group owners can access all consumables

6.41.3 Register consumables

After setting up your consumable categories, you can register individual consumable items.

- Steps to Register a New Consumable:
- Go to the Consumable tab.
- Click on Register New Consumables.
- Complete the form using the parameters described below.

Consumable Parameters:

Parameter	Description
Consumable Code	A short identifier or barcode for the item (e.g. AT2070).
Description	A brief description (e.g. ATnLOF2070 100ml).
Consumable Category	The category assigned to the item. Categories are set via **Register Consumable Categories**.
Unit	The unit of measurement (e.g. ml, kg, cm). You may define custom units like 100ml or 1 pack.
Min Order Quantity	(Optional) Automatically adds this quantity to a user's booking. Useful for labs with default consumable requirements.
Price per Unit	The cost per unit (used for billing or tracking purposes).
Stock Quantity	Displays current inventory. *Note: this field is not editable directly.*
Re-Order Quantity	A threshold value. If stock drops below this level, the system sends a restock notification email.
Hide Stock Qty on Cart	If ticked, users won't see the current stock level when ordering.
Quick Close on Order	If enabled, the order is **automatically marked as complete** upon submission, and stock is updated immediately.
Admin Only	If enabled, only **admins** can order this item.

6.41.4 Search/Edit consumables

ACLS provides tools for efficiently searching, reviewing, and editing consumables in your lab's inventory.

Key Features:

- **Filter Options:**

Filter consumables by **active** or **inactive** status.

- **Sort and Flag:**

Results can be **sorted**, and consumables with **low stock** are automatically **flagged** for attention.

Editing Consumable Profiles:

From the search results, you can **directly access the edit page** of any consumable.

On the edit page, you can:

- **Update item details (e.g. unit, price, reorder threshold)**
- **Upload an image of the consumable**
    - *Recommended image size: 200px × 200px*
- **Review price change logs by clicking the Price Change Logs button**
    - This provides transparency over pricing history.
- **Track stock quantity adjustments**
    - All changes are logged automatically to support accountability and record-keeping.

6.41.5 Set up consumable supplier

To assist with procurement tracking and record keeping, ACLS allows you to associate suppliers with each consumable item.

How to Set Up a Supplier:

- Go to the Edit Consumable page for the desired item.
- Click the Edit Supplier button.
- Enter the supplier details as required.

This information is stored in the system for **reference purposes only** and helps maintain traceability of consumable sourcing.

Note: This feature does not automate ordering but supports internal audit and supplier management.

6.41.6 Notify user to collect the ordered consumables

ACLS allows admins and staff to **notify users** when their ordered consumables are ready for collection.

Key Features:

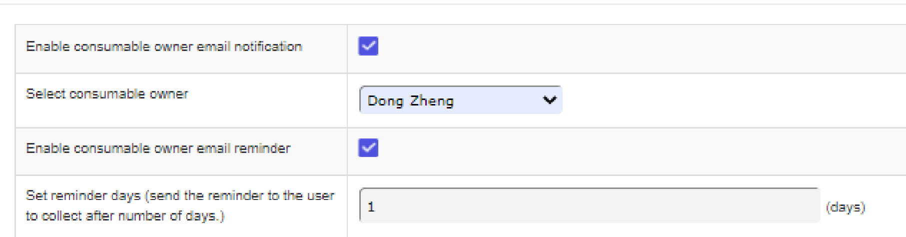
- You can send a collection notification to the user at any time after the order is placed.
- The system displays whether a notification has already been sent, helping avoid duplicate alerts.
- Notifications improve communication and ensure timely pickup of consumables.
- This function is available on the Order Management or Consumable Orders page.

6.41.7 Set up consumable owners and alerts

To improve oversight and communication, ACLS allows you to assign **category owners** for consumables and enable **notification alerts**.

Steps to Configure:

- Go to the Search/Edit Consumable page.
- Click on Set Up Consumable Category Owner, Notification and Reminder.



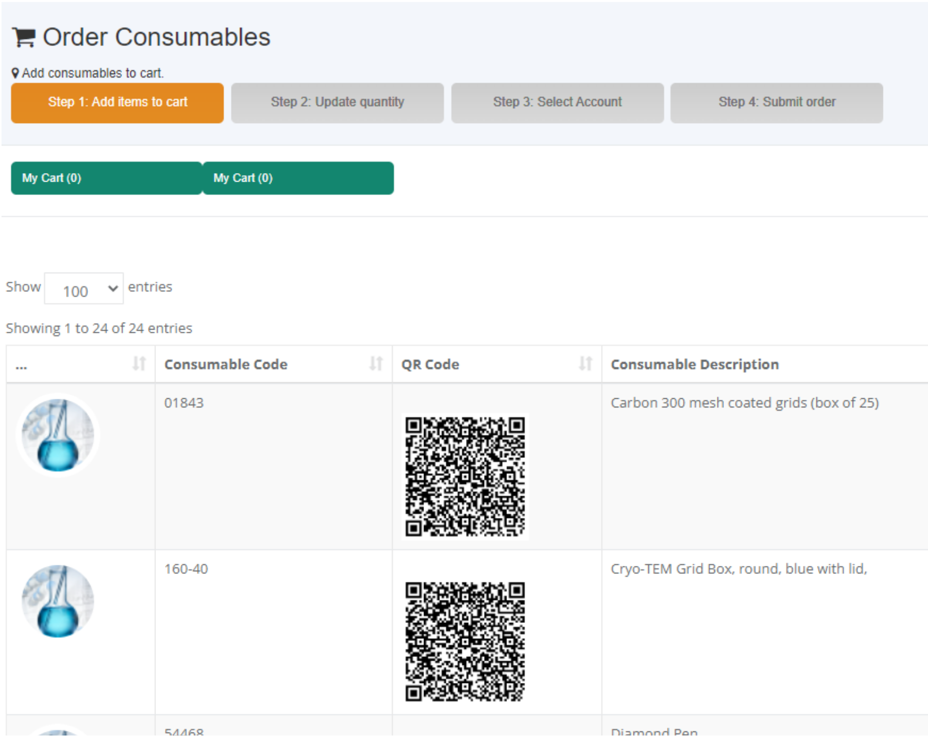
Key Features:

- Assign a category owner who will be responsible for monitoring consumables within that group.
- Enable notifications and reminders to keep owners informed of new user orders.
- ACLS will automatically send an order notification to the category owner once per day if new orders are received.

This feature helps streamline consumable management and ensures that responsible staff are kept in the loop without being overwhelmed by immediate alerts.

6.41.8 *Order consumables*

ACLS provides a **user-friendly consumable ordering system**, similar to an online storefront, making it easy for users to request items needed for experiments or lab work.



Key Features:

- **Browse by Category**

Users can locate consumables using the **category list** for quick access.

- **Search Tool**

A built-in search function allows users to find specific items by name, code, or description.

- **My Cart**

Users can view their current **pending orders** and make changes before final submission.

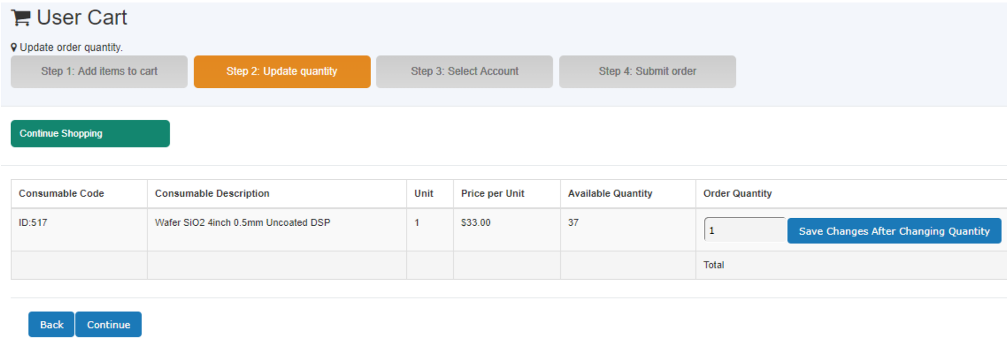
- **My Order**

This section provides a history of **previous consumable orders**, including status and collection records.

The streamlined interface ensures ease of use while enabling traceability and inventory management.

6.41.9 Lab admin to order consumables for users:

Lab admins have the ability to place **consumable orders on behalf of users** when required.



Key Functions:

- **Order on Behalf of a User**

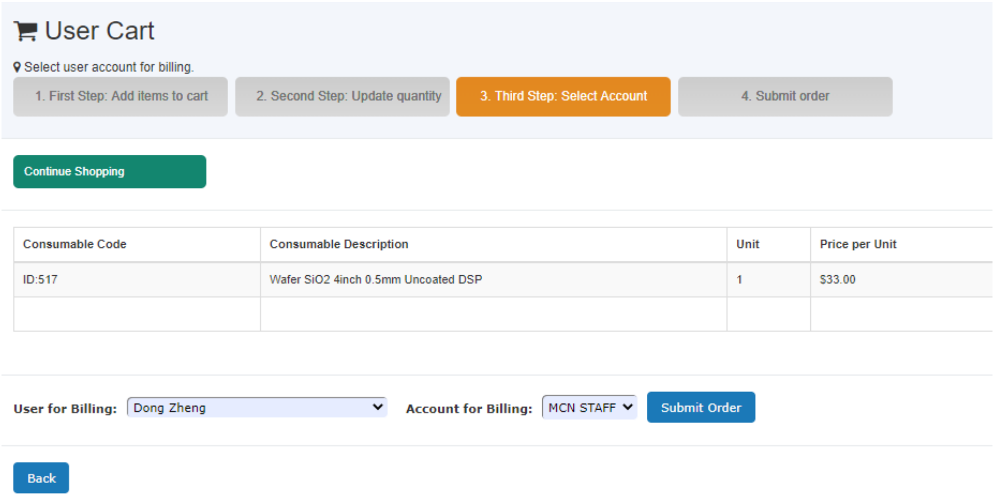
Navigate to **Order Consumables for User** to begin the process.

- **View User Orders**

Use the **User Orders** page to review any user's order history or status.

How to Place an Order for a User:

- Go to Order Consumables for User.
- Select the user from the list.
- Choose the appropriate account (for billing or allocation).
- Submit the order.



Post-Order Notification:

Once the order is submitted, the system sends an **email notification** to the user with collection instructions, such as:

- *"Please ask one of the staff members in the cleanroom for the delivery."*
- *"Or ask one of the staff members in the office for the delivery."*

6.41.10 Update consumable orders

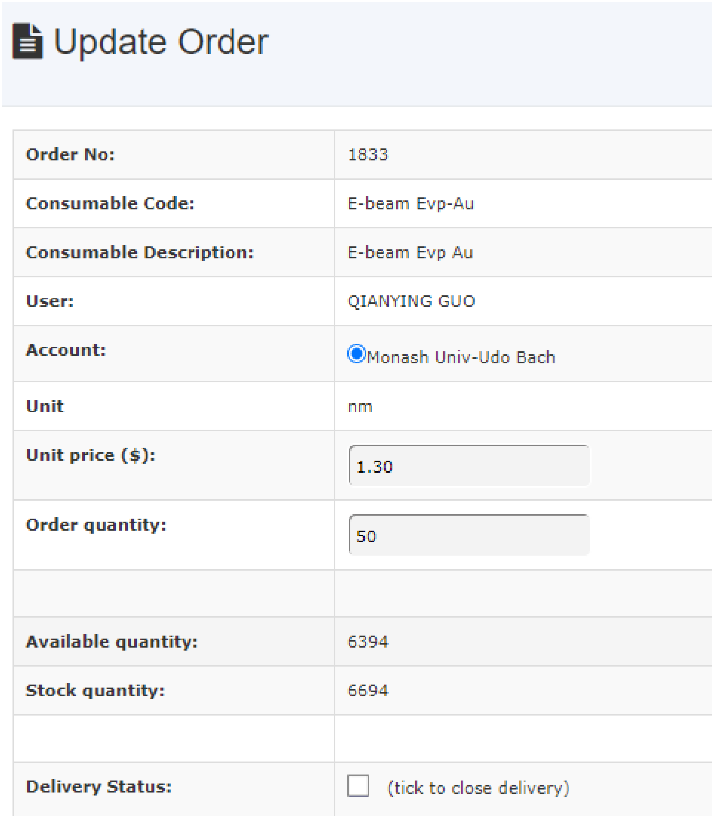
Lab admins have the ability to **modify existing consumable orders** when adjustments are needed—such as changes in quantity or correction of order details.

How to Update an Order:

Navigate to: *Staff → Consumable Resources → Change Consumable Orders*

- Locate the relevant order in the list.
- Click Update to access the order details.
- Make the necessary changes (e.g. update the quantity, correct information).
- Save the changes.

This feature helps labs maintain accurate order records and respond to evolving user or inventory needs.



6.41.11 Delivery status of consumable orders

To support accountability and traceability, ACLS allows labs to **record the delivery status** of each consumable order.

How to View and Update Delivery Status:

Navigate to: *Staff → Consumable Resources → Change Consumable Order*

The system displays each order with a **delivery status**:

- **Open**: Delivery is pending
- **Closed**: Delivery has been completed

Managing Delivery Records:

- **For Closed Orders:**

The system shows the **date of delivery** and the **staff member** who recorded it.

- **For Open Orders:**

Admins or staff can **confirm and mark delivery** by ticking the **delivery status checkbox**, which will:

- Change the status to **Closed**
- Log the staff member and timestamp

This process ensures accurate tracking of consumable handling and improves inventory audit reliability.

6.41.12 Cancel order

ACLS allows admins to **cancel consumable orders** when necessary, with automatic stock adjustment and restoration options.

Key Features:

- When an order is cancelled, the system will:
  - **Automatically roll back** the ordered quantity to the consumable's stock level.
- Admins can restore cancelled orders at any time if needed, reinstating the original order details and updating the stock accordingly.

This feature helps maintain accurate stock records while providing flexibility for order corrections or user changes.

6.41.13 Consumable order report

ACLS provides a comprehensive **consumable order report** feature for lab admins to monitor usage, stock trends, and user activity.

Key Features:

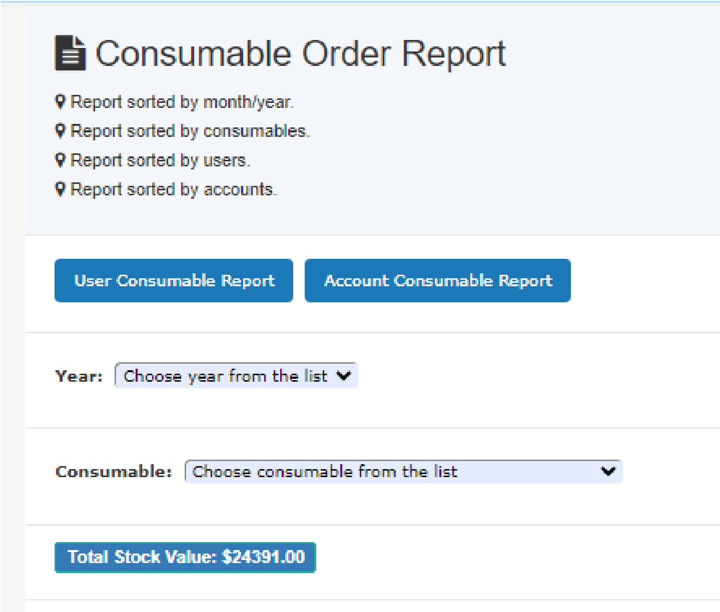
- **Detailed Reporting:**

View all consumable orders, including item names, quantities, dates, and stock levels.

- **Sort & Filter Options:**
  - **Sort by**: User or account
  - **Filter by**: Year or specific consumable item
- **Stock Tracking:**

The report also displays **current stock quantities**, supporting inventory planning and restocking decisions.

This report supports accountability, purchasing forecasts, and lab audit requirements.



6.41.14 Consumable stock check

To help labs maintain sufficient inventory levels, ACLS performs an automated **daily stock check**.

Key Feature:

- The system sends a daily email notification to lab admins containing a summary of:
    - **Current stock quantities** for all consumables
    - Highlighted items approaching or below the **reorder threshold**

This automated alert helps ensure timely restocking and reduces the risk of supply shortages during critical lab operations.

6.41.15 Integrate the consumable orders in the monthly invoice

ACLS supports the **consolidation of delivered consumable orders** into the facility's **monthly usage invoice**, streamlining billing and financial tracking.

How It Works:

All **delivered consumable orders** are automatically **grouped into the monthly invoice** alongside equipment usage and other billable items.

Enabling This Feature:

To activate this integration:

- Go to *System Settings → Configure System*
- Enable the global setting parameter: *IncludeConsumableToUsageInvoice*

6.41.16 Consumable order auto-collection reminder

To ensure timely collection of consumable orders, ACLS can send out **automated collection reminders** to users.

Key Feature:

- Based on system configuration, ACLS sends an auto-reminder email to the user after a defined number of days following order placement.
- The reminder encourages users to collect their ordered items and helps reduce unclaimed stock.

Configuration:

- The reminder timing is controlled via a system setting, where the admin defines the number of days (xx) after which the reminder is triggered.

This feature supports smoother inventory turnover and reduces delays in consumable handling.

6.41.17 Consumable order auto-cancellation

To minimise uncollected and stale orders, ACLS can automatically **cancel open consumable orders** after a specified time period.

Key Feature:

- Based on system settings, ACLS will automatically cancel any open (uncollected) orders after xx days from the order date.

- When an order is auto-cancelled:
  - The stock quantity is **automatically restored**
  - The cancellation is **logged** for record-keeping

- Configuration:

This function is controlled by a **system setting**, where the admin defines the expiry period (xx days) for auto-cancellation.

This feature helps maintain accurate stock levels and reduces administrative overhead caused by uncollected orders.

6.42 Staff Comments on Users

ACLS provides a **private commenting feature** for staff to record notes on individual users. These comments may relate to **performance**, **behaviour**, or other relevant observations.

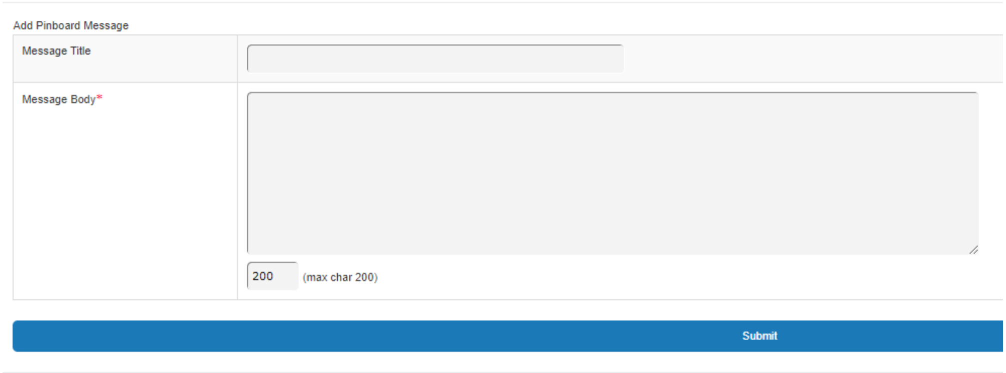
How to Add a Staff Comment:

- Navigate to the desired user's profile.
- Go to Profile → Pinboard.
- Add a sticky note with your comment.

Key Features:

- **Visibility:**
    - Sticky notes are **visible only to staff** viewing that user's profile.
    - They are **not visible** on the public pinboard.
    - **Standard users** cannot see these comments.
- **Permissions:**
    - **All staff** can view and add comments.
    - **Only lab admins** can delete staff comments.

This tool helps staff document user-related notes discreetly and securely, supporting informed decision-making within the lab.

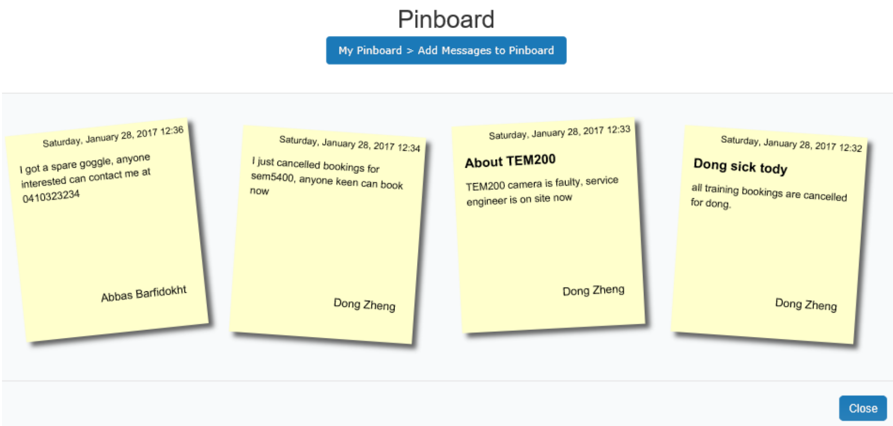


6.43 My Pinboard

My Pinboard serves as a virtual message board, similar to a notice wall in a lab room—where users can leave and manage sticky notes for reminders, updates, or general communication.

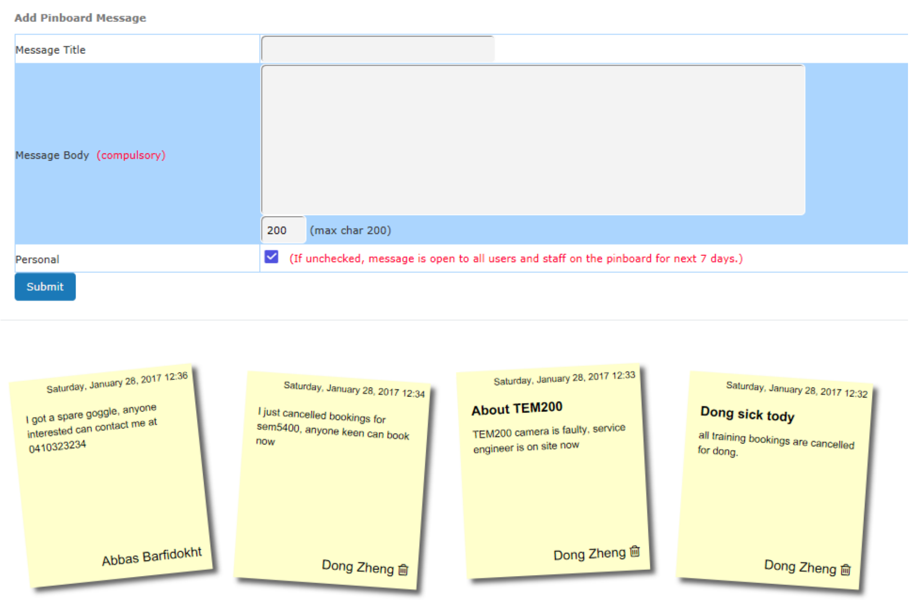
Types of Sticky Notes:

- **Personal**
  - Visible **only to the user** who created it
  - Ideal for private reminders or to-do items
- **Public**
  - Visible to **all registered users and staff**
  - Automatically **deleted after 7 days**, or can be **manually deleted by lab admins**



Features & Navigation:

- **Speech Bubble Icon**
  - Located in the header
  - Indicates when sticky notes are present
  - Click it to view:
    - Your **personal notes**
    - Any **public sticky notes**
- **Manage Notes**
  - Go to **My Pinboard** to view, create, or manage your notes
  - Use the **rubbish bin icon** to delete notes you no longer need
- **Admin Controls**
  - **Lab admins** can delete any **public sticky notes** for content moderation or housekeeping



This feature enhances informal communication within the lab and allows users to manage their own space effectively.

6.44 Most Popular Resources

ACLS includes Corea Analytics, a tool designed to provide insight into resource usage trends within the lab.

Key Feature:

- **Most Booked Resources**

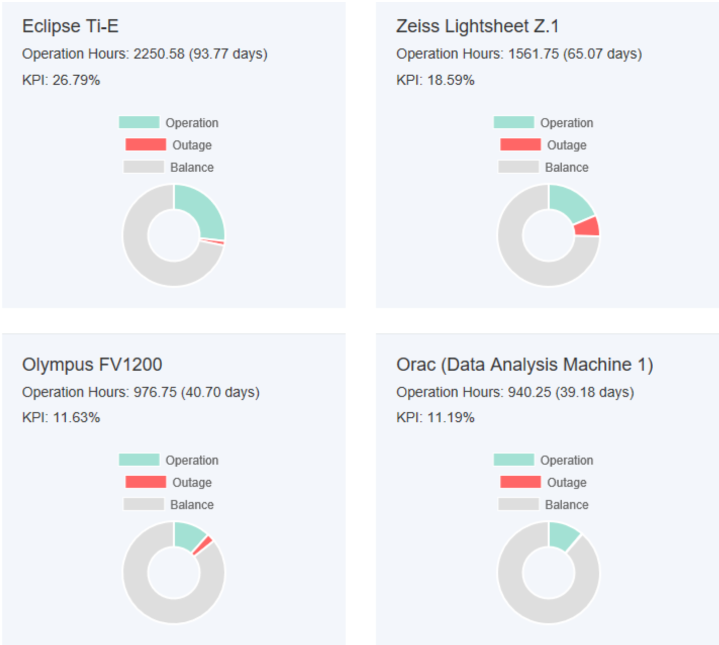
Corea Analytics highlights the most popular resources based on booking frequency.

- **Trend Analysis**

Usage trends over time are displayed, helping lab managers:

- Identify high-demand instruments
- Plan for maintenance, upgrades, or additional capacity
- Support reporting and funding justification

This data-driven feature supports resource planning, optimisation, and strategic decision-making.



6.45 Resources With the Most Training Hours

Corea Analytics also provides insights into **training-related resource usage**, helping labs understand where the most training time is being spent.

Key Feature:

- **Training Hours Analysis**

Displays a ranked list of **resources with the highest cumulative training hours**.

- **Use Cases:**
  - Identify which instruments require the **most training effort**
  - Evaluate **staff workload** and training program efficiency
  - Support decisions on streamlining training or adding automation

This metric helps lab managers and training coordinators plan better resource support and training allocation.

6.46 Resources With the Most Outage Hours

Corea Analytics includes detailed tracking of **resource downtime**, helping labs monitor the impact of outages on operational availability.

Key Feature:

- **Outage Hours Analysis**

Reports and ranks **resources with the highest total outage hours**, based on maintenance schedules, unexpected faults, or manual downtime entries.

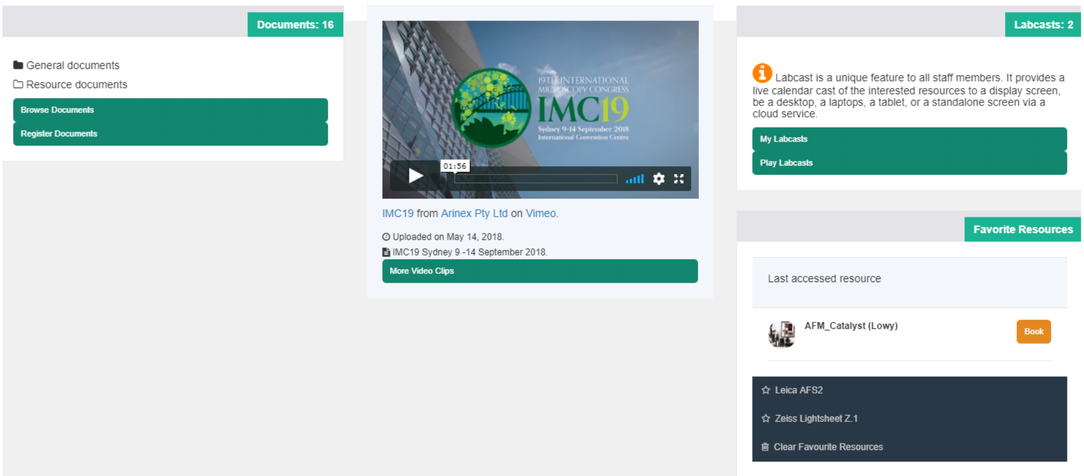
Use Cases:

- Identify resources with frequent or prolonged outages
- Support preventive maintenance planning
- Justify the need for replacement or upgrade
- Improve service reliability and reduce booking disruptions

This data enables evidence-based decisions to enhance equipment uptime and operational efficiency.

6.47 Video Player

The **Video Player** feature allows labs and organisations to **promote training courses, events, and announcements** through embedded video content.

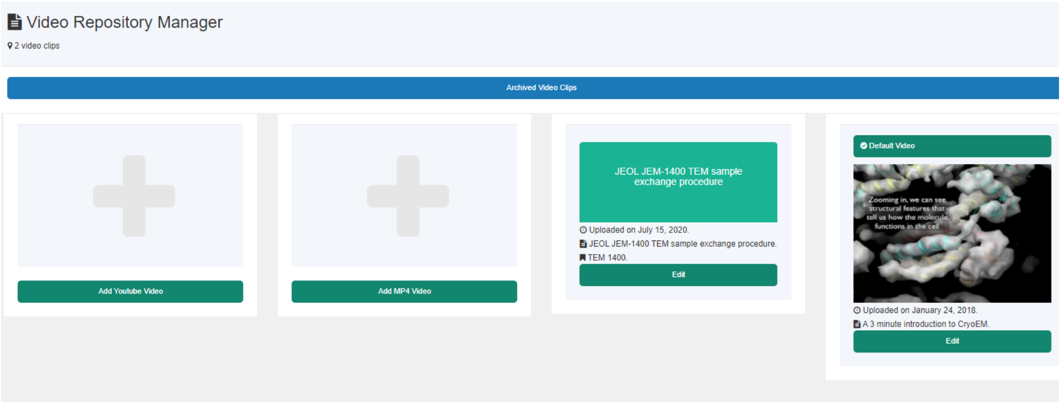


Key Features:

- If at least one video clip is set up, a video will be displayed on the sign-in landing page.
- Users can click the More Video Clips button to access the main video library.
- The displayed video is randomly selected upon each login, offering variety and exposure to different content.

Admin Functions:

- Admin staff can manage videos via the Video Repository Manager.
- Supported formats:
  - **External video links** (e.g. YouTube)
  - **Direct uploads** (e.g. .mp4 files)



6.47.1 Add Youtube Videos

ACLS allows admin staff to embed YouTube (or other platform) videos to promote training, safety, and general lab information.

To add a new video, go to the Video Repository Manager and fill out the following parameters:

Parameter	Description
Title	The title of the video clip (can be copied from YouTube).
Description	A brief summary or description of the video (also may be copied from YouTube).
Video Type	Select a category such as *general*, *educational*, or *safety*. *(A sorting feature by type will be added in future versions.)*
Video Source	Choose **YouTube** or another platform. - If using YouTube, the thumbnail is automatically retrieved. - For other platforms, you must manually upload a thumbnail.
Embed URL	**Important**: Do not paste the video's standard URL. Use the **embed code** provided by the platform. For YouTube: Right-click on the video → **Copy Embed Code** → Paste here.
Resource	Optionally link the video to a specific resource. *(In future versions, this will allow sorting by resource.)*
Set as Default	Mark this clip as the **default video** to be shown on the login landing page.
Status	If ticked, the video is **enabled** and viewable. If unticked, the video is hidden from users.

This feature enhances visual communication within the system, allowing for a more engaging user experience.

6.47.2 Add MP4 videos

ACLS allows admin staff to directly upload MP4 video clips for training, communication, or promotional purposes. These videos are hosted within ACLS and can be displayed on the landing page or video library.

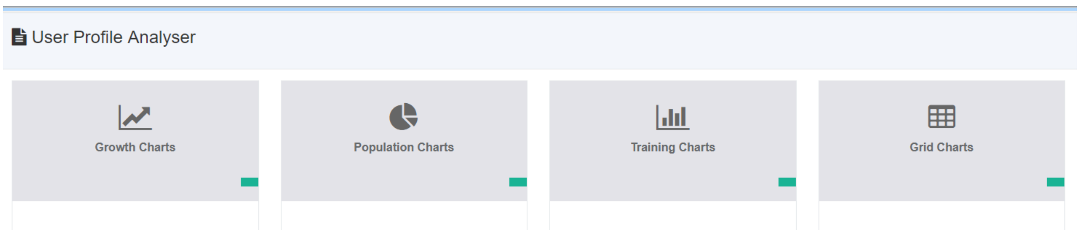
To add a new MP4 video, go to the Video Repository Manager and fill in the following fields:

Parameter	Description
Title	The title of the video clip to be displayed to users.
Upload MP4	Upload the video file directly from your device in .mp4 format.
Resource Group	Optionally link the video to a specific **resource**. *(Future updates will allow sorting by resource.)*
Video Type	Select a category such as *general*, *educational*, or *safety*. *(Sorting by type will be supported in future versions.)*
Set as Default	If ticked, this video will be the **default clip** shown on the landing page. Only one default clip can be active at a time.
Status	Tick to **enable** and display the clip on the video page. Untick to **hide** it without deleting.

This feature allows labs to maintain a self-contained library of training and informational videos, viewable on login and accessible to all users.

6.48 User Profile Analyser

ACLS includes a **graphical analytics tool** that helps administrators understand the structure and evolution of the user base. These insights support decision-making related to capacity planning, training delivery, and infrastructure support.



6.48.1 Growth charts

Growth charts display the number of registered users over a selected period.

Useful for:

- Tracking userbase growth
- Forecasting future demand

- Planning system or resource expansions

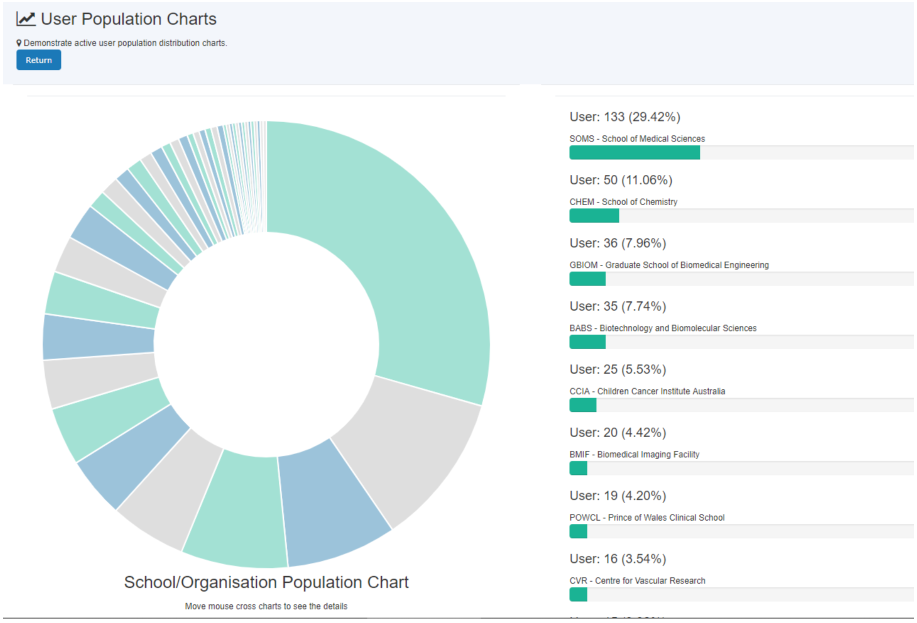
6.48.2 Population charts

Population and geographic distribution charts reveal how users are distributed across:

- Research groups
- Schools or faculties
- Geographic locations

Useful for:

- Understanding user demographics
- Prioritising resource allocation
- Identifying high-impact research clusters

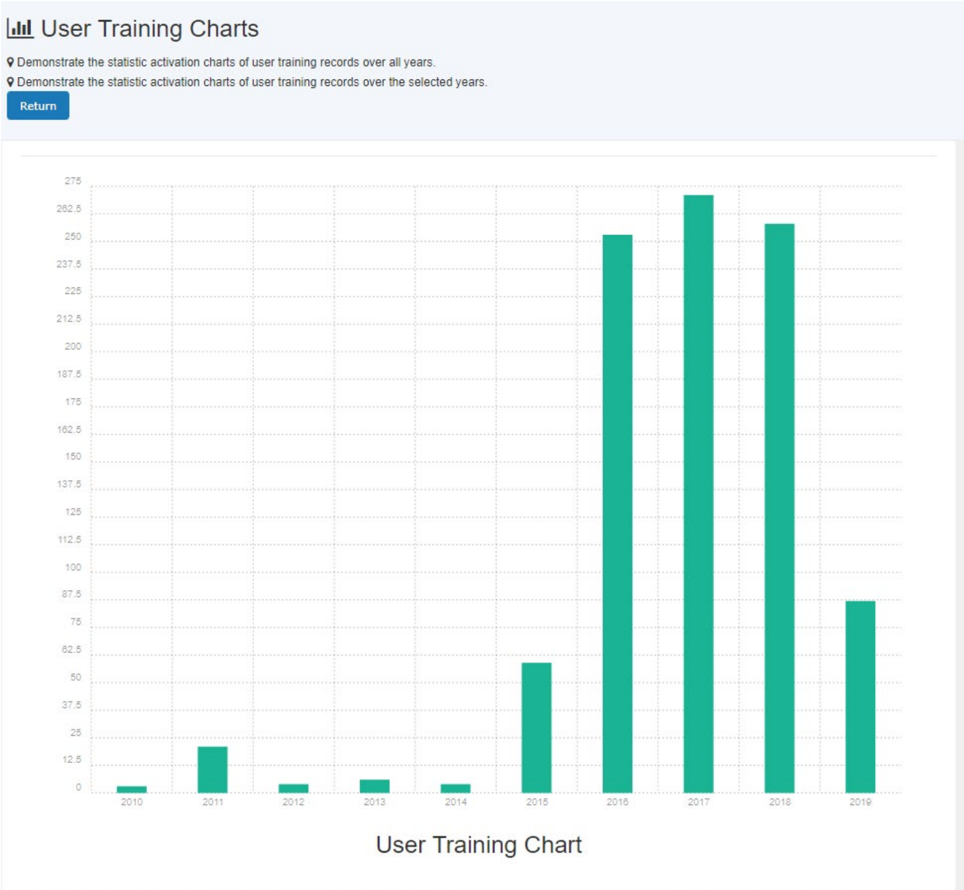


6.48.3 Training charts

Training charts show the number of training records submitted or completed over time.

Useful for:

- Anticipating **training demands**
- Evaluating **training program effectiveness**
- Identifying **periods of peak onboarding**



These visual tools help lab managers proactively manage infrastructure, improve user experience, and align with institutional growth trends.

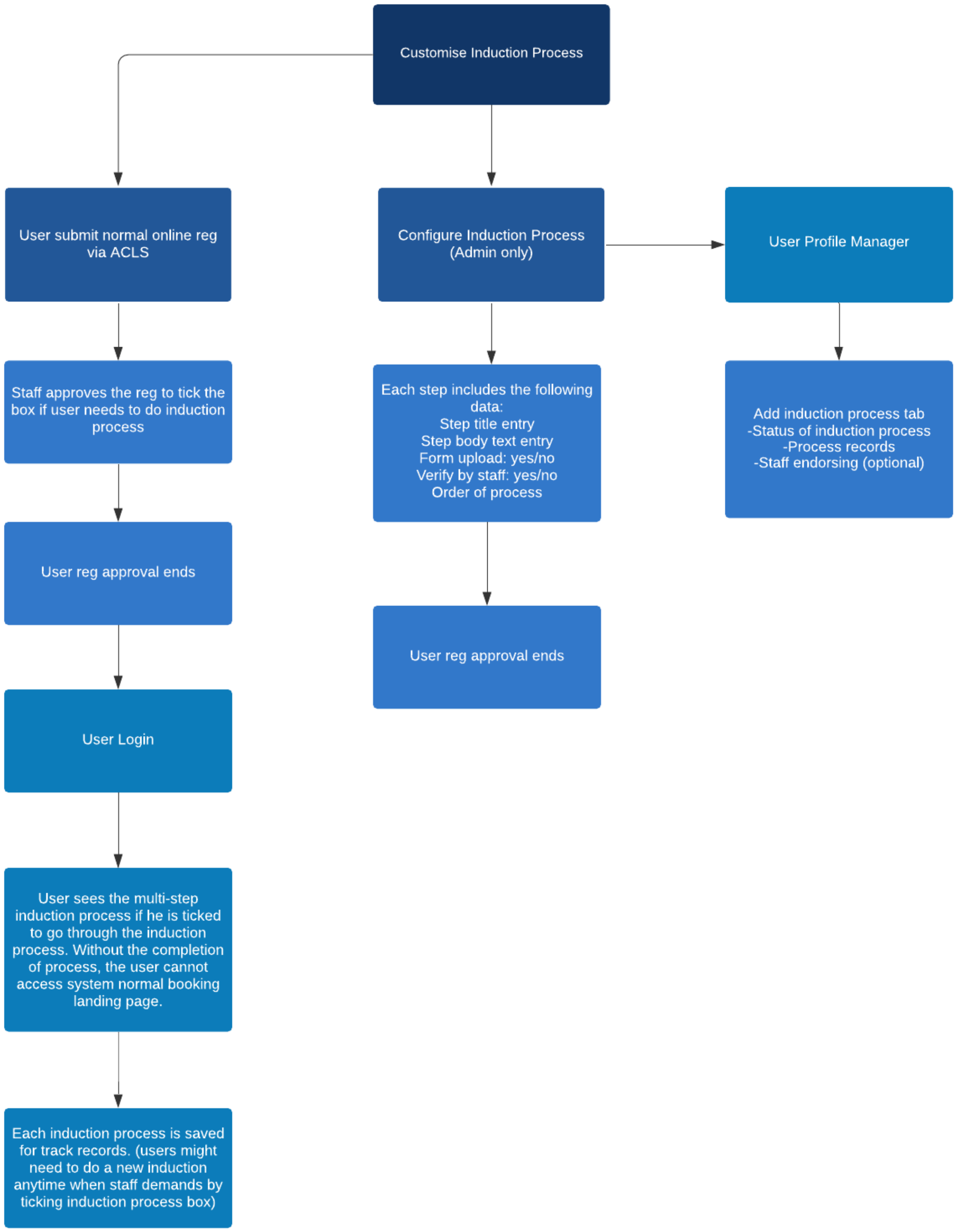
6.49 Induction Process

The induction process is implemented for labs that require users to follow specific procedures, such as medical labs and PC2 labs, before granting access. This process ensures that users are aware of relevant safety protocols and lab-specific requirements.
As part of this process, users must complete additional induction forms. These forms are submitted for review and must be verified by designated lab staff before access is granted.

ACLS also supports a **collaborative induction protocol**, allowing labs to share verified induction records. This feature reduces redundancy by preventing users from having to complete identical inductions when moving between participating labs.

From the user's perspective:

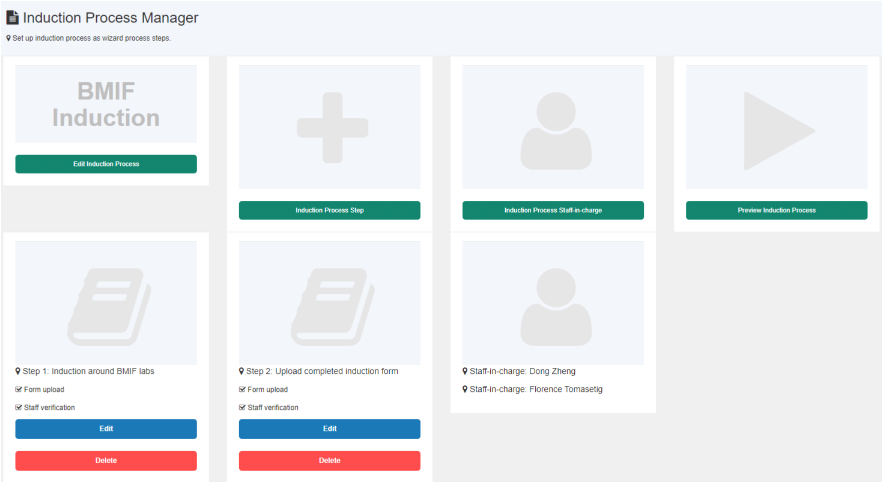
- The user completes the standard registration process.
- Upon first login, they are prompted to complete the induction procedure.
- Until the induction is completed and verified, the user will not have access to the booking interface.



6.49.1 Set Up Induction Process

You can configure multiple induction processes to suit your lab's operational and safety requirements.

To begin, navigate to: ***Staff → Utility → Induction Process Manager***



The initial setup includes the following steps:

Create the Induction Header and Body:

Start by entering a **header** (title) and a **body** (description) for the induction process. This provides users with an overview of the induction requirements.

Define Each Induction Step:

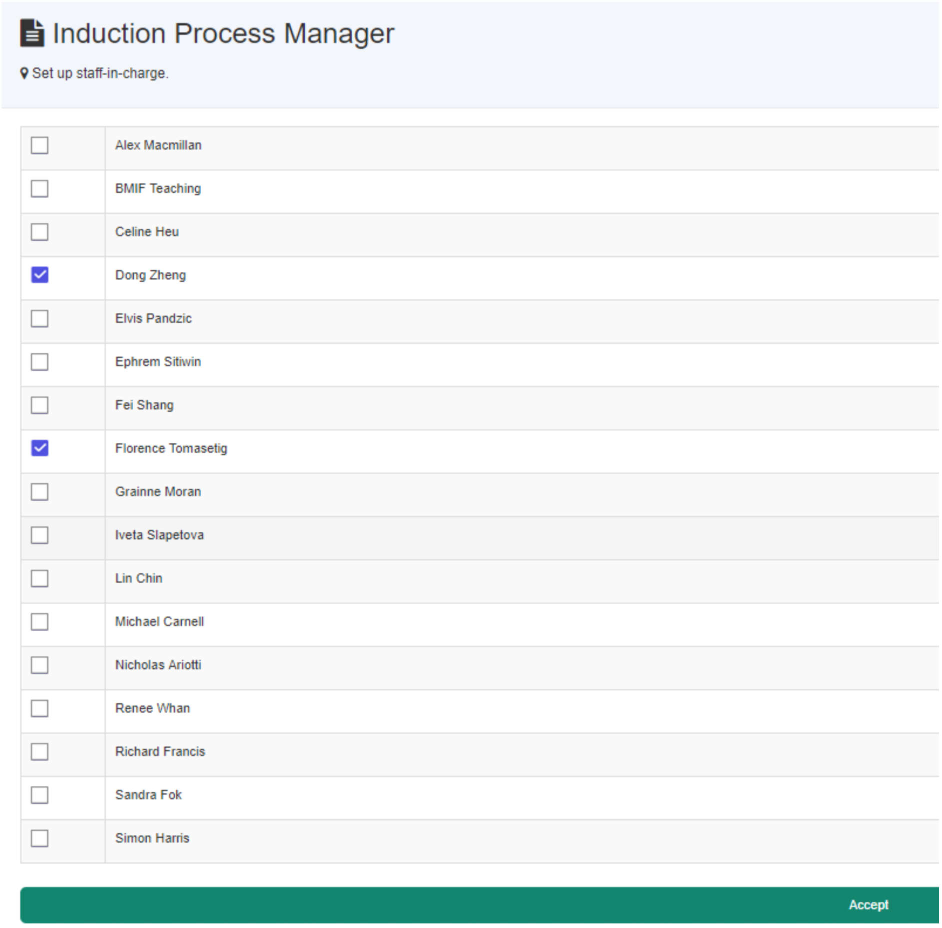
For each step:

- Provide a description of the task or requirement.
- Specify whether the step requires a form upload (e.g., safety checklist, consent form).
- Indicate if the step requires staff verification before the user can proceed.
- Assign a step number to define the order of the induction sequence.

Assign Staff-in-Charge:

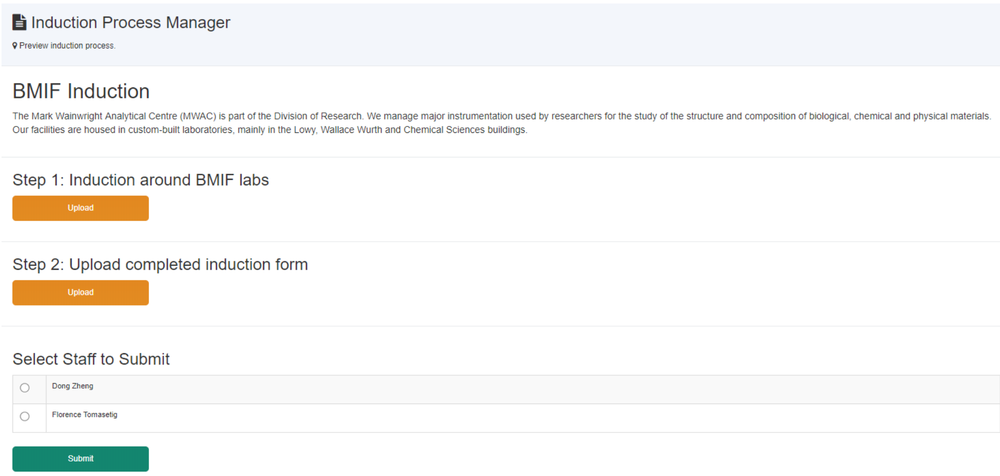
Each induction process must have designated staff members responsible for verifying user submissions.

- Select staff from the checkbox list within the Induction Process Manager.
- When a user completes the induction process, ACLS will send email notifications to both the user and the assigned staff-in-charge.



Preview the Induction Process:

Once configured, you can **preview the full induction flow** to verify the setup and user experience.



6.49.2 *Enable Induction Process to Users*

ACLS allows you to enforce induction requirements for both new and existing users. This ensures compliance with lab-specific safety and operational protocols before granting system access.

For New Users:

During the processing of a new registration (via **User Profile Manager → Process Online Registration**):

You can select or deselect the relevant induction processes from the list of available induction processes.

This determines which induction requirements are assigned to the new user upon approval.

For Registered Users:

To apply induction processes to existing users:

- Go to User Profile Manager, select the user, then navigate to the Induction Process tab.
- From there, you can assign or remove induction processes as needed.

Enabling or Disabling Induction for a User:

In the **Induction Process** tab:

- You can toggle the Induction Process On/Off for a user.
- Disabling it will exempt the user from any assigned induction requirements.

Each induction process assigned to a user is recorded in their profile for administrative tracking and future reference.

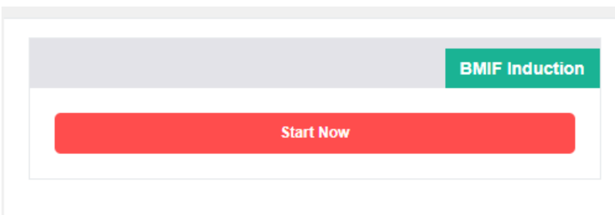
Completing Induction (User Perspective):

Once induction is enabled:

- When the user logs in, the Booking page will prompt them to complete induction before they can proceed with bookings.
- The user clicks Start Now to begin. ACLS generates a unique reference ID for the induction record.
- The user completes each step as defined in the induction process, uploading any required forms or documentation.
- For the final submission, the user selects a staff member to notify of their induction completion.
- The process is only marked complete after the assigned staff member verifies the user's submission.

From the staff view, the user’s profile will display:

- Each induction step completed
- Uploaded files (if applicable)
- Verification status and timestamps



6.50 Resource/Consumable QR Codes

QR codes in ACLS enhance lab efficiency by enabling fast access to equipment and consumables. Users can:

- Quickly book and access equipment
- Order consumables
- Record consumable usage
- Access lab-specific resource information

6.50.1 QR Code Overview

QR codes provide a convenient, mobile-friendly interface for both resource and consumable interactions. Scanning a QR code with a smartphone camera takes the user directly to the corresponding resource or consumable page within ACLS.

6.50.2 Resource QR Codes

Each resource can have a dedicated QR code. These codes are:

- Displayed on the catalogue and calendar pages
- Usable via smartphones, printed displays, or touchscreens
- Upon scanning, users are directed to the resource detail page, where they can:
- View booking availability
- View trainers and access conditions
- Make bookings directly from the QR-linked page

Mobile App Requirement

QR codes are **mandatory** for resource visibility in the ACLS mobile app.

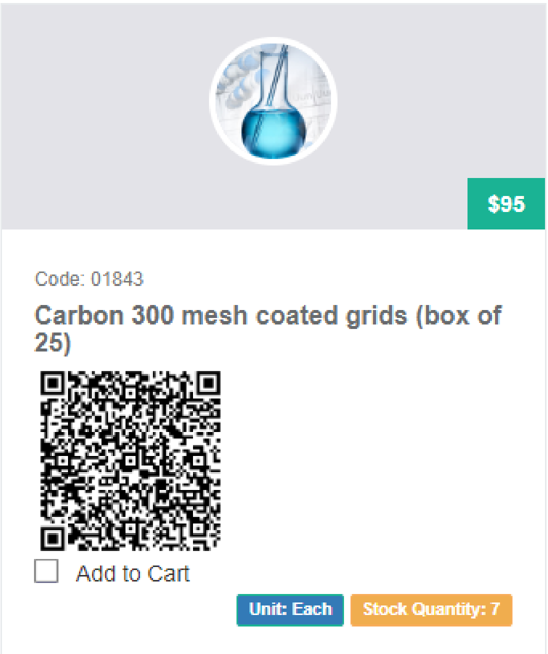
- Resources **without QR codes will not appear** in the mobile app
- QR-enabled resources ensure seamless mobile access and interaction

6.50.3 Consumable QR Codes

Each **consumable** can also have a QR code linked to its order and tracking page. Users can:

- Place orders
- Record usage
- Review item details

This streamlines stock management and audit trails for lab consumables.



Mobile App Requirement

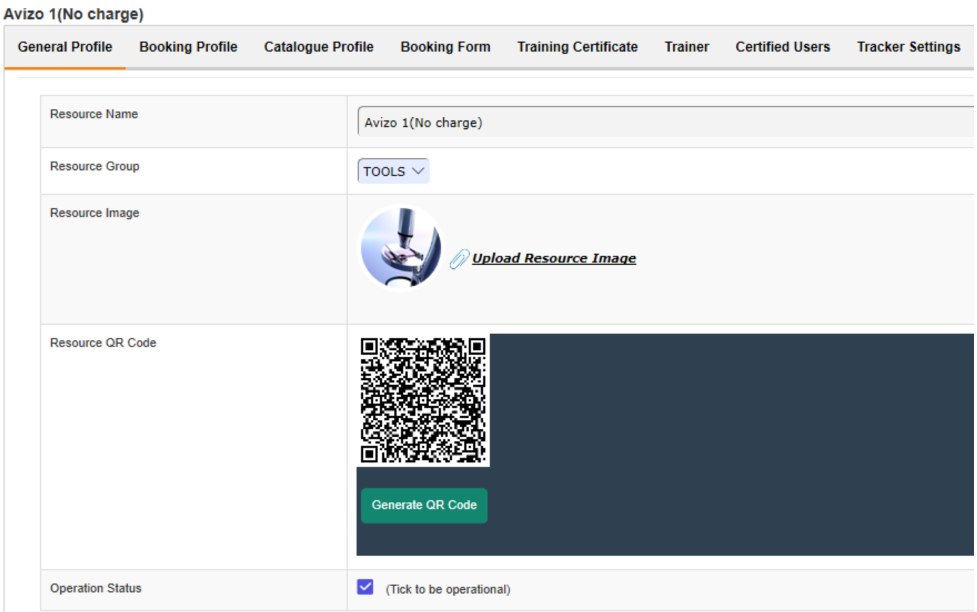
QR codes are **mandatory** for consumable visibility in the ACLS mobile app.

- Consumables **without QR codes will not appear** in the mobile app
- QR-enabled consumables ensure seamless mobile access and interaction

6.50.4 Generating Resource QR Codes

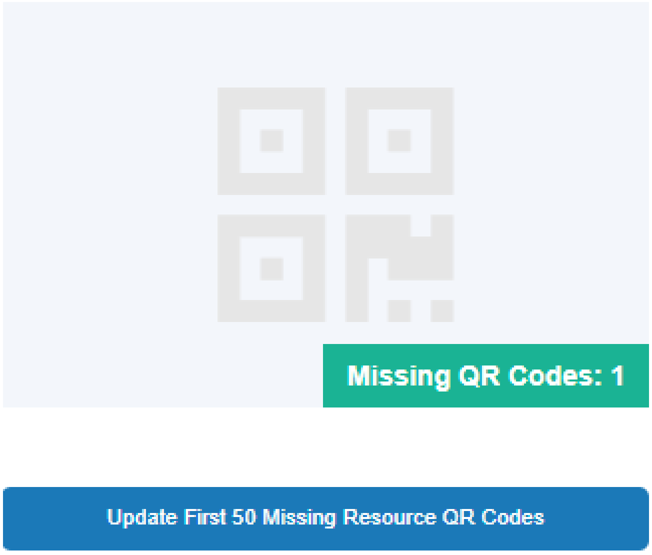
To generate a QR code for a single resource:

- Go to Resource Manager
- Select the resource and click the Generate QR Code button



To **batch generate QR codes** (up to 50 at a time):

- Go to Resource Manager → Batch Generate QR Codes



6.50.5 *Generating Consumable QR Codes*

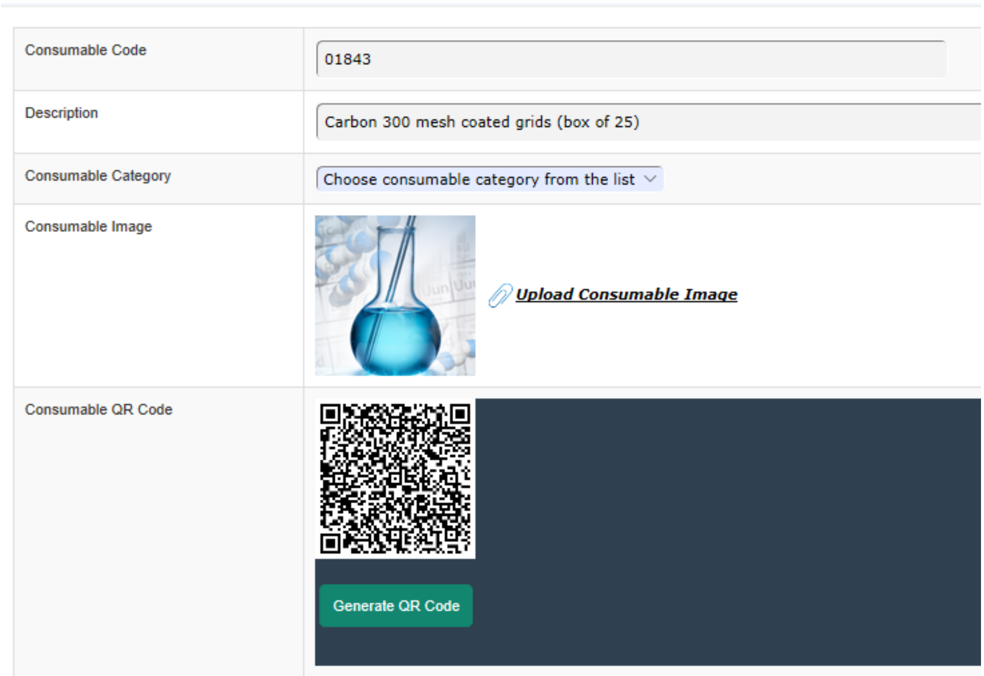
QR codes for consumables are created in a similar way:

- To generate individually:

Go to **Consumables Tab** → **Edit Consumables** → Select an item → **Generate QR Code**

- To batch generate (up to 50 codes):

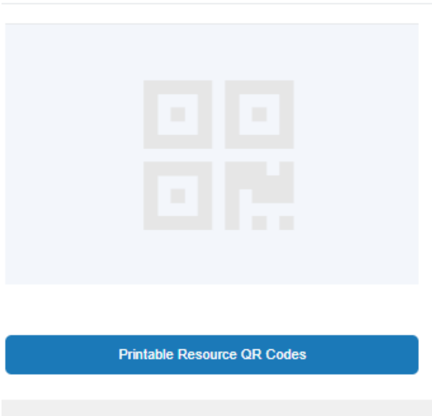
Go to **Edit Consumables** → **Batch Generate QR Codes**



6.50.6 Printable Resource QR Code List

Lab staff can print a consolidated list of resource QR codes for display purposes:

- Go to Resource Manager
- Choose Print All QR Codes to generate a single-page document
- This document can also be exported via Print to PDF



6.50.7 Printable Consumable QR Code List

Similarly, a consolidated QR code list for consumables is available:

- Go to Edit Consumables
- Use Print All QR Codes to create a display-ready or PDF-exportable page

This allows lab staff to post QR codes for quick consumable access throughout the lab.

6.51 Social Distancing Lab Space (COVID-19)

To comply with COVID-19 or other safety-related occupancy policies, ACLS allows administrators to define **lab spaces with social distancing limits**. This feature enforces a cap on the **maximum number of concurrent users** allowed in a shared workspace, regardless of how many tools are booked.

A **lab space** consists of:

- A defined set of linked resources (tools/equipment), and
- A maximum concurrent user limit

This setup helps prevent overcrowding in shared lab environments.

Case Study #1:

A room contains **5 tools**, each booked individually, but the lab policy allows only **4 concurrent users** due to social distancing.

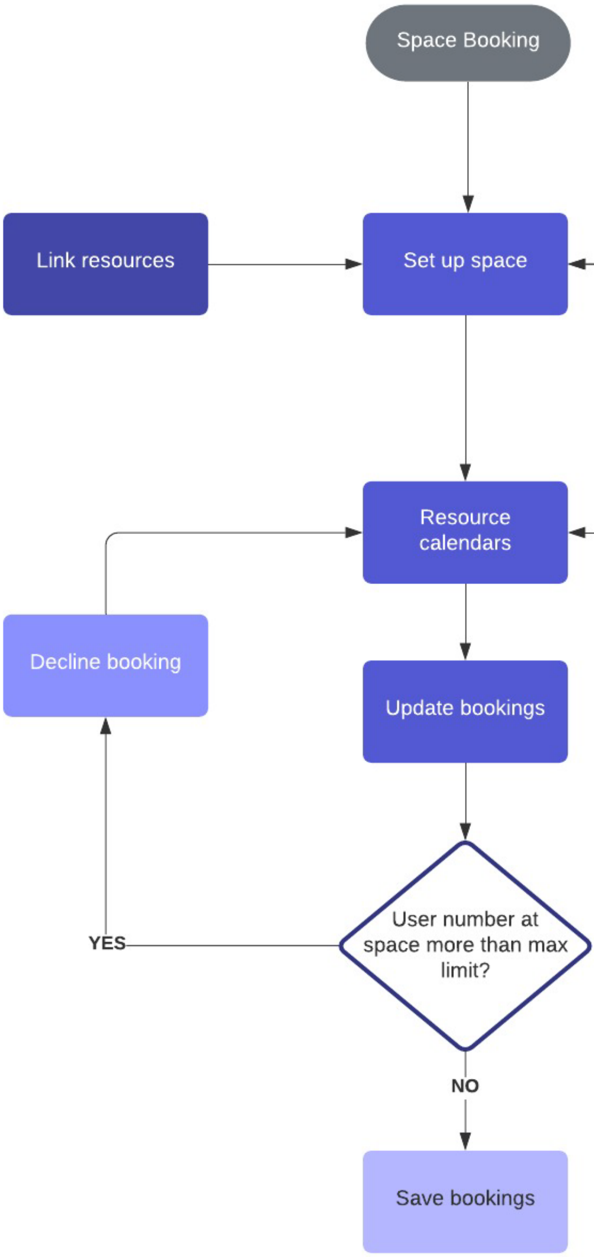
- All 5 tools can be linked to a single lab space, even if they belong to different resource groups.
- The system monitors the total number of users across all bookings and blocks excess usage.

Case Study #2:

A lab needs to **temporarily shut down** due to lockdown or maintenance.

By setting the **maximum user limit to zero**, all linked resources in the lab space are effectively **disabled for booking**.

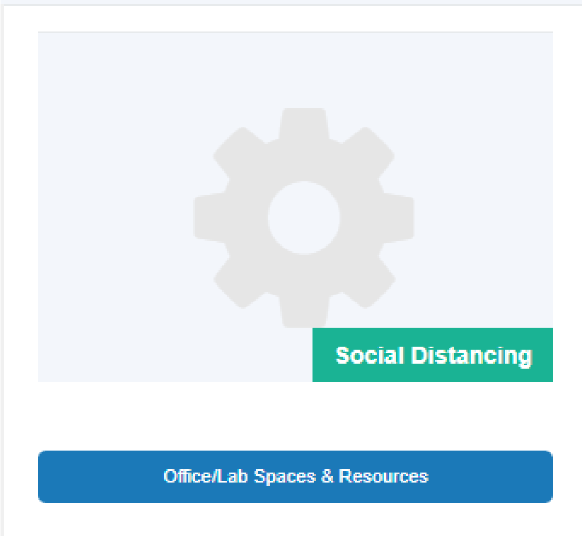
This feature operates **independently** of resource groups, meaning resources from multiple groups can be managed under the same space restriction.



6.51.1 Create Spaces

To configure a lab or office space with occupancy restrictions, navigate to: *Staff tab → Resource Manager → Office/Lab Space*

This module allows you to **add and manage lab spaces**, particularly useful for enforcing social distancing or occupancy controls.



Initial Setup:

When creating a new lab space, define the following attributes:

- Name – The display name of the lab space
- Location – Physical location or room identifier
- Linked Resources – Select the tools or equipment located within the space
- Maximum Concurrent Users – Set the limit of users allowed in the space at any one time (optional)
- User Limitation Rule – Define whether this space restricts access based on bookings
- Linking Resources to a Lab Space

Resources can be associated with a lab space in two ways:

From the Lab Space Editor:

Select multiple resources to link during lab space creation or editing.

From the Resource Editor:

Open an individual resource profile and assign it to a lab space via the **Lab Space** field.

This dual approach provides flexibility when managing shared spaces with overlapping equipment and users.

6.51.2 Space Booking – Resource Calendar

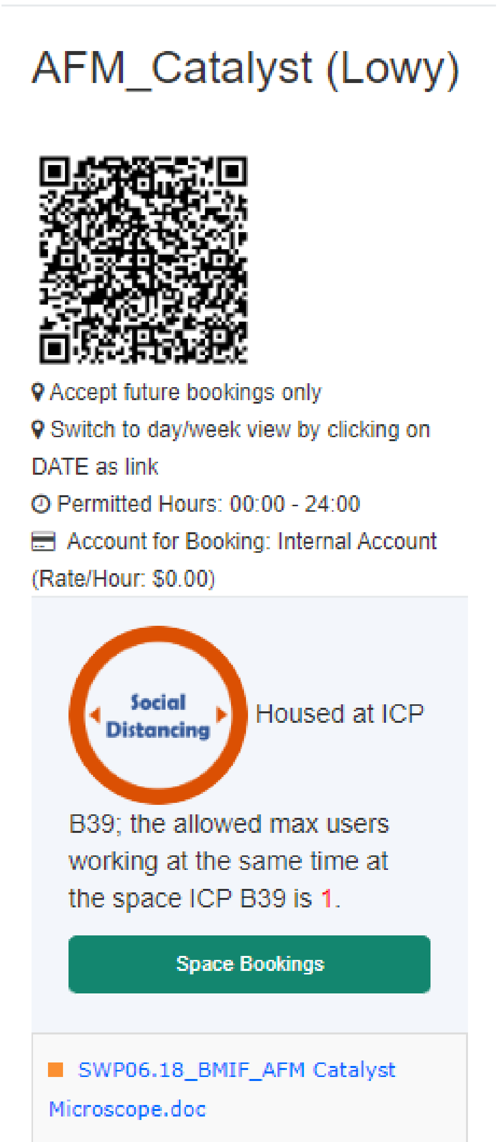
If **space booking** is enabled for a lab or office space, users can make bookings via the **Space Booking Dashboard** located on the **Resource Calendar** page.

This feature provides a visual interface similar to the standard resource booking calendar.

Key Features:

- **Lab Space Calendar View:**

Users can view booking availability and existing reservations for a specific lab space.



- **Timeslot Visualization:**

Each day's availability is displayed as a series of timeslots, with visual indicators for:

  - **Occupied periods**
  - **Available times**
  - **Additional notes** (e.g., maintenance, restricted access)

This feature allows users to plan bookings while ensuring they comply with **concurrent user limits** defined for the space.

6.51.3 Space Booking – Timeline Calendar

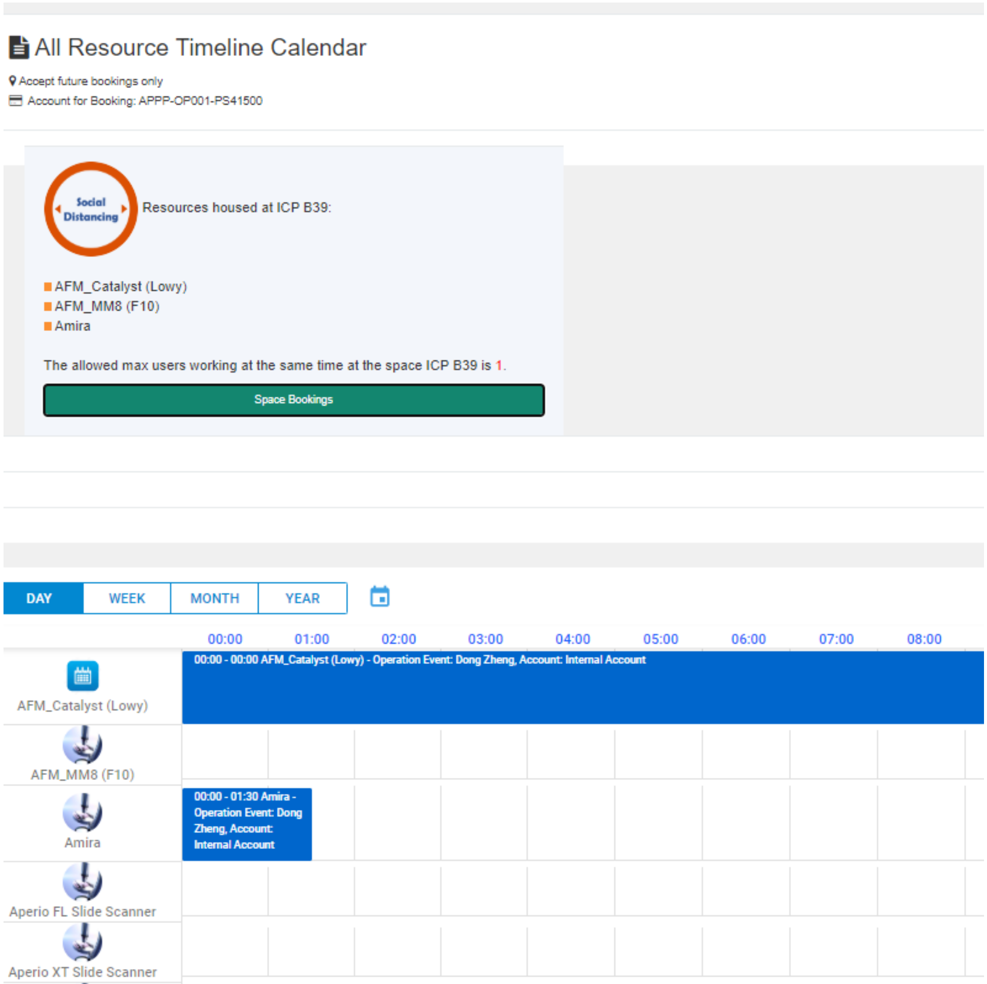
In addition to the standard calendar view, the Lab Space Booking system also provides a timeline calendar view, similar to that used for resource bookings.

This view displays all existing bookings in a horizontal timeline format, allowing users and administrators to:

- Quickly visualise occupancy trends across the day or week

- Identify overlapping bookings or congestion within the lab space
- Monitor compliance with the maximum concurrent user limit

The timeline view is especially useful for managing high-traffic shared spaces and for coordinating bookings across multiple users or teams.



- *Is space booking about limiting the bookings?*

  No, space booking is not about limiting the number of bookings.

  It is specifically designed to **limit the number of concurrent users** within a defined lab space, regardless of how many resources are booked.

  For example:

  - A single user may book multiple resources located in the same lab space.
  - That user is still counted as one concurrent user for space occupancy purposes.

This approach ensures that lab usage complies with space-specific safety or operational limits (e.g., social distancing), without unnecessarily restricting legitimate multi-resource workflows.

- *What calendars are applied to space booking feature?*

Space booking restrictions apply only to the "operation booking" category.

Bookings made under other calendar categories—such as **training**, **group sessions**, or **commercial bookings**—are **not subject** to space booking limits. These categories are typically used by staff and are exempt from the concurrent user cap.

Note for staff:

While these bookings bypass space restrictions, it is strongly recommended that staff remain mindful of social distancing and lab safety guidelines when creating non-operational bookings that could contribute to space congestion.

6.52 Loan-Type Resources

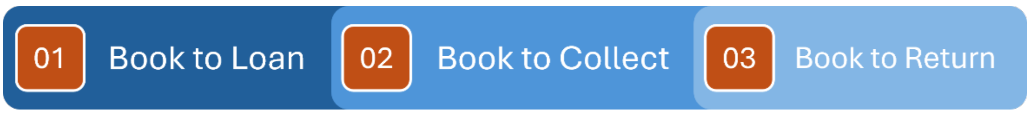
ACLS supports a Loan Resource/Item module for managing borrowable items such as equipment, instruments, or kits. This system ensures traceability, accountability, and streamlined handling of items that leave the lab temporarily.

6.52.1 Working Concept

The loan module functions similarly to a library system and is structured around **three key actions**:

- Book to loan – Reserve the item in advance
- Book to collect – Confirm the pickup of the item
- Book to return – Schedule the return of the item

Each step is logged to maintain a complete and auditable loan history. This ensures items are not misplaced or unaccounted for during their loan lifecycle.



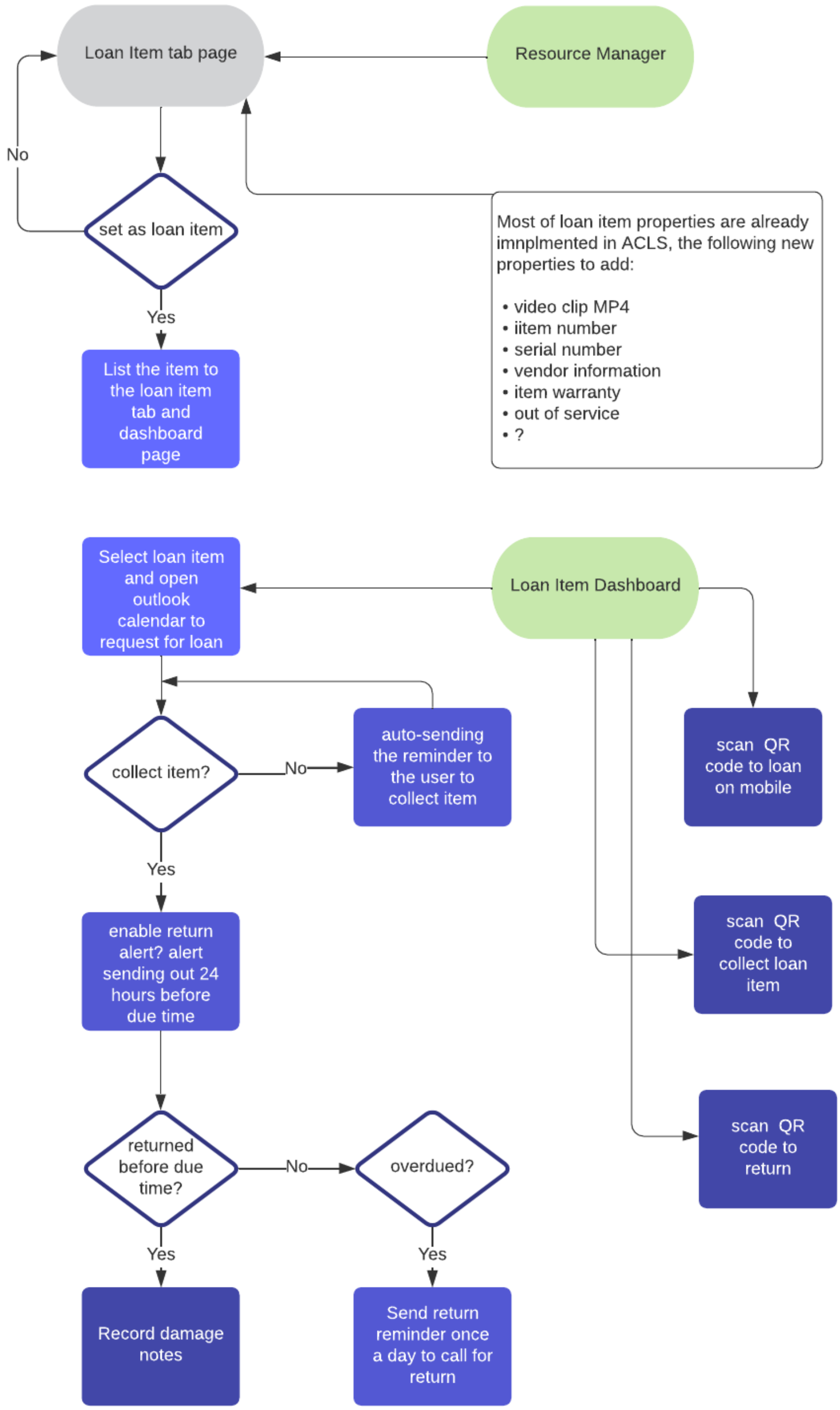
No barcode scanner required:

All processes—loan, collection, and return—are facilitated using QR codes. Users simply scan the code linked to the item to proceed through each stage.

Email Notifications:

To ensure oversight, ACLS automatically notifies relevant staff at each stage of the loan process:

- **Book to loan**: An email is sent to the resource trainers for the loaned item.
- **Book to collect**: An email is sent to the resource trainers, and the primary trainer is also CC'd for awareness.
- **Book to return**: An email is sent to the resource trainers, again including the primary trainer in the notification.



Loan Item tab page
Resource Manager
No
set as loan item
Yes
List the item to the loan item tab and dashboard page
Most of loan item properties are already imnplmented in ACLS, the following new properties to add:
• video clip MP4
• iitem number
• serial number
• vendor information
• item warranty
• out of service
• ?
Select loan item and open outlook calendar to request for loan
Loan Item Dashboard
collect item?
No
auto-sending the reminder to the user to collect item
scan QR code to loan on mobile
Yes
enable return alert? alert sending out 24 hours before due time
scan QR code to collect loan item
scan QR code to return
returned before due time?
No
overdued?
Yes
Yes
Record damage notes
Send return reminder once a day to call for return

6.52.2 Set Up Resource as Loan Item

To configure a resource as a **loanable item**, go to: *Staff tab → Resource Manager → [Select Resource]*

From the resource profile page, you can enable **Loan Item Mode** by editing the resource settings.

Note: Once a resource is designated as a loan item, it will **no longer appear on the standard resource booking calendar**. Instead, it will be managed through the loan booking workflow (Book to Loan → Collect → Return).

Additional Loan Item Fields:

When setting up a loan item, you can add supporting metadata to aid with inventory, traceability, and usage guidance:

- Item Number (e.g. internal reference or service tag)
- Product Serial Number
- Quantity Available (number of identical items that can be loaned)
- Purchase Date
- Product Vendor Information
- Product Warranty Information
- YouTube Video Embed (e.g. tutorial or setup guide)

This information will be visible to users and staff during the booking and loan process, helping them understand the item, care requirements, and usage instructions.

6.52.3 Book to Loan (User)

To initiate a loan, the user begins by clicking **Book to Loan** on the loan item's page.
This will open a calendar interface where the user can:

Select the loan period by specifying the **start time** and **end time** for the booking.
Once the loan booking is submitted, the user is **required to book a separate collection time** for physically picking up the item from the lab office or storage location.

Note: A loan is not considered active until the item is collected through the **Book to Collect** step.

6.52.4 *Book to Collect (User)*

After booking a loan period, the user must proceed to **Book to Collect** in order to schedule a time to **physically pick up the item**.

Clicking **Book to Collect** opens the **Collection Booking Page**, where the user can:

Select an available **time slot** to collect the item from the designated **lab store or office**.

Reminder: The loan process is not considered active until the collection is completed. The system will log the collection time and notify the assigned trainers.

6.52.5 *Book to Return (User)*

To complete the loan process, the user must schedule a time to return the item by clicking **Book to Return**.

This opens the **Return Booking Page**, where the user can:

Select an available **return time slot** with the lab store or designated return location.
The return booking ensures that staff are prepared to receive the item and update the system status accordingly.

Note: Once the return is completed, the item becomes available for the next user, and the loan record is marked as **closed**.

6.52.6 *Collect Loan Item (Admin)*

Once a user has arrived to collect their booked item, **admins must confirm the collection** by clicking the **Collect** button in the loan management interface.

This action formally records the **handover of the item** and initiates the active loan period.

During this step, admins are required to record:

- The user collecting the item (auto-filled if applicable)
- The expected return date
- Any optional notes (e.g. item condition, special handling instructions)

Tip: Use the notes field to record important information such as visible wear, damage, or user acknowledgement of special conditions.

This step ensures that the loan is fully tracked and auditable from start to finish.

6.52.7 Return Loan Item (Admin)

After an item has been marked as **collected**, the **Return** button becomes available in the loan management interface.

When the user returns the item, admins must:

- Click the Return button to confirm and record the return
- Optionally ad any notes regarding the item's condition or return status

Once recorded, the loan is considered **complete**, and the item is made available for future bookings.

All **Collection** and **Return** actions are logged in the system. These historical records are accessible to admin staff for tracking, reporting, and accountability purposes.

6.52.8 Loan Item QR Code

Each loan item can be assigned a **QR code**, similar to standard resource booking QR codes. When scanned, the QR code directs the user to the **Loan Item Page**, where they can:

- View loan details
- Submit a Book to Loan request
- Proceed with collection or return steps

This allows users to manage the entire loan process directly from their **mobile device**, without needing access to the desktop interface.

Admin View:

Loan logs include a source indicator, showing whether the user initiated the booking via the **desktop site** or the **mobile QR code page**. This provides greater traceability and insight into user behaviour.

6.53 Last booking of the certified active users

The **Training Manager** includes a feature to review the **last booking activity** of users who are certified to use a selected resource.

This tool is particularly useful for evaluating the impact of changes to **certificate expiry settings**, such as adjusting validity duration or re-certification intervals.

How It Works:

- Select a resource from the Training Manager.
- The system retrieves a list of users certified on that resource.
- For each certified user, the last recorded booking is displayed.

Visual Indicators:

- If a user's last booking occurred more than 12 months ago, the booking date is highlighted in red.
- This helps administrators quickly identify inactive users whose certifications may no longer reflect current usage.

Tip: Use this report before modifying certificate expiry rules to assess how many users may be affected.

6.54 Resource Maintenance Profile

Many labs require a structured preventive maintenance plan to ensure equipment reliability and track maintenance-related costs over time.

ACLS provides a **Resource Maintenance Profile** to manage:

- Maintenance schedules
- Cost tracking
- Historical service records

This profile is embedded within each **resource profile** and supports detailed metadata for scheduled maintenance activities.

Maintenance Profile Fields:

- Resource Brand
- Resource Model
- Serial Number
- Maintenance Level (e.g., minor, major)
- Last Maintenance Date
- Last Maintenance Comments
- Maintenance or Certificate Type
- Next Maintenance Due Date
- Maintenance Frequency (e.g., monthly, annually)
- Estimated Maintenance Cost
- Cost Owner
- Other Cost Owners (if applicable)

6.54.1 Enable resource maintenance profile feature

The **Resource Maintenance Profile** feature is **disabled by default**.

To enable it, please contact your **ACLS system administrator** to activate the setting in the global configuration.

6.54.2 Set up resource maintenance profile

Once enabled, you can configure the maintenance profile as follows:

- Navigate to the Resource Manager page.
- Add or edit a resource and select the Maintenance tab.

Some fields—such as **Brand**, **Model**, and **Serial Number**—are entered via the **Catalogue Profile Page** and automatically carried into the maintenance profile.

ACLS stores and displays all maintenance records for each resource to support traceability and reporting.

6.54.3 Alert on next maintenance due date

To ensure timely servicing, ACLS automatically sends out **maintenance alerts**:

- 10 days before the next due date
- 30 days before the next due date

These notifications are sent to:

- The global "Contact Us" email address
- The assigned Resource Cost Owners

This ensures that maintenance is planned and actioned without unexpected service interruptions.

6.55 MoxyTouch Service (Powered by UniLab)

MoxyTouch is a cloud-based digital signage platform developed by **UniLab**, enabling real-time content display and management across screens located anywhere in the world.

Access the service at: https://www.unilab.com.au/moxytouch/moxytouch-home

MoxyTouch integrates seamlessly with ACLS to enhance **communication, visibility, and operational awareness** across laboratories, offices, and shared research environments.

Key Features:

- Remote Screen Management: Manage and update displays from any location
- Flexible Widget Containers: Design custom layouts using modular widgets
- DIY Widget Builder: Create tailored content without development effort
- Real-Time Lab Communication: Display schedules, alerts, safety information, and announcements
- Workspace & Safety Messaging: Support social distancing, lab rules, and operational notifications

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Collaboration with UniLab:

ACLS and UniLab jointly deliver an integrated digital lab infrastructure ecosystem, combining:

- Resource management (ACLS)
- Real-time display and communication (MoxyTouch)

This partnership enhances efficiency, safety, and transparency across research environments.

6.55.1 Lab Data Analytics Integration (Labcast)

ACLS enables lab analytics to be streamed directly to MoxyTouch via **Labcast**, transforming raw data into visual insights.

Analytics Display Types

- Growth Charts: Visualise user growth trends over time
- Population Charts: Show user distribution across groups or regions
- Training Charts: Track training activity and forecast future demand

Benefits

- Supports data-driven decision-making
- Enhances transparency across teams
- Improves planning and resource allocation

6.55.2 Setting Up Labcast

Step 1: Configure in ACLS

- Navigate to My Labcast
- Select desired widgets (e.g., charts, calendars)

- Preview live output

Step 2: Configure in MoxyTouch

- Access MoxyTouch dashboard
- Create or edit a display layout
- Add Labcast widgets
- Preview and publish

For support, contact UniLab.

6.55.3 Live ACLS Calendar Display

MoxyTouch enables **real-time broadcasting of ACLS booking calendars** to screens across facilities.

Use Cases

- Lab entrances
- Clean rooms and PC2/PC3 labs
- Microscopy suites

Provides **airport-style visibility** of bookings, improving access control and user awareness.

Display Themes

- Standard (light background)
- Dark (ideal for low-light environments)

Deployment

- Requires Labcast configuration in ACLS
- Requires MoxyTouch subscription

6.55.4 QR Code Widgets (Resource & Consumables)

MoxyTouch supports **interactive QR-based operations** integrated with ACLS.

Resource QR Code Widget

- View resource details

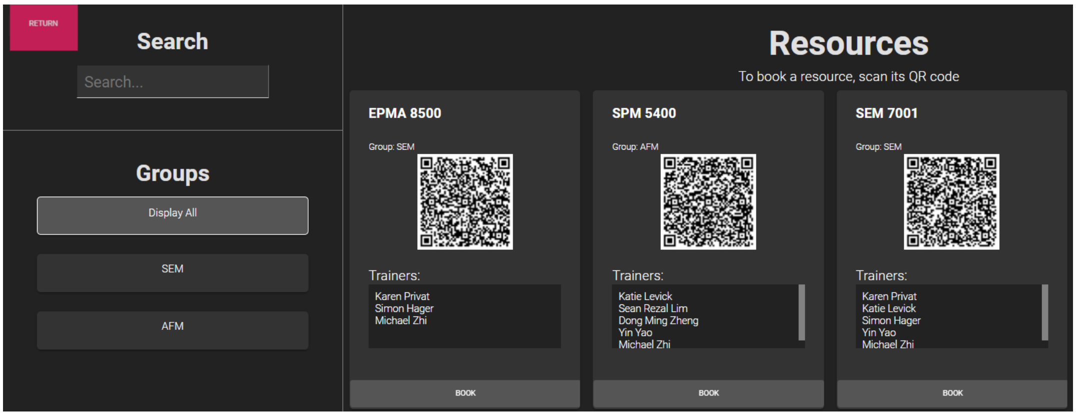
- Modify bookings
- Access training information

Consumable QR Code Widget

- Record usage
- Track inventory and expiry
- Place orders

Resource Group QR Widgets (Labcast)

- Generate QR widgets for resource groups
- Display on shared screens
- Enable fast, on-site interaction



6.55.5 Staff Roster Calendar Integration

MoxyTouch enables public display of staff rosters.

Setup Overview

- Enable roster in ACLS
- Configure roster calendar
- Publish via MoxyTouch

Features

- Outlook integration
- Public display on screens or dashboards
- Real-time updates with notifications

6.55.6 *User Training Records Display*

Displays **real-time training and certification records** on screens.

Benefits

- Instant compliance verification
- Hands-free access
- Ideal for controlled environments (e.g., PC2/PC3 labs)

6.55.7 *User Sign-In via MoxyTouch*

Enables onsite user sign-in using touch screens.

How It Works

- Users select their name from a list
- System logs entry time
- Updates ACLS access records

Benefits

- Improves traceability
- Eliminates manual sign-in sheets
- Supports compliance in restricted environments

6.55.8 *Summary*

MoxyTouch transforms ACLS into a **real-time, visible, and interactive lab ecosystem**, enabling:

- Live operational visibility
- Enhanced communication
- Data-driven decision-making
- Seamless integration between digital systems and physical lab spaces

6.56 MoxyBot Service (Powered by UniLab)

MoxyBot is an AI-powered lab knowledge assistant developed by UniLab, designed to deliver real-time, intelligent support for researchers, lab users, and facility staff.

Built on enterprise-grade AI models from OpenAI, MoxyBot integrates seamlessly with ACLS to transform static documentation into an interactive, on-demand knowledge system.

MoxyBot is accessible via: https://www.unilab.com.au/moxybot/moxybot-home

6.56.1 Lab Knowledge Chatbot

MoxyBot functions as a smart digital assistant within research environments, providing:

- AI-Driven Knowledge Engine: Trained on lab-specific documentation to deliver accurate, context-aware responses
- 24/7 Availability: Supports users anytime, including after-hours and weekends
- Instant Response Times: Provides immediate answers to common operational and technical questions
- Multi-Language Support: Enables accessibility for diverse and international research communities

6.56.2 Lab Pain Points Addressed

MoxyBot is designed to solve common challenges in laboratory operations:

- Limited After-Hours Support: Researchers often require assistance outside standard working hours
- Inconsistent Information Delivery: Variations in staff responses can lead to confusion and inefficiencies
- Fragmented Documentation: Critical knowledge is distributed across SOPs, manuals, PDFs, and training materials
- Slow Information Retrieval: Users spend excessive time locating relevant information under operational pressure

6.56.3 Key Benefits of MoxyBot

- Contextual Information Delivery: Responds based on curated internal documentation, ensuring reliability and reducing hallucinations
- Intelligent Knowledge Extraction: Converts complex procedures into clear, actionable answers using natural language queries
- Workflow Assistance: Supports tasks such as experiment preparation, equipment usage, and training processes

- Scalable and Maintainable: Easily updated with new documents as lab processes evolve

- Educational Support: Enhances onboarding and training by simplifying complex concepts for users

6.56.4 Data for Bot Training

MoxyBot is trained exclusively on **lab-controlled, non-personal, work-relevant data**, ensuring compliance and data governance.

Typical training sources include:

- Operational procedures and SOPs
- Equipment and instrument manuals
- Training materials and certification guides
- Software and system usage documentation

Note: Personal or sensitive data is excluded from training datasets.

6.56.5 Proven Results: ACLS Chatbot

The ACLS Chatbot, powered by MoxyBot, demonstrates measurable operational benefits:

- Reduced inconsistency in user support responses
- Lower administrative workload for ACLS staff
- Instant access to structured, accurate information
- Continuous 24/7 automated support for users

6.56.6 Lab Bot Demo

To explore MoxyBot capabilities or request a tailored deployment for your lab:

support@unilab.com.au

6.56.7 Summary

MoxyBot represents a key step in the evolution of ACLS toward an intelligence-driven research infrastructure platform, enabling:

- Real-time knowledge access
- Improved operational efficiency
- Enhanced user experience
- Scalable, AI-assisted lab support

6.57 Tap & Go Service (Powered by MoxyTap, UniLab)

The **Tap & Go Service** is a smart access control and usage tracking solution designed to enhance **equipment utilisation, safety compliance, and operational efficiency** in research laboratories.

Powered by UniLab's **MoxyTap** technology, Tap & Go integrates seamlessly with ACLS to provide **real-time, secure, and traceable access** to instruments using institutional NFC-enabled swipe cards. Moxytap-PLUS is the advanced version of MoxyTap to include a insudtrial grade power unit that controls the instrument power inlets or instrument computer monitor power inlets.

Unlike tracker that is software app that could be bypassed by the users, MoxyTap-Plus truly delivers the solution of no-bypassing of mandatory sign in.

6.57.1 Overview

MoxyTap enables users to access equipment by simply tapping their institutional card, eliminating the need for passwords or manual sign-in processes.

It is suitable for:

- Laboratory instruments
- Shared research facilities
- Controlled access environments (e.g., PC2/PC3 labs)

6.57.2 *Key Features*

- **Swipe Card Access Integration**

  Utilises existing institutional or organisational NFC swipe cards – no need for additional passwords or PINs.

- **Tap-On / Tap-Off Logging**

  Mimics public transport access—users simply tap in and tap out to register equipment use.

- **Real-Time Usage Monitoring**

  Provides live dashboards and usage logs to improve lab oversight, security, and scheduling efficiency.

- **Historical Access Records**

  Automatically maintains a comprehensive log of past usage, aiding in audits, accountability, and research tracking.

- **Operational Efficiency**

  Promotes better use of lab resources and funding by identifying usage trends and underutilised assets.

- **Data-Driven Management**

  Enables lab managers and administrators to make informed decisions about equipment funding, maintenance, and planning.

6.57.3 Key Benefits

- **Mandatory Tap to Sign In & Sign Out**

  Seamlessly register entry and exit by tapping an NFC-enabled institutional or organisational card—no passwords or manual logins required.

- **Improved Resource Efficiency**

  Promotes smarter utilisation of lab equipment and funding by reducing idle time and improving operational oversight.

- **Historical Usage Records**

  Automatically logs detailed access history, supporting audits, reporting, and analysis of usage trends.

- **Data-Driven Decision Making**

  Empowers managers with actionable insights to guide funding allocations, maintenance planning, and resource optimisation.

- **Self-Registration with Institutional Cards**

  Users can onboard themselves by linking their existing university card using a one-time setup code—ensuring quick, secure access without administrative overhead.

- **Real-Time Equipment Tracking**

  Delivers live visibility of equipment usage across facilities, enhancing transparency, space management, and safety compliance.

6.57.4 Learn More

More information is available at: https://www.unilab.com.au/moxytap/moxytap-home

6.57.5 Register Your Card

- On first use, users will be prompted to register their card

- Follow on-screen instructions to complete registration
- Registration is required only once

Once registered, the card can be used across all Tap & Go devices within the facility.

6.57.6 Tap to Sign In & Tap to Sign Out

- Tap your card on the device to sign in
- Tap again to sign out after use

This ensures accurate tracking of session duration and usage.

6.57.7 Device Status Indicators

Waiting to Tap
- Green screen
- Indicates device is ready for user interaction

Sign-In Successful
- Red screen
- Confirms successful sign-in and active session

6.57.8 Administration & Management

Live Device Status

Administrators can monitor all Tap & Go devices in real time via ACLS.

- Display resembles an airport-style activity board
- Shows device availability and current usage

Usage Reporting

- Standard Reports: Navigate to *Report Manager → MoxyTap Usage Report*
- Advanced BI Reporting: Navigate to *Node BI → Tracker Report*

Consolidates usage data across multiple ACLS instances

Device Configuration

Enable Tap & Go for Resources

- Navigate to: *Utility → MoxyTap Manager*
- Select resources to enable

Link Devices to Resources

- Navigate to: *System Settings → MoxyTap Devices*
- Assign or remove device-resource mappings

6.57.9 Troubleshooting

Device Troubleshooting

- Connect keyboard and mouse
- Restart MoxyTap application via Task Manager
- Check network connection
- Use Ethernet if Wi-Fi is unstable

Manual Card Registration (Admin)

Administrators can manually register user cards:

- Use an NFC reader app (e.g., mobile device)
- Capture card serial number
- Navigate to: User Profile → Card Registry
- Add or update card details

6.57.10 Feature List (Planned for 2026)

The **MoxyTap-PLUS** platform will be further enhanced with a series of feature improvements, delivered in staged releases throughout 2026. These enhancements aim to strengthen **access control, user experience, compliance, and operational intelligence**.

Stage I – Core Functional Enhancements

Focus: **Alignment with Tracker capabilities and improved usability**

- **Account / Project Selection**

  Enable account or project selection directly on MoxyTap-PLUS, replacing Tracker workflows with a consistent process

- **Next Booking Visibility**

Introduce a calendar icon on the device interface, allowing users to quickly view upcoming booking details

- **Training Certificate Validation**

  Enforce validation of user training certification prior to granting access

---

Stage II – Smart Access Control & System Intelligence

Focus: **Improved session control, booking compliance, and system stability**

- **Session Conflict Handling (Multi-User Tap Logic)**

  When a second user taps during an active session, the system prompts for confirmation:

  Example message:

  "TEM5400 is currently in use by [User]. Your booking starts at [Time]. Do you want to proceed and end the current session?"

- **Booking First Policy Enforcement**

  - Users (excluding staff) must have a valid booking to sign in
  - Early access allowed up to **15 minutes before booking start time**

- **Improved Network Stability**

  Introduce buffering logic for internet connectivity checks, preventing false offline states due to temporary network interruptions

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Stage III – Compliance, Safety & Automation

Focus: **Enhanced safety, reminders, and supervised operations**

- **Safety Reminders**

  Display contextual safety messages prior to or during equipment use

- **Booking Reminder (No-Show Detection)**

  Automatically notify users if they have a booking but have not tapped in within a predefined timeframe

- **Onsite Supervision Support**

  Enable supervised access workflows, requiring staff presence for certain operations or user groups

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Summary

The 2026 MoxyTap-PLUS roadmap delivers:

- Full replacement of Tracker workflows at the hardware level
- Smarter access control and session management
- Enhanced compliance with booking and training policies
- Improved reliability and user experience
- Stronger safety and supervision capabilities

6.57.11 MoxyTap-Space

MoxyTap-Space is purpose-built to support **workspace-level access tracking**, enabling users to tap and sign in to shared lab spaces rather than individual instruments.

Core Concept

Unlike device-based Tap & Go (per instrument), MoxyTap-Space enables:

- Concurrent sign-in across multiple entry points
- Users can tap to sign in at different entrances within the same workspace
- Centralised tracking of space occupancy and usage

This makes it ideal for:

- Shared lab environments
- Open-access facilities
- Controlled spaces requiring attendance tracking

Key Features

- **Custom Device Messaging**

  Display configurable messages on device screens (e.g. instructions, alerts, lab notices)

- **Monthly Access Reports**

  In addition to yearly reports, administrators can now generate monthly usage summaries for improved operational analysis

Enhancements

- **Improved Device UI**

  Enhanced interface for better usability and user interaction

- **Customisable Screen Saver**

  Display tailored messages during idle periods to support communication and compliance

- **Automatic Midnight Sign-Out**

  Active sessions are automatically terminated at midnight to ensure accurate daily tracking and prevent session carryover

Summary

MoxyTap-Space delivers:

- Flexible workspace-level access control
- Accurate tracking of user presence and occupancy
- Improved user experience and communication
- Enhanced reporting for operational insights

6.57.12 Summary

The Tap & Go Service delivers a **hardware-enforced layer of access control and usage tracking**, enabling:

- Secure and seamless user authentication
- Real-time operational visibility
- Accurate and automated usage recording
- Enhanced compliance and safety management

6.58 MoxyTap-PLUS vs Tracker

The **Tap & Go Service**, powered by **MoxyTap-PLUS**, is a next-generation access control and usage tracking solution designed to enhance **equipment utilisation, safety compliance, and operational efficiency** in research laboratories.

This section outlines the key differences between **MoxyTap-PLUS (hardware-based enforcement)** and **ACLS Tracker (software-based enforcement)**.

Core Concept Difference

Feature	MoxyTap-PLUS	Tracker
Deployment Model	Hardware device with power control unit	Desktop software installed on instrument PC
User Interaction	NFC card tap (passwordless)	Username/password login (LDAP deprecated by Microsoft)
Dependency	Independent of instrument computer; no impact on vendor software	Depends on instrument PC; may interfere with acquisition software
Vendor Requirement	No vendor approval required	May require vendor approval for installation
Support Lifecycle	Actively developed	End of development support

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Access & Authentication

Feature	MoxyTap-PLUS	Tracker
ACLS user validation	✅	✅
Training certification check	✅	✅
Booking validation	✅	✅
Passwordless access	✅	❌
Tap-to-sign-in	✅	❌

Usage Control & Enforcement

Feature	MoxyTap-PLUS	Tracker
Prevent usage without login	✅ Hardware enforced (no bypass)	⚠️ Software enforced (possible bypass)
Power control (instrument/monitor)	✅	❌
Non-bypassable enforcement	✅ Physical control	⚠️ Bypass possible
Works without instrument PC	✅	❌

Data Capture & Tracking

Feature	MoxyTap-PLUS	Tracker
Session start/stop logging	✅	✅
Real-time usage tracking	✅	✅
Usage history & reporting	✅	✅
Booking-first policy	✅	✅
Booking reminder (no-show detection)	✅	❌

Workflow & User Experience

Feature	MoxyTap-PLUS	Tracker
Ease of use	✅ Tap-and-go	⚠️ Login required
Speed of access	Fast	Medium
Open lab environments	✅ Excellent	⚠️ Limited
Shared equipment usage	✅ Optimised	⚠️ Limited

Safety & Compliance

Feature	MoxyTap-PLUS	Tracker
OHS alerts / reminders	✅	✅
Compliance enforcement	✅ Hard enforcement (no bypass)	⚠️ Soft enforcement
Safety reminders	✅	❌
Staff supervision enforcement	✅	❌
Prevent unauthorised usage	✅ Strong	⚠️ Limited

Deployment Scenarios

Scenario	MoxyTap-PLUS	Tracker
Computer-controlled instruments	⚠️ Optional	⚠️ Optional
Non-computer equipment	✅ Ideal	❌ Not supported
High-risk instruments	✅ Ideal	⚠️ Limited
Compliance-critical labs	✅ Best fit	❌ Not recommended

Key Takeaways

- MoxyTap-PLUS provides hardware-level enforcement, eliminating bypass risks and ensuring strict compliance
- Tracker relies on software controls, which may be bypassed and depend on instrument PCs
- MoxyTap-PLUS delivers a superior user experience with passwordless, tap-based interaction
- MoxyTap-PLUS is the preferred solution for high-value, high-risk, and compliance-critical environments
-

Summary

MoxyTap-PLUS represents the evolution of ACLS access control:

- From **software-based monitoring → hardware-enforced governance**
- From **login-based workflows → seamless tap-and-go experience**
- From **optional compliance → mandatory enforcement**

7 Frequently Asked Questions

This section addresses common questions related to login, registration, and system access in ACLS. It is intended to assist users and administrators in resolving typical issues quickly and efficiently.

7.1 Login and Logout

1. **I tried to log in but was not successful. What should I do?**

   Your login attempt may have failed due to one of the following reasons:

   - *Incorrect login name*
   - *Incorrect password*

   To regain access:

   - *Click **Access Denied** or **Reset Password** on the login page*
   - *Complete the reactivation or password reset form*
   - *Click **Submit** to proceed*

   If the issue persists, please contact your system administrator or support team.

2. **What is the enterprise sign-in page (SSO)?**

   *ACLS supports **enterprise Single Sign-On (SSO)**, allowing users to authenticate using their institutional credentials.*

   This includes:

   - *University login accounts (staff and students)*
   - *External user access (if configured)*

   SSO simplifies access management and enhances security by integrating with institutional identity providers.

   To enable SSO for your organisation, please contact UniLab.

3. **What information can a supervisor access upon logging in to ACLS?**

   *In addition to standard user access, supervisors are provided with enhanced visibility over their **research group and associated activities**.*

   Supervisor Access Includes

   - ***Researcher Profiles***
     View profiles of users under their supervision, including relevant details and status

- ***Booking Reports***
  Access booking activity and usage data for their research group
- ***Invoices***
  View billing statements and financial records associated with their research group

Summary

Supervisor access enables:

- *Oversight of team members and their activities*
- *Monitoring of resource usage within the group*
- *Visibility into billing and cost recovery*

7.2 Online Registration

4. I submitted an online registration application, but it appears lost. What should I do?

- *Always keep a copy of your registration (e.g. print or save as PDF)*
- *If the application cannot be located, contact lab staff or administrators for assistance*

5. What happens after I complete online registration?

Once submitted:

- *You should retain a copy for your records*
- *A confirmation email will be sent to you*
- *Relevant staff members will be notified*
- *Staff may contact you regarding access, training, or requirements*

6. Which email address receives registration notifications?

*By default, ACLS sends notifications to the **"Contact Us"** email listed in the system footer.*

Additional recipients can be configured via: System Settings → Email Receivers

7. How do we configure a resource selection in online registration?

*Administrators can define a **resource list** via the **Resource Manager**.*

If enabled:

- *A resource selection page will appear during registration*
- *Applicants can indicate their areas of interest*
- *Staff can better assess user requirements*

8. **Can we include an Ethics Number field in registration?**

   Yes. An ***Ethics Number field*** *can be added for compliance requirements (e.g. medical or clinical research).*

   Please contact UniLab for configuration assistance.

9. **How do we configure account fields in registration?**

   Up to ***four custom account fields*** *can be configured via:*

   Configure System

   Example:

   - *RegAccountField1 = Ledger Codes*
   - *Remaining fields left blank*

   → Only "Ledger Codes" will appear in the registration form.

10. **How do we enable user photo upload during registration?**

    Navigate to:

    Configure System ➔ Enable "User Photo For Reg"

    This will allow users to upload a profile photo during registration.

11. **Are there any restrictions on photo size?**

    No. ACLS automatically resizes uploaded images to meet system requirements.

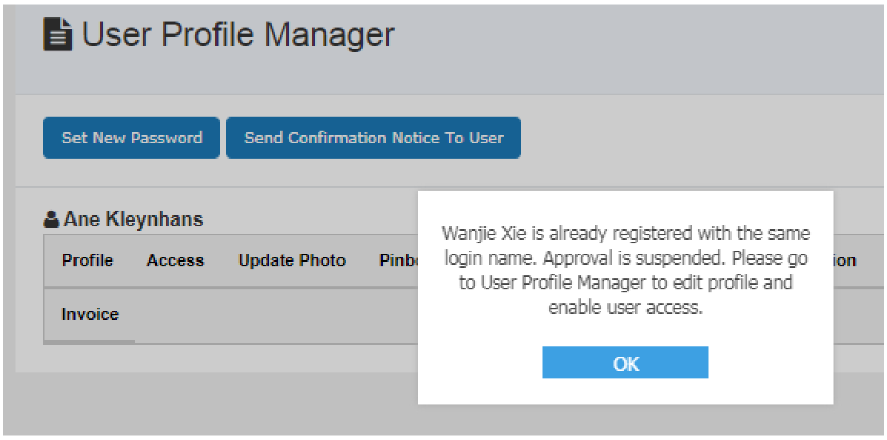
12. **Why does the system say a user is already registered when approving?**

    This typically occurs when:

    - *The email address is already linked to an existing user profile*

    To resolve:

    - *Perform a full user search*
    - *Reactivate or update the existing account as required*



13. Cybersecurity Feature: One-Time Code (OTC)

*ACLS implements a **One-Time Code (OTC)** verification mechanism to enhance security and prevent automated abuse.*

Where OTC is Applied

- *Online registration*
- *Password reset*
- *Access denied pages*

Purpose

*The OTC mechanism ensures that only **genuine human users** can proceed by requiring a one-time verification step.*

Key Benefits

- *Mitigates bot attacks on public-facing forms*
- *Prevents automated mass account creation*
- *Adds a security layer with minimal user friction*

7.3 Booking

This section addresses common questions related to booking behaviour, permissions, calendar functionality, and system configurations in ACLS.

User Access & Booking Permissions

14. A user cannot make bookings, but their profile appears correct. Why?

Most likely, the user is not linked to a billing account.

ACLS requires every user to have an associated account (real or dummy) to enable bookings.

15. **Why can't I find a resource in the booking list?**

    You may not have the required training certificate.

    - *Check: Dashboard → My Training Records*
    - *If certified, refresh via: Booking Resources*

16. **Why can a user book without a training certificate?**

    Check Resource Manager settings. Ensure Training Certificate = Required is enabled for that resource.

17. **How can we restrict untrained staff from booking?**

    Enable: Configure System → Restrict Bookings To General Staff

18. **Can staff make bookings on behalf of users?**

    Yes. Use the User Booking Calendar.

19. **Why can staff book beyond user limits?**

    Staff bookings override user quota restrictions when using assisted booking tools.

20. **Can booking reminders be made mandatory?**

    Yes.

    *ACLS allows administrators to configure booking reminders as **mandatory by default** at the resource level.*

    How It Works

    - *Enable reminder settings in **Resource Configuration***
    - *Once enabled, the reminder option is **automatically applied to all bookings***
    - *Users are **not required to manually select** the reminder checkbox*

    Outcome

    - *Reminder emails are sent automatically for all bookings*
    - *Ensures consistent notification to users*
    - *Reduces missed bookings and improves resource utilisation*

21. **Calendar shows blank or distorted page. What should I do?**

    Clear your browser cache and reload the page.

22. **I cannot cancel my booking. Why?**

    You may not have permission to cancel within a restricted timeframe (e.g., within 24 hours).

    Contact staff for assistance.

23. **Why can't I cancel a training booking?**

    Only the staff member who created the training booking can cancel it.

24. **Booking fails using phone/QR but works on computer. Why?**

    Likely due to outdated QR codes. Admin should regenerate QR codes.

Booking Management & Operations

25. **Can I create service bookings?**

    Yes (staff only).

    Service bookings:

    - *Override existing bookings*
    - *Notify affected users*
    - *Cancel conflicting bookings automatically*

26. **How do I cancel a booking for another user?**

    - *Cancel via User/Approval Booking Calendar*
    - *Remove any temporary service booking blocking the slot*

27. **Can we correct past bookings?**

    Yes. Use Data Logbook Manager to:

    - *Edit/delete past bookings*
    - *Add retrospective entries*

28. **How to create retrospective service bookings?**

    Use Data Logbook Manager → Select Service Booking

29. Booking Calendar vs Data Logbook Manager?

- *Booking Calendar → future bookings*
- *Data Logbook Manager → past bookings*

Calendar Usage & Navigation

30. How to quickly navigate to different dates?

    Use the mini calendar on the page to jump to specific dates.

31. How to print the booking calendar?

    Use the PDF icon to export (day/week/month/list view supported).

32. Can I set week view as default?

    Yes. Configure via Calendar -> Information Panel -> Calendar Settings.

33. Can I book multiple resources on one page?

    Yes. Use Timeline Calendar view.

Booking Limits & Quotas

34. What are my booking limits?

    Check the quota panel on the calendar page, booking quota is defined in resource training certificates.

35. Why do users see different booking ranges?

    Controlled by Resource Training Certificate settings.

36. Why do booking hours differ between users?

    Also controlled by Training Certificates (e.g., 9 AM–5 PM limits).

37. Is there a limit for repeat bookings?

    Yes. Based on maximum advance booking days allowed.

38. What does "booking beyond limit" error mean?

    User has exceeded allowed booking period defined in certificate.

39. Can bookings be made more than 3 months ahead?

    Yes, if certificate settings allow extended booking windows.

Booking Features & Configuration

40. How do booking reminders work?

    System sends reminder emails 2 days before booking (default).

41. Can reminder timing be changed?

    Yes. Configure via: System Settings → AdvBookingReminderDay

42. How does booking confirmation work?

    Confirmation emails are sent automatically after booking.

43. Why do I receive confirmations automatically?

    This is the default system behaviour. Contact staff to disable.

44. How to disable compulsory booking confirmation?

    Go to Resource Manager → Uncheck confirmation option

45. Can we disable certain booking features?

    Yes. Configure via: System Settings → Enable Various Booking Calendars

46. Can booking intervals vary by resource?

    Yes. Set minimum booking unit per resource:

    - *5 / 15 / 30 / 60 minutes*

47. Why can't I book within current hour?

    Enable: Configure System → Enable Current Hour Booking Change

Repeat Booking & Scheduling

48. What is weekly repeat booking?

    Repeats booking on the same weekday.

49. What is monthly repeat booking?

    Repeats booking on the same calendar date each month.

iCal & External Calendar Integration

50. What is iCal?

A standard .ics format used by:

- *Google Calendar*
- *Outlook*
- *Apple Calendar*
- *Others*

51. How to use iCal with web calendars (e.g., Gmail)?

Import the .ics file manually into your calendar platform.

Advanced Operations

52. Can approved bookings be reverted?

No. Approved bookings cannot be changed back to unapproved.

53. How to approve bookings?

- *Email approval link*
- *Calendar page*
- *Dashboard*

54. Can declined bookings be restored?

No. Create a new booking.

55. How to reopen resources after lab-wide closure?

Administrator only: Booking Resources -> Calendar Utility -> Lab calendar

56. How to get notified when a booking is cancelled?

Enable notifications in the Information Panel.

57. How to restrict booking hours (e.g., 8:30–4:30)?

Set limits via Training Certificate settings.

58. How can I link two resources so that booking one blocks the other (e.g. Acid Bench)? Is there a better way to manage this?

To achieve this behaviour, ACLS uses a ***primary–secondary resource relationship****.*

How It Works

- ***Resource A (Primary)*** *→ can link to* ***Resource B (Secondary)***
- *When Resource A is booked, Resource B is automatically* ***blocked/unavailable***

Important Rules

- *A resource assigned as a* ***secondary resource cannot also be set as a primary resource***
- *Therefore:*
    - *If* ***Resource B is already linked as secondary****, it cannot be configured as primary*
- *This prevents circular or conflicting relationships*

59. Why can't I make bookings over marked public holidays on the calendar?

Booking restrictions on public holidays are controlled by ***permission settings*** *within ACLS.*

Explanation

- *Public holidays may be configured as* ***non-bookable periods*** *by default*
- *Booking access during these periods depends on:*
    - ***Access Group settings***
    - ***Training Certificate permissions***

How to Resolve

If you require booking access on public holidays:

- *Contact your* ***lab staff or administrator***
- *Request a review or update of your* ***access permissions***

7.4 Group Booking

This section addresses common questions related to Group Booking functionality, including notifications, cancellation rules, and reporting behaviour.

60. Is an email notification automatically sent to users in a group booking?

Yes. All users included in a group booking will automatically receive an email notification confirming the booking details.

This ensures that:

- *All participants are informed of the scheduled session*
- *Booking details are clearly communicated*
- *Coordination for group activities is streamlined*

61. **Can group bookings be cancelled?**

Yes, with the following restrictions:

- *You can only cancel group bookings that you created*
- *To cancel a group booking created by another staff member, use the Service Booking feature to override the session*

This ensures controlled access and maintains accountability for group scheduling.

62. **Are group bookings included in reports?**

Group bookings are included in some booking reports but excluded from invoices.

Reporting Notes:

- *A separate Group Booking report function is available*
- *Group bookings are treated as special entries within ACLS*
- *If required, their data must be manually integrated into broader reporting workflows*

7.5 Update User Information

This section addresses common questions related to user profile management, including login credentials, account status, and duplicate profile handling.

63. **How can I change my login name and password?**

- *Login Name:*
  The login name cannot be changed once registration is completed.
- *Password & Profile Updates:*
  Users can update their personal details and change their password via:
  Dashboard → My Profile
- *Administrator Access:*
  Administrators can reset any user's password via the User Profile Manager.

The system will automatically send a notification email to the user after the reset.

64. **I cannot find a user using the search function. Why?**

Users are categorised into three groups:

- *All Users*
- *Active Users*
- *Inactive Users*

Ensure the correct search filter is selected when performing a lookup.

Note: The default search setting is typically All Users.

65. **Is it possible to remove user access?**

Yes.
Administrators can revoke access by:

- *Navigating to User Profile Manager*
- *Unchecking the Activate User option*

This will disable the user's ability to log in and use ACLS.

66. **What are the risks of duplicate user profiles?**

Duplicate profiles may occur when a user registers with a different email address, bypassing system checks.

Potential issues include:

- *Incorrect assignment of training certificates*
- *Users unable to book resources due to incomplete profiles*
- *Data inconsistency across bookings and reports*

Best Practice: Always verify user identity and email before activating a new profile.

67. **What should I do if a user registers again but already has an account?**

This situation typically occurs when the original account is inactive.

Recommended steps:

- *Reactivate the user's original profile*
- *Delete the duplicate registration*

This ensures data consistency and avoids operational confusion.

7.6 Update User Supervisors

This section addresses common questions related to supervisor assignment, invoicing linkage, and supervisor management within ACLS.

68. **How can I set up supervisors for a user?**

To assign supervisors:

- *Navigate to **User Profile Manager***
- *Locate the user profile*
- *Open the **Supervisor** tab*

- *Click **Edit User Supervisor** to add supervisors*

*You may assign **multiple supervisors**, but only one can be designated as the **default for invoicing**.*

69. What does “default for invoicing” mean?

*The **default invoicing supervisor** is the supervisor linked to the user’s billing records.*

- *ACLS generates invoices against this supervisor by default*
- *This ensures consistent financial tracking and reporting*

70. How can I delete a supervisor set as “default for invoicing”?

You cannot remove a supervisor while they are set as the default.

To proceed:

- *Assign another supervisor as the new default*
- *Then remove or deactivate the original supervisor*

***Note:** Every user must always have **one active default supervisor**.*

71. Can I assign more than one default invoicing supervisor?

No.

*ACLS supports **only one default invoicing supervisor per user**.*

For advanced billing requirements involving multiple supervisors, please contact UniLab for customised solutions.

72. How can I split billing across multiple supervisors?

ACLS does not support simultaneous multi-supervisor billing for a single user.

Workaround:

- *Update the **default supervisor** in **User Profile Manager***
- *Generate invoices separately for each supervisor as required*

73. Can I deactivate a supervisor who has left the organisation?

Yes.

- *Navigate to **Supervisor Manager***
- *Uncheck the **Status** checkbox to mark the supervisor as inactive*

This ensures:

- *Historical records remain intact*

- *The supervisor is no longer available for new assignments*

7.7 Data Report and Invoice

This section addresses common questions related to billing, invoicing workflows, and reporting capabilities within ACLS.

74. How can I generate a billing invoice?

ACLS provides multiple invoicing methods to support different operational workflows:

- ***Batch Invoicing***
  Generate invoice statements in bulk for multiple users or supervisors

- ***Booking Invoicing***
  Create printable invoices based on booking or usage log data, typically grouped by supervisor

- ***Sample Invoicing***
  Generate invoices for completed sample jobs billed to a supervisor

*These options allow flexibility depending on whether billing is based on **resource usage, bookings, or sample services**.*

75. What if I make a mistake when creating a sample job invoice?

You can reverse the invoice as follows:

- *Navigate to **Find Invoices***

- *Select **Cancel Sample Jobs Invoice***

This will reopen the associated sample job, allowing further edits and corrections.

76. What happens after sample jobs are invoiced?

Once invoiced:

- *The sample job is marked as **closed***

- *The record becomes **locked from further editing***

This ensures data integrity and prevents post-invoice modifications.

77. Can we restrict supervisors from accessing invoice statements?

Yes. Supervisor access to invoices can be controlled via system settings:

- *Navigate to **Configure System***

- *Uncheck the parameter: **Invoice Accessible By Supervisor***

This allows administrators to manage financial visibility and access control.

78. **Can we compare booked hours with actual tracked usage?**

*Yes. ACLS supports comparison between **booked hours** and **actual usage captured by Tracker or Tap & Go devices**.*

To access this report:

- *Navigate to:*
  Report Manager → Resource Booking Report → Booking Report By Resources

*Ensure that the relevant reporting features are enabled in **System Settings**.*

7.8 Batch Data Report

This section addresses common questions related to batch reporting, data integrity, and invoice generation workflows in ACLS.

79. **What are the benefits of using the batch reporting tool?**

*Batch reporting enables the generation of **all booking and usage reports in a single run**, significantly improving operational efficiency.*

Key Benefits:

- *Improves productivity (up to 10× faster than manual reporting)*
- *Stores results as a **single transaction record***
- *Ensures **data consistency**—pricing changes do not affect previously generated reports unless re-run*

80. **What is the difference between Batch Reporting and Booking/Usage Data Reports?**

Batch Reporting

- *Runs all reports in one process*
- *Stores results as transaction records*
- *Used for official reporting and invoicing*

Booking/Usage Data Report

- *Generated manually on demand*
- *Displays results without saving*
- *Used for quick analysis or review*

81. **Why are there two types of reports: Booking Reports and Usage Reports?**

- *Booking Reports: Based on calendar booking data*
- *Usage Reports: Based on actual usage logs (e.g., Tracker or Tap & Go data)*

Batch reporting generates both, allowing comparison between:

- *Planned usage (bookings)*
- *Actual usage (tracked data)*

82. How can we access generated batch reports?

Navigate to:

Report Manager → Resource Batch Report → Access Batch Data Reports

Features include:

- *Reports organised by **year index***
- *Additional sorting and filtering options*

83. What should be checked before running batch reporting?

Before running monthly reports, verify data integrity:

- *Review logs via **Data Logbook Manager***
- *Identify errors (highlighted in red)*
- *Correct issues before processing*

Batch reports can be re-run at any time if corrections are required.

84. What happens during batch reporting?

While batch reporting is in progress:

- *Reporting and invoicing modules are **temporarily disabled***
- *Once completed, full functionality is restored*

This ensures data consistency during processing.

85. Can invoices be generated in PDF format instead of HTML?

*Currently, invoices are generated in **HTML format only**.*

*A PDF conversion feature is planned for future **ACLS Enterprise Service** releases.*

86. How can I search for specific invoice statements?

*Use: **Invoice Manager → Find Invoices***

Search options include:

- *Supervisor name (partial match supported)*
- *Invoice number*

87. **What if data changes and invoices need to be regenerated?**

Simply re-run ***batch data invoicing****.*

- *ACLS maintains* ***one valid invoice per supervisor per month***
- *Previous invoices are automatically replaced*

88. **Can the invoice format be customised?**

Yes. Invoice formats can be customised based on institutional requirements.

Please contact UniLab to discuss customisation options.

7.9 User Training & Certification

This section addresses common questions related to training certificate management, trainer roles, and certification reporting within ACLS.

Training Certificate Management

89. **How do I register user training certificates?**

Only designated ***trainers (staff members)*** *can issue training certificates.*

To issue a certificate:

- *Navigate to:* ***User Profile Manager***
- *Open the user profile*
- *Go to the* ***Certificate*** *tab*
- *Click* ***Edit User Certificates***

Note: *Trainers can only issue certificates for resources they are authorised to train on.*

90. **Why can't I find a staff/user in the drop-down list when adding them to be trainer?**

Only eligible users appear as trainers:

- *Users assigned to* ***staff group*** *(minimum: general staff level)*
- *Users assigned to the* ***User Trainer Group***

91. **Who can assign trainers and issue certificates?**

The following roles have permission:

- *System Administrator*
- *Administrative Staff*
- *Lab Managers*

Trainer Visibility & Verification

92. How do I know which resources I am a trainer for?

You can verify your trainer status via:

- ***Dashboard → My Profile***
- ***Booking → Resource Trainer***
- ***User Profile Manager → Trainer tab***
- ***Training Manager → Trainer List***

93. Why can't I issue a certificate for a resource?

You may not be assigned as a trainer for that resource.

To resolve:

- *Navigate to:* ***Utilities → Training Manager***
- *Assign yourself (or the appropriate trainer) to the resource*

94. A trainer cannot see certificates when editing a user. Why?

Possible reasons:

- *The certificate has not been created*
- *The certificate exists but is* ***disabled***

Ensure the certificate is properly configured and active.

Training Reports & Monitoring

95. How do I view users issued certificates within a specific period?

Navigate to: ***Report Manager → Training Certificate Report***

Generate reports based on selected date ranges.

96. How do I view expired certificates?

Navigate to: ***Training Certificate Report → Expired Certificate Report***

97. How can I find certificates expiring in a selected month?

Go to: ***Staff → Utility → Reports → Training Certificate Report***

Filter by date range.

98. How can I find users who have not used their certification recently?

Use: ***Training Manager → Last Booking of Certified Users***

Users inactive for over 12 months are highlighted

99. How do I check last bookings for a specific resource?

*Go to: **Training Manager → Last Booking of Certified Users***

Filter by resource.

Resource Certification & Configuration

100. Why are only a few instruments shown in Training Manager?

*Only **active and bookable resources** are displayed.*

*Check: **Resource Manager → Booking Resource***

101. How can I view all certified users for a resource?

- *Go to: **Utilities → Resource Manager***
- *Select the resource*
- *Click **Certified User***

102. Why is the resource drop-down list empty in Training Manager?

*This typically occurs when **resource group certification** is enabled.*

How to Resolve

- *Navigate to: **Utilities → Resource Manager → Resource Group***
- *Manage certificates via: **Resource Group Certificate & Trainer***

Important Note

When resource group certification is enabled:

- *Individual resources are removed from the drop-down list*
- *A **single certificate applies to all resources within the group***

Advantages

- *Simplifies training management*
- *Reduces duplication of certificates*
- *Ensures consistent access control across related resources*

7.10 Register Forms and Documents

This section addresses common questions related to form management, document storage, and repository organisation within ACLS.

Form Repository Management

103. What is Form Repository Manager?

*The **Form Repository Manager** is a centralised system for storing and managing **user-related documents**, such as:*

- *Induction forms*
- *Safety and OHS documents*
- *Access and subscription forms*

*It enables **long-term archiving**, traceability, and easy access for both staff and users.*

104. How does the Form Repository work?

The Form Repository provides a simple and efficient workflow:

- *Upload **PDF documents** linked to individual user profiles*
- *Support for **unlimited uploads***
- *Staff can access user form records via the **Dashboard***
- *Users can view their own forms after logging in*

105. Can I restore deleted forms?

Yes.

- *Navigate to **Deleted Form Records***
- *Restore forms deleted within the **last 12 months***

Forms deleted beyond this period cannot be recovered.

Document Management

106. How can I organise documents into sub-folders?

ACLS supports structured document organisation:

- *Up to **three levels of sub-folders** under the root directory*
- *Manage folders via: **Add/Edit General Document Sub-Folder***

Functions include:

- *Add folders*
- *Edit folder names*
- *Delete folders (only if empty)*

The system provides a clear view of the folder hierarchy.

107. What should be uploaded as general documents?

*General documents are **lab-wide resources**, including:*

- *Lab operation policies*
- *Safety procedures*
- *Induction guides*
- *Instrument or software manuals*

108. What should be uploaded as resource documents?

*Resource documents are **specific to individual equipment or instruments**, such as:*

- *Operation guides*
- *Training materials*
- *Tutorials*

109. Should maintenance contracts or service agreements be uploaded as resource documents?

No.

*Maintenance contracts and service agreements should **not be stored** as resource documents in ACLS.*

110. What is the maximum file upload size?

*The system supports file uploads up to: **1 GB per file***

111. Can I view deleted document history?

Yes.

*Navigate to **Deleted Document Records** to view deletion history*

***Note:** Deleted documents cannot be restored (unlike forms).*

Forms vs Documents

112. What is the difference between forms and documents?

Category	*Description*
Documents	*Lab-wide or resource-specific files (general or equipment-related)*
Forms	*User-specific records linked directly to individual profiles*

Key Distinction

- ***Documents** → Organised by **lab or resource***
- ***Forms** → Linked to **individual users***

7.11 Request Tickets

This section addresses common questions related to request ticket handling, notifications, and workflow behaviour within ACLS.

113. What happens if a request is closed by staff?

*Once a request is marked as **closed**:*

- *No further responses or edits can be made*
- *The ticket becomes read-only for both users and staff*

*If the request needs to be re-opened, please contact the **System Administrator** for assistance.*

114. What happens after a user submits a request?

After submission, ACLS initiates an automated notification workflow:

- *The system sends an email to the **"Contact Us Email"** configured in system settings*
- *Additional recipients can be configured via: **System Settings → Email Receiver***

Staff Response Notification:

When staff respond to a request:

- *The system sends a notification email to the **original requester***
- *The notification includes a summary or update of the response*

This ensures continuous communication and keeps users informed of request progress.

7.12 Sample jobs

This section addresses common questions related to **sample job management, reporting, file handling, and editing workflows** within ACLS.

115. What if I added the wrong method to a sample job?

*You can remove the method **as long as it has not been checked in**. Alternatively, you can archive the method anytime to remove it from the active list.*

Once the method is checked in, it becomes part of the job record and cannot be removed without administrative intervention.

116. How do I collect job data for reporting purposes?

*ACLS provides a built-in **Sample Job Reporting Tool**.*

To generate a report:

- *Select the **month and year***

- *Choose the desired **data option***
- *Run the report to compile the relevant records*

This enables efficient aggregation of job data for operational and financial analysis.

117. What is the maximum file upload size?

*Maximum file size: **1 GB per file***

For larger files: Contact the System Administrator for assistance

118. What file types are supported for upload?

ACLS supports common document and archive formats, including:

- ***Excel:** .xls, .xlsx*
- ***Word:** .doc, .docx*
- ***PDF:** .pdf*
- ***Archive:** .zip*

119. How do I fix jobs with duplicate or incorrect job numbers?

*Use the system tool: **Configuration → Auto-Correct Job No***

This function restores jobs with conflicting or incorrect job numbers to their correct sequence.

120. How do I edit a completed sample job?

Editing depends on the job status:

- ***If invoiced:***
  - *Cancel the invoice first*
  - *This will unlock the job for editing*
- ***If not invoiced:***
  - *A System Administrator can use **Reopen Job To Edit***

121. How can users download sample job results?

*Users can access their results via: **Dashboard → Access Sample Reports***

Features include:

- *Secure access based on user credentials*
- *Downloadable reports*
- *Records organised by year for easy navigation*

122. **Can I archive discontinued sample operation groups?**

Yes.

*You can archive **sample operation groups** that are no longer in use.*

Behaviour After Archiving

- *Archived groups are removed from the sample group selection panel*
- *They are no longer available for new operations*

Data Impact

- *Existing data associated with the group remains unchanged*
- *Historical records, reports, and invoices are not affected*

Summary

Archiving sample operation groups allows you to:

- *Keep the system clean and organised*
- *Prevent selection of outdated groups*
- *Preserve historical data for reporting and audit purposes*

7.13 Tracker

This section addresses common questions related to the ACLS Tracker application, including connectivity, authentication behaviour, and operational settings.

123. **What if there is no communication between the Tracker and the ACLS server?**

A loss of communication may be caused by several factors:

- *Network outage*
- *ACLS server downtime*
- *Incorrect ACLS server IP configuration*
- *Network firewall restrictions*

*The Tracker includes a **built-in connection monitor** that continuously checks communication with the ACLS server and helps identify connectivity issues.*

124. **Why does the Tracker display the "Staff Authentication Page" during login?**

*This occurs when the resource is configured with **onsite supervision requirements**.*

- *Users under training status must be supervised*

- *A staff member must authenticate to confirm supervision*
- *Only then will access be granted*

This ensures compliance with training and safety policies.

125. What is the purpose of the Reload button in the Tracker application?

*The **Reload** button is used to refresh or restart the Tracker interface.*

Typical use cases include:

- *Recovering from lost or unstable server connection*
- *Refreshing the application interface*
- *Resolving temporary display or loading issues*

126. What if users frequently forget to log out?

*Enable the **Auto-Logout** feature in Tracker settings.*

- *Administrators can define an inactivity timeout*
- *Users are automatically logged out after the specified period*

This helps maintain accurate usage records and prevents unintended extended sessions.

127. What is the Booking First Policy in Tracker?

*The **Booking First Policy** enforces strict booking compliance.*

- *The Tracker verifies whether a user has a valid booking*
- ***No booking = no login***

This ensures:

- *Proper scheduling of resource usage*
- *Elimination of unauthorised access*
- *Accurate tracking and billing of usage*

7.14 General

This section addresses general system questions related to configuration, administration, system behaviour, and troubleshooting within ACLS.

System Access & Troubleshooting

128. **What could cause web pages to display incorrectly?**

This is typically due to browser cache or temporary files.

Recommended actions:

- *Press Ctrl + Refresh (or Cmd + Shift + R on Mac)*
- *Clear browser cache, history, and temporary files*

129. **Why can't I find a user in the drop-down list?**

The user may have been automatically set to inactive.

- *Use the search function*
- *Check user status via User Profile Manager*

130. **How can I check web portal access logs?**

System administrator only, navigate to: ***Configure System → Access Records***

- *Displays the last 100 login records*
- *Includes user IP and timestamps*

Communication & Notifications

131. **How can I send notices to all supervisors?**

- *Go to* ***Broadcast Messages***
- *Select all supervisors from the list or all supervisors (active users) from the list*
- *Enter subject and message → Click Send Message*

132. **How does scrolling text announcement work?**

- *Go to:* ***System Settings → Announcement – Scrolling Text***
- *Enter message (single paragraph, no single quotes ')*
- *Enable scroller and save*

133. **How does popup announcement work?**

- *Go to System* ***Settings → Popup Announcement***
- *Enter message and enable*

A popup will appear upon user login.

134. Why set up multiple email receivers?

- *Ensures communication continuity*
- *Allows backup staff coverage*
- *Supports redundancy*

*Configure via: **System Settings → Email Receiver***

135. Can we change the "Contact Us" email?

Yes.

- *Go to Configure System*
- *Update Contact Us Email*

136. Can we check sent email records?

Yes.

- *Navigate to: **System Settings → Email Logs***
- *Search by recipient, subject, or resource*

Resource & System Configuration

137. Can I create a resource group without resources?

Yes. Resource groups can be created first and populated later.

138. Can I clone a resource?

Yes.

- *Go to **Resource Manager → Clone***

139. Can I delete a resource group?

No.

To deactivate, unlink all resources and set them as non-bookable

140. Why can't I assign a resource group owner?

Only users with equipment supervisor role or above can be assigned.

141. What is the difference between owners and trainers?

Role	*Responsibility*
Owner	*Manages resource group and assigns trainers*

Trainer	*Issues training certificates*

Owners must also be assigned as trainers to issue certificates.

142. Can an owner assign themselves as a trainer?

Yes, if they meet the required permissions.

143. What is the difference between "Bookable" and "Operation Status"?

Bookable: Controls visibility in booking calendar

- *Operation Status:*
  - *Active → Fully usable*
  - *Inactive → Hidden and disabled*

144. I am trying to update custodians for resources, but only a limited list of users appears. Can we add anyone as a custodian?

No.

Custodians must be ***registered ACLS users*** *with a* ***staff-level role or higher*** *(general users are not eligible).*

Booking Control Parameters

145. How do I configure booking limits for user groups?

Set in Group Manager:

- *Max hours/day*
- *Max days/period*
- *Max hours/period*

Important:

- *Max hours/day → independent*
- *Max days/period → independent*
- *Max hours/period → must align logically*

Example:

3 hrs/day × 7 days = max 21 hrs/period

System Customisation

146. How can I update system banner, logo, or terms?

Use: System Settings → Upload System Files

You can:

- *Replace banner*
- *Update invoice logo*
- *Upload registration terms PDF*

147. Can we set a home page link in the footer?

Yes.

- *Go to Configure System*
- *Update Home Page Link*

Operations & Maintenance

148. What are the initial setup steps for ACLS?

- *Configure Account Manager*
- *Set up Resource Manager*
- *Define Group Manager*
- *Configure School/Org Manager*
- *Set up Resource Login*

149. Why install Tracker if using booking for cost recovery?

Tracker adds:

- *Training validation*
- *Access control*
- *Real-time usage tracking*
- *Auto-logout enforcement*

150. How can tracker logs be corrected?

Use Data Logbook Manager:

- *Detects missing login/logout*
- *Automatically corrects gaps*
- *Ensures accurate usage records*

151. **How can I manage the public holidays on calendars?**

Public holidays are centrally managed by UniLab, if you want to remove public holidays from calendar, please contact UniLab for assistance.

User & Workflow Management

152. **What is the difference between General Staff and Equipment Supervisor?**

Role	*Access Level*	*Capabilities*
General Staff	*Basic*	*Monitor usage and bookings*
Equipment Supervisor	*Elevated*	*Manage training and issue certificates*

153. **Where can I find Terms & Conditions?**

- *Available on Dashboard*
- *Opens in a modal window*

154. **Can induction be stopped?**

Yes.

- *Go to user profile*
- *Click Cancel Induction*

155. **Can induction be redone?**

Yes. You can roll back approval and restart the process.

156. **How can I track who cancelled a consumable order?**

- *Go to Consumable Manager → Change Consumable Order*
- *View audit logs (user, timestamp, details)*

8 Enterprise Service

The ACLS Enterprise Solution is designed to extend beyond single-node deployments, enabling institution-wide management of research infrastructure.

While each ACLS node operates as a standalone, self-contained system, the enterprise layer introduces centralised services and governance, while preserving the flexibility required to support diverse laboratories and disciplines.

This architecture enables:

- Consistent governance across multiple facilities
- Unified user experience across all ACLS instances
- Centralised reporting and analytics
- Scalable deployment across campuses and institutions

8.1 Single Sign-On (SSO) Integration

ACLS supports enterprise authentication protocols, including:

- Microsoft Entra ID (formerly Azure Active Directory)
- Okta

This enables:

- Seamless login across all ACLS instances
- Secure, institution-managed authentication
- Reduced administrative overhead for user management

8.2 University-Wide Catalogue Service

The University-Wide Catalogue provides a centralised portal that:

- Lists all ACLS nodes across the institution
- Allows users to quickly navigate between lab systems
- Promotes visibility of available resources and facilities

This enhances accessibility and supports cross-facility collaboration.

8.3 Work Health and Safety (WHS) Compliance Service

ACLS incorporates a dedicated WHS compliance layer to support institutional safety requirements.

Key Features

- Two-step approval workflow for:
    - Document declarations
    - Policy acknowledgements
- Integrated with all ACLS nodes to ensure:
    - Consistent safety compliance
    - Auditability across the organisation

8.4 Node Business Intelligence (BI) Reporting

The Node BI platform provides a centralised analytics layer that aggregates data from multiple ACLS nodes.

Capabilities

- Resource usage analytics
- Training and safety compliance reporting
- Booking and financial performance metrics

This empowers:

- Lab managers
- Administrators
- Executive stakeholders

to make data-driven decisions at scale.

8.5 Centralised User Onboarding

ACLS Enterprise supports a unified onboarding experience across all facilities.

Benefits

- Standardised registration workflows
- Integration with institutional identity systems
- Consistent user access management across nodes

This reduces duplication and improves user experience.

8.6 REST API

ACLS provides API connectivity, for example, for integration with Microsoft Power BI.

Key Benefits

- Real-time data dashboards
- Custom analytics and visualisation
- Institution-wide reporting capabilities

This enables organisations to transform ACLS data into actionable insights and executive-level reporting.

8.7 Summary

The ACLS Enterprise Service enables:

- Scalable, multi-node deployment across institutions
- Centralised governance with local flexibility
- Unified authentication and onboarding
- Advanced analytics and reporting capabilities

9 Appendix A – Modification for ANFF-MCN

The **Australian National Fabrication Facility (ANFF)** is a national network supporting researchers in micro- and nanofabrication. The **Melbourne Centre for Nanofabrication (MCN)**, part of ANFF, has been using a customized version of the **AC Lab System (ACLS)** since 2010.

This appendix provides an overview and operational guide to the specific modifications and custom features developed for ANFF-MCN. These customizations reflect the operational, reporting, and user management requirements unique to MCN's facility environment.

9.1 MCN: Modification Background

The ACLS system has been specifically customized to support the business and operational model of the **Melbourne Centre for Nanofabrication (MCN)**, a node of the **Australian National Fabrication Facility (ANFF)**. These modifications have been developed progressively since 2010 to accommodate MCN's distinct cost centre model and access management framework.

A provisional pricing schedule aligned with MCN's internal documentation is presented in **Table 1**, illustrating the basic access pricing structure based on user categories and support levels.

Table 1: Basic Access Pricing Regimes at MCN:

Support Provided	PhD Student	University / PF Researcher	Industry User
Unassisted	A	B	C
Assisted	D	E	F

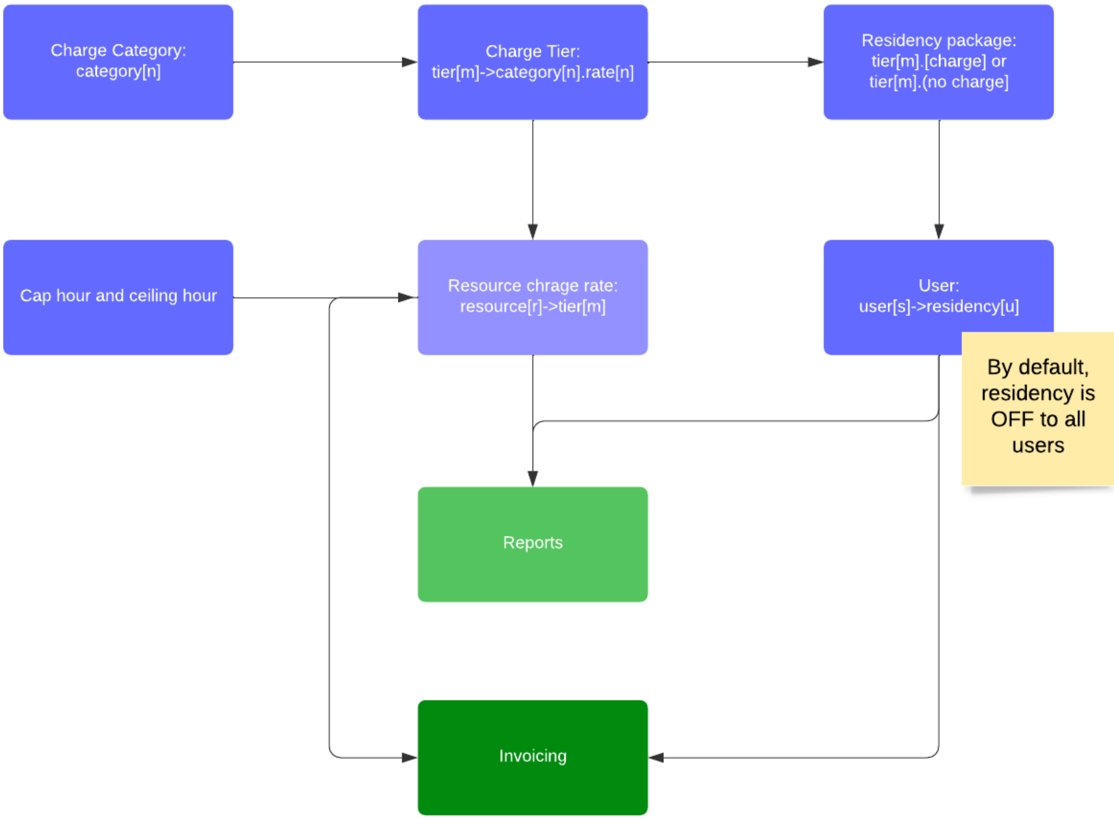
Notes:

- Basic consumables are included in the standard cost price.
- Specialized consumables (e.g., substrates, retooling) are billed to the user at cost.
- Flagship instruments are priced at the upper end of the scale; general lab access and non-flagship instruments are at the lower end.
- Subsidized access is available for early-stage “proof of principle” work aimed at grant applications, subject to approval by the access committee.
- Public sector researchers are charged based on marginal costs only.
- Charges are subject to review and change without notice.
- Unassisted access requires successful completion of application-specific training, beyond general inductions and safety training, as assessed by MCN.
- Access to in-kind equipment hosted at MCN-affiliated institutions is determined by the respective facility managers.

Table 2: MCN Facility and Equipment Access Charges:

Equipment	Booking Type	A	B	C	D	E	F
Cleanroom	Hourly	$50	$50	$100	$75	$100	$150
Bio Lab	Hourly	$40	$40	$100	$50	$50	$150
EBL	3–7 hrs				$200	$250	$400
DRIE (per system)	3–7 hrs	$100	$150	$200	$150	$200	$300
PECVD	3–7 hrs	$100	$150	$200	$150	$200	$300
FIB	3–7 hrs	$75	$100	$150	$100	$150	$200
SEM	Hourly	$75	$100	$150	$100	$150	$200
PVD (EBEAM)	3–7 hrs	$75	$100	$150	$100	$150	$200
PVD (SPUTTER)	3–7 hrs	$75	$100	$150	$100	$150	$200
Polymer System	3–7 hrs	$75	$100	$150	$100	$150	$200
NIL/Embossing	3 hrs	$75	$100	$150	$100	$150	$200
AFM	Hourly	$75	$100	$150	$100	$150	$200
Confocal Microscope	Hourly	$75	$100	$150	$100	$150	$200

A revised business model and charging flow were introduced in **2022**, reflecting changes in operational structure and financial tracking. The flowchart detailing this updated charging process is provided below.



9.2 MCN: Set Up Charge Category

To configure charge categories for MCN:

- Navigate to Utilities → Charge Category Manager.
- Define the required charge categories based on MCN's pricing structure and access model.

Notes:

- There is no system-imposed limit on the number of charge categories.
- However, it is strongly recommended to limit the total to 20 or fewer to maintain clarity and ease of management.
- Each category should align with the pricing tiers (A–F) and equipment types described in Section 9.1.

Proper setup of charge categories ensures accurate billing, reporting, and streamlined user access assignment within the ACLS environment.

9.3 MCN: Set Up Charge Tiers

To support the tiered pricing model used at MCN—particularly for residency package users—ACLS allows the use of Charge Tiers. This avoids the need to manually adjust the charge rate for each individual resource, thereby reducing administrative workload and ensuring consistency in billing.

Steps to Configure Charge Tiers:

- Navigate to Utilities → Charge Tier Manager.
- Create the required tiers based on MCN's pricing logic (e.g., Tier A–F).
- For each tier:
    - **Assign charge categories** that correspond to the user types (e.g., PhD, University, Industry).
    - **Specify the hourly rate** for each charge category within the tier.

Each charge tier acts as a billing structure template that can be linked to:

- Specific resources or instruments
- Defined user groups or residency packages

This tiered approach ensures billing accuracy and efficiency while aligning with MCN's operational model.

9.4 MCN: Assign Charge Tiers to Resources

Once charge categories and charge tiers have been configured, the next step is to link the appropriate tier to each resource. This ensures that any updates made to the charge rates within a tier are automatically applied to all associated resources, maintaining consistency and minimizing administrative effort.

Steps to Assign Tiers to Resources:

- Navigate to Resource Manager → Charge Rate.
- Select the resource (instrument or facility area) you wish to configure.
- Assign the appropriate charge tier to the resource from the available list.

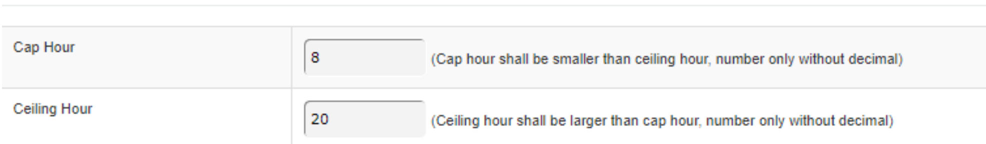
Key Notes:

- Any future changes made to rates within the tier or its categories will automatically propagate to all resources linked to that tier.
- This setup supports MCN's dynamic pricing structure while simplifying rate management across multiple instruments.

This centralized management approach supports MCN's complex access and billing framework with reduced manual updates and improved accuracy.

9.5 MCN: Set Up Resource Capped Hour and Ceiling Hour

ACLS supports a capped billing model for long-duration bookings, commonly used at MCN to prevent overcharging for extended equipment use. This is managed via the Capped Hour and Ceiling Hour settings.



How to Configure:

- Navigate to Resource Manager → Charge Rate.
- Locate the relevant resource.
- Set the following values:
    - **Capped Hour**: The maximum number of chargeable hours within each ceiling period.
    - **Ceiling Hour**: The duration (in hours) that defines the charging cycle window.

Important Notes:

- If Capped Hour = 0, the cap setting is disabled.
- If Ceiling Hour = 0, the cycle definition is disabled.
- Both values must be greater than zero for the capped billing logic to take effect.

Charging Logic:

ACLS calculates chargeable hours based on booked session time using the following logic:

- Each ceiling hour defines a billing cycle (e.g., 24 hours).
- Within each cycle, the maximum chargeable hours is the capped hour (e.g., 8 hours).
- If the booked session exceeds the capped hour but is still within the ceiling hour, the user is only charged up to the capped hour.
- If the session extends across multiple ceiling periods, the capped rate is applied per cycle.

Example:

- Resource: TEM#1
- Capped Hour: 8 hours
- Ceiling Hour: 24 hours
- Booking: James books TEM#1 from 10:00 AM on 2/5/2022 to 9:00 AM on 5/5/2022 (total 71 hours)

Charging Breakdown:

- First 24-hour cycle: charged 8 hours
- Second 24-hour cycle: charged 8 hours
- Third 24-hour cycle: charged 8 hours
- Total Charged Hours: 24 hours

This model promotes efficient resource use while providing cost predictability for users with long bookings.

9.6 MCN: Set Up Charge Residency

The Charge Residency feature in ACLS extends the tiered charging model by applying it to users, rather than to resources. This is particularly useful for managing residency packages, internal grants, or institutional agreements where specific users are entitled to discounted or waived charges.

How to Configure Charge Residency:

- Navigate to Staff Tab → Utility → Charge Residency Manager.
- Define one or more residency groups as needed.
- For each charge category (e.g., A, B, C), specify whether it should be treated as:
    - **Chargeable** (standard rate applies), or
    - **Non-chargeable** (rate waived for this residency)

Key Points:

- Charge Residency works in parallel with Charge Tiers.
- Residency settings override the standard charge behavior for users who belong to a designated residency group.
- This feature is ideal for handling:
    - Internal users with pre-approved usage caps
    - Sponsored access arrangements
    - Long-term collaborators with residency rights

By correctly mapping users to a residency group, ACLS can automatically enforce the correct billing logic during usage tracking and invoice generation.

9.7 MCN: Assign Charge Residency to Users

By default, charge residency is disabled for all users. To apply charge residency benefits (e.g., waived or reduced fees), system administrators must manually enable and assign the appropriate residency group at the user profile level.

Steps to Assign Charge Residency:

- Navigate to User Profile → Charge Residency.
- Enable the Charge Residency option for the selected user.
- Choose the appropriate residency group from the drop-down list.

Additional Notes:

- A user's charge residency status is visible in the user search summary, making it easy to verify at a glance.
- To view detailed residency settings, use the zoom-in function on the user summary or go directly to the user's profile.

This configuration ensures that residency-based billing rules are correctly applied during booking and invoicing, in line with MCN's access and pricing model.

9.8 MCN: Set Up Charge Category for Users

Each user must be assigned a charge category before they can make any bookings. Charge categories define the applicable rate based on the MCN pricing structure (e.g., A–F tiers), and form the basis of the resource vs charge category matrix used for billing.

Key Rules:

- Staff members are exempt from booking charges; charge categories do not apply to staff.
- Only users (non-staff) must be assigned a valid charge category.
- All staff have the authority to assign or modify charge categories for users.

Steps to Assign a Charge Category:

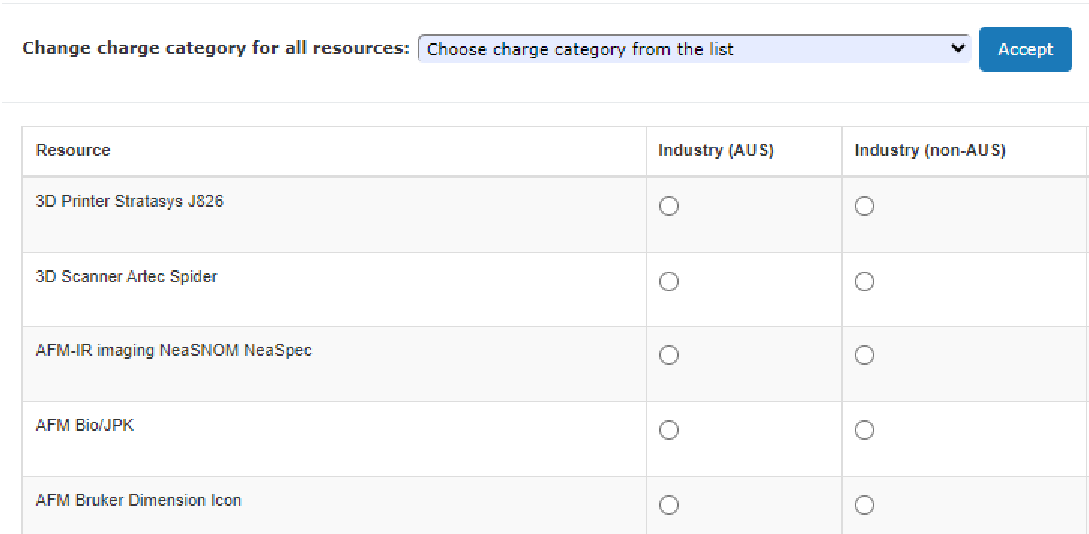
- Navigate to User Profile → User Profile Manager.
- Search and select the user you wish to configure.
- Open the user's profile and go to the Charge Category tab.
- Click Edit User Charge Category to begin editing.

Options for Assignment:

- Use the "Single Selection" option to apply the same charge category to all resources for that user in one step — ideal for users consistently falling under one category.
- Alternatively, manually assign categories for individual resources by selecting the appropriate radio button from the category matrix.

Once set, the user's assigned charge categories are listed in the Charge Category section of their profile for review and audit purposes.

This setup ensures accurate billing in accordance with MCN's pricing policy while giving administrators full flexibility over user-specific rate structures.



9.9 MCN: Automatic Charge Category Assignment for New Users

ACLS supports automatic assignment of charge categories for newly registered users, based on their type of researcher. This streamlines the onboarding process and ensures consistency in billing configuration.

How to Configure:

- Go to Utilities → Charge Category Manager.
- Click on Charge Category vs Type of Researcher.
- Define the mapping between each researcher type (e.g., PhD Student, University Researcher, Industry User) and the corresponding charge category (e.g., A–F).

How It Works:

- Upon approval of an online registration, the system will automatically assign the appropriate charge category to each resource for the user, based on the mapping.
- If no mapping is defined for a given researcher type, no automatic assignment will occur, and the user must be configured manually.
- This feature ensures that standard user groups are consistently assigned the correct billing category without admin intervention.

This automation is especially useful at MCN, where large volumes of users may be onboarded across multiple instruments with complex pricing structures.

9.10 MCN: Reports and Invoice Statements

The ACLS system has been enhanced to support tiered pricing models and capped hour logic, enabling accurate reporting and billing in alignment with MCN's cost structure. All charges are calculated using the user's charge category and the associated tier configuration, including capped hours and ceiling hours.

9.10.1 Batch report

Modifications have been made to the Batch Report to incorporate:

- Chargeable hours, which are derived from booked hours, capped hours, and ceiling hours defined in the user's charge category.
- The tier-based cost structure, allowing the system to apply correct hourly rates based on tier assignments.

The introduction of chargeable hours as a reportable field allows administrators to:

- Compare booked vs. billable time
- Audit long-session bookings under capped charging rules
- Streamline financial review and reconciliation

This report ensures transparency and alignment with MCN's pricing policy, especially for residency or subsidized users.

9.10.2 Invoicing

Enhancements to the invoicing system apply to both:

- Batch invoicing (multi-user, multi-project)
- Individual supervisor invoicing (per group or user)

Key changes include:

- Integration of chargeable hours calculated using booked, capped, and ceiling hour rules
- Application of the tier cost structure to determine final charges
- Clear breakdowns on invoice statements showing how each session was priced

These improvements ensure that all invoices reflect the accurate financial impact of MCN's access model, and support both internal subsidy tracking and external billing.

9.11 MCN: Online Registration

The online registration process at MCN includes several custom modifications beyond the ACLS standard, tailored to MCN's operational requirements.

Registration Page:

- Split address fields have been introduced to align with data standards.
- A Local Contact field is required, prompting the user to select at least one nominated local staff member.

Supervisor Page:

Enhanced data fields have been added for new supervisor registration:

- **Given Name**
- **Family Name**
- **Work Phone**
- **Email Address**
- **Split address fields**

These fields ensure accurate identification and communication with the nominated supervisor.

Resource Page:

- A new question has been added: "Do you want this to be performed by MCN staff?"
- The Resource of Interest list is configurable via Resource Manager, allowing MCN to control available selections.

Submission Page:

- A confirmation checkbox has been added to the final page of the registration form.
  - Users must **accept the agreement** before submission is allowed.

- Upon clicking Submit, ACLS automatically sends a notification email to:
  - The **user** completing the registration
  - The **user's supervisor**
  - The **nominated local staff member(s)**

These enhancements ensure registration completeness, internal accountability, and improved communication among all involved parties.

9.12 MCN: Set Up Local Contacts

To support the online registration process and ensure appropriate point-of-contact allocation, ACLS allows administrators to configure a list of Local Contacts.

How to Configure:

- Navigate to Utilities → Local Contact Manager.
- Use the interface to add, edit, or remove staff members from the local contact list.
- These local contacts will appear as selectable options for users during the registration process.

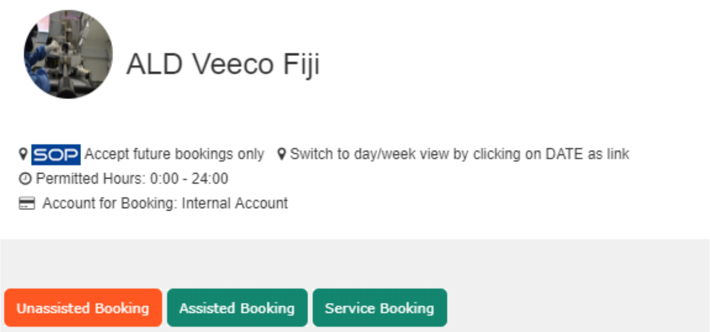
This setup ensures that all new registrants are linked to a relevant staff contact, improving onboarding efficiency and lab coordination.

9.13 MCN: Unassisted and Assisted Bookings

To better align with MCN's operational workflows, ACLS has replaced the standard Resource Booking, User Booking, and Training Booking functions with two distinct booking types:

- **Unassisted Booking**
- **Assisted Booking**

Both options provide streamlined workflows while capturing essential booking context, including support and training requirements.

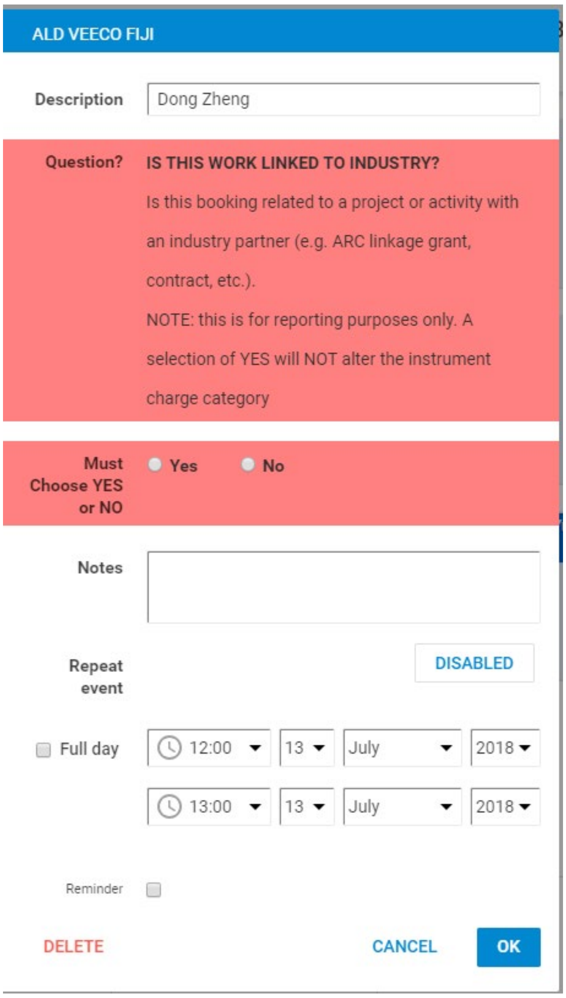


Booking Question Field:

For both booking types, a mandatory Yes/No question field is added to the booking event page. Users must respond before completing the booking. This field ensures key decision points (e.g., assisted vs. unassisted) are captured upfront.

Unassisted Booking:

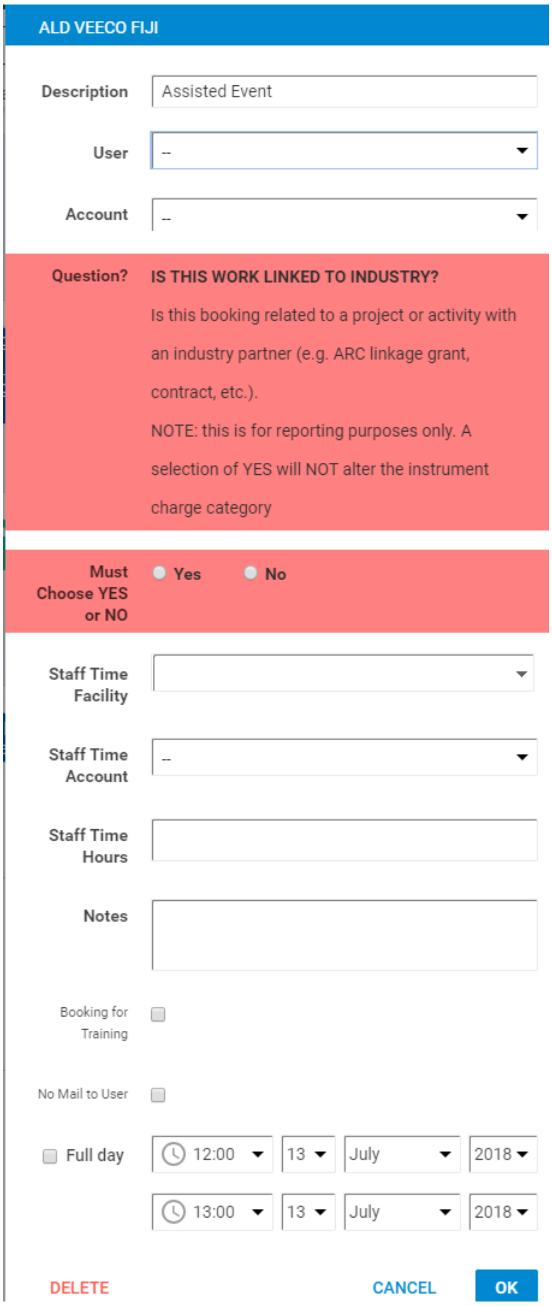
- Originates from the standard Facility Booking module.
- Booking mechanism remains consistent with traditional resource bookings.
- Indicates the user is fully trained and does not require staff assistance.



Assisted Booking:

- Originates from the former User Booking function, now extended.
- Mechanism is similar to standard bookings, but tailored for:
    - **Staff-assisted sessions**
    - **Training sessions** (replacing the separate training booking module)

A new booking template is introduced for assisted bookings.



New Concepts in the Assisted Booking Template:

- Staff Time Facility: A new resource representing staff effort. This must be set up in Resource Manager.
- Staff Time Hours: Defines the duration of staff involvement. Default value is 1 hour, but can be adjusted as needed.
- Booking for Training: If the booking is for a training session, the user must check the corresponding box to label it accordingly.

These updates provide MCN with better granularity in tracking and reporting staff-assisted time and training delivery, while simplifying the booking interface for users.

9.14 MCN: Service booking

The Service Booking module at MCN has been extended to incorporate optional staff time tracking, providing greater flexibility and resource visibility for both users and administrators.

Key Features:

Staff Time Facility and Hours:

Users can optionally specify:

- A staff time facility (e.g., technical assistance or preparation time)
- The duration of required staff involvement

These values are then reflected in the Service Booking Calendar for scheduling and oversight.

Repeat Service Booking:

A repeat booking feature has been implemented, allowing users to create recurring service bookings (e.g., weekly staff-supported maintenance or periodic sample prep), improving efficiency and planning for routine service sessions.

These enhancements help MCN efficiently manage both user-driven and staff-supported service sessions while maintaining accurate usage records.

9.15 MCN: Cancel training bookings to cancel the linked staff time booking

When a training booking is cancelled in ACLS, the linked staff time booking is automatically cancelled as well. This ensures that staff time is not mistakenly allocated to sessions that are no longer required.

9.16 MCN: Cancel service bookings on assisted booking calendar

Staff have the ability to **cancel service bookings** directly from the **Assisted Booking Calendar**.

Note:

Staff **cannot modify** service bookings from the Assisted Booking Calendar.

To edit service bookings (e.g. time, duration, staff involvement), staff must use the **Service Booking Calendar**.

This separation of permission ensures clear accountability and accurate service records.

9.17 MCN: Cancel staff time bookings to cancel the linked assisted booking

If a staff time booking is cancelled, ACLS will automatically cancel the linked assisted booking. This prevents scenarios where users mistakenly attend sessions without assigned staff support.

9.18 MCN: Edit the future assisted and unassisted bookings

Staff members are permitted to modify or cancel any future assisted or unassisted bookings (excluding service bookings) via the Assisted Booking Calendar.

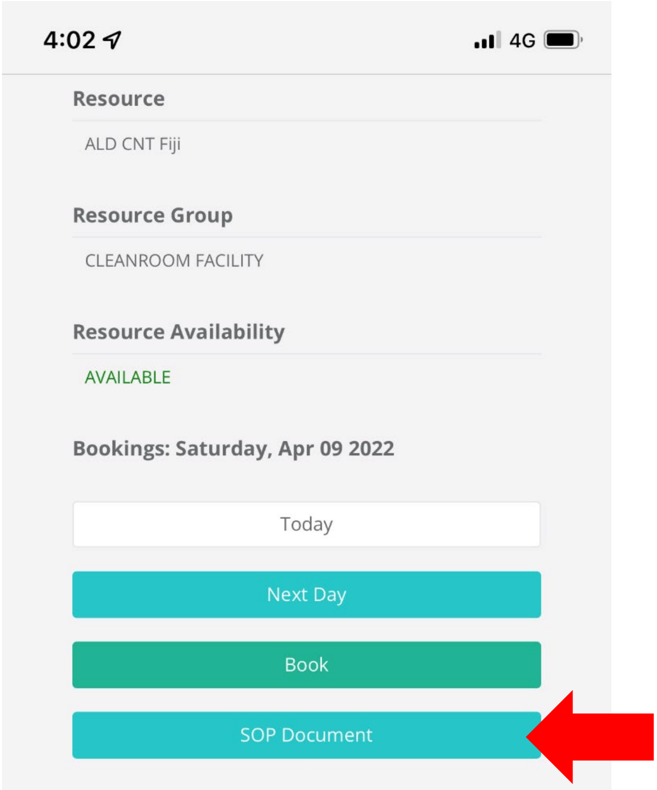
- Editable bookings are visually distinguished in green.
- This provides clear visibility and access control over upcoming sessions.

These permissions support efficient scheduling management while protecting the integrity of service bookings.

9.19 MCN: Access resource SOP on QR code

ACLS supports access to Standard Operating Procedures (SOPs) through QR code integration.

- Users can scan the QR code displayed on or near the equipment to directly view the associated SOP document.
- This feature improves user accessibility to safety and operational guidelines at the point of use.



9.20 MCN: Define Business Hours for Reports

To set up business hours for reporting purposes:

- Navigate to System Settings → Configure System.
- Click on Business Hour Settings.
- Define the standard working hours for the facility (e.g., 9 AM – 5 PM, Monday to Friday).

These settings are used by ACLS in downstream reporting functions (e.g. usage outside business hours, workload analysis, after-hours cost tracking).

9.21 MCN: Stop Booking Confirmation (Assisted Booking)

For assisted bookings, ACLS will suppress booking confirmation emails if the following condition is met:

- The user profile has “Exclude from Broadcast” enabled.

This setting helps reduce unnecessary notifications for certain user categories, such as staff testers or internal bookings.

9.22 MCN: Booking Confirmation for Blacklisted Users (Unassisted Booking)

For unassisted bookings, if a user is marked as "Black Listed" in their profile:

- ACLS will still allow the booking, but a copy of the confirmation email will be automatically sent to the resource's assigned trainers.

This ensures that trainers are aware of activity involving blacklisted users and can monitor accordingly for compliance or retraining purposes.

9.23 MCN: Account Discount

MCN introduces an account-level discount mechanism to support custom financial agreements and grant-based usage reductions.

Key Features:

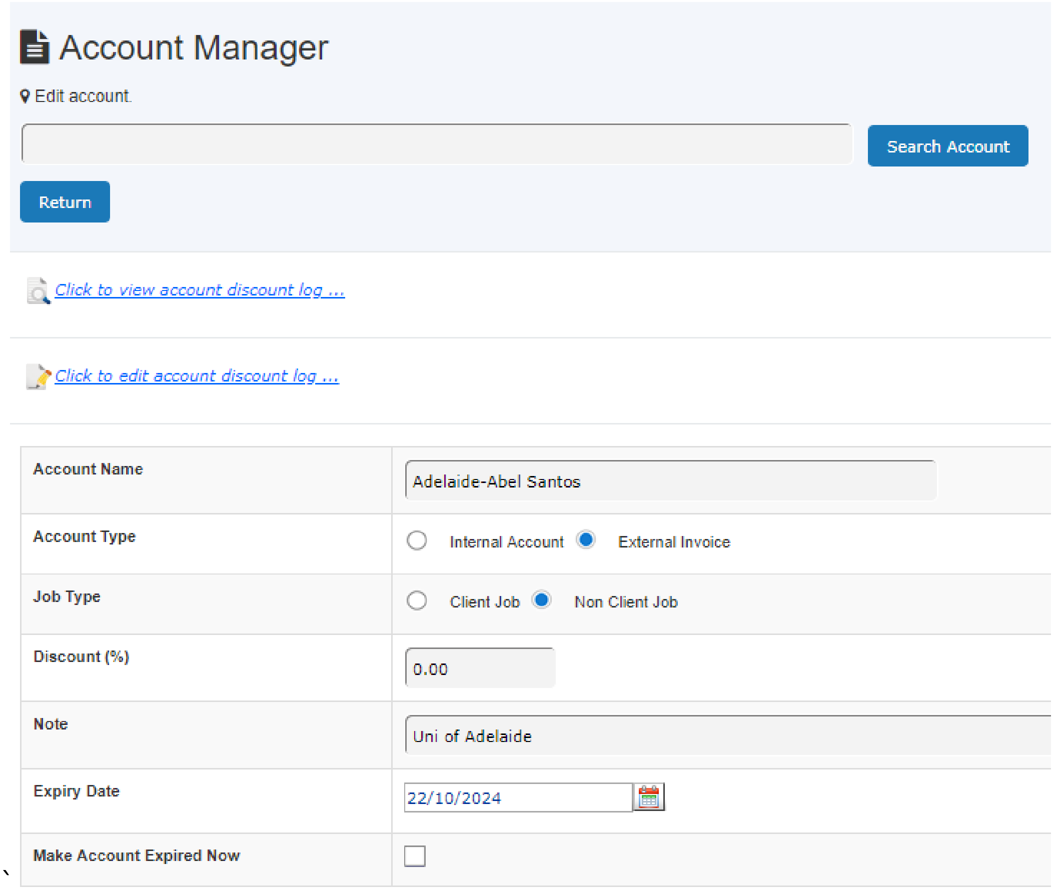
- By default, all discounts are set to 0%.
- To apply or modify a discount, go to the account edit page.
- Each change is logged with an effective date set as the first day of the month.

Example: If a 2% discount is added on 11/10/2013, the system applies it retroactively from 1/10/2013.

Change Log:

- A discount change log is maintained for each account.
- Admins can edit the most recent log entry to correct any mistakes.

All reports and invoices automatically integrate the applicable account discounts for accurate monthly charge calculations.



9.24 MCN: Track User Category Change

A category tracker is implemented to ensure billing reflects a user's category at the time of each booking.

Example:

- On 1 July: James books SEM230 under Category A
- On 2 July: His category is changed to Category B
- On 5 July: He makes another booking

In this case:

- The 1 July booking is billed at Category A rate
- The 5 July booking is billed at Category B rate

To view the history, go to Charge Category Change Log under the user's profile.

9.25 MCN: Broadcast Messages To Newly Trained Users

A new broadcast option, “To Newly Trained Users,” allows targeted messaging to users recently trained on equipment.

To use:

- Click on To Newly Trained Users
- Enter the subject and message body
- Select a time range (e.g., last 1–12 months)
- Click Send Message

Example:

Selecting “2” for Last Period in Month will send the message to users trained within the past two months.

This feature supports communication of SOP updates, policy reminders, or follow-up instructions.

9.26 MCN: Client Job and Non-Client Job Accounts

A new classification system has been added to account settings to distinguish between:

- **Client Job Accounts (default)**
- **Non-Client Job Accounts**

This classification does not affect billing, but is used in customised reporting for internal and external clients.

To configure:

- **Go to the Account Settings page**
- **Select the appropriate account type**

9.27 MCN: Instruments – Hours of Usage

The Hours of Usage module summarizes equipment usage per month in formats aligned with MCN’s reporting standards.

Options:

- **Single Resource Hours of Usage**
- **Multiple Resource Hours of Usage**

How to Use:

- Choose the resource(s)
- Select the start month and end month
- Click Continue to generate the usage summary

This feature streamlines monthly internal reporting and supports resource utilization analysis.

9.28 MCN: FOB for User Profile

To support secure facility access and effective credential management, a FOB tab has been added to each user's profile in ACLS.

Admin-Only Editable Fields:

Only system administrators have permission to edit the following FOB properties:

- **FOB Title**
- **FOB Type**
- **FOB Registration Date**
- **FOB Expiry Date**

All users and staff must have an expiry date set for their FOB credentials.

User Access to FOB Info:

- Users and staff can view their assigned FOB information through My Profile, but cannot make changes.

Automated Expiry Monitoring:

ACLS performs a daily check on FOB records. If a FOB is set to expire within the next 30 days, the system:

- Sends an expiry notification to the user
- Ensures timely renewal and avoids access interruption

9.29 MCN: Consumable Module Modification Requirements

MCN has outlined enhancements to the Consumables Module in ACLS to better integrate consumable usage with resource bookings and automate charge calculations.

Objectives:

- Enable linked consumables selection during bookings, allowing users to specify materials and quantities.
- Automate consumable cost calculation as part of the booking process.

Required Modifications:

- Consumable Self-Selection at Booking

  Users should be able to:

  - Book a tool (e.g., thin film deposition system)
  - Select consumables (e.g., Gold)
  - Specify quantity (e.g., nanometres, units, or samples)
  - System automatically applies the consumable charge to the booking.

- Link Consumables to Tools via Resource Manager

  A new setting should be added to Resource Manager:

  - **Linked Consumables**: YES / NO
  - If **YES**, allow staff to select consumable items from the **Consumables Register** to associate with that tool.
  - These items will appear on the **booking form**, where users can input usage amounts.

- Customizable Account Restrictions

  - Certain user **accounts should be restricted** from ordering consumables.
  - A setting should be available to **enable/disable consumable ordering per account**.

- Default Account Selection

  - For both **assisted and unassisted bookings**, the user's **default account** should be auto-selected when opening the booking calendar, improving workflow efficiency.

Note: ACLS already has most of the required components in place (e.g., consumable register, resource manager, account controls); the enhancement involves integrating these components into a unified booking workflow.

9.30 MCN: Accounts Used for Consumable Order

To ensure appropriate financial control, ACLS should allow administrators to define which accounts can be used for consumable charges.

Implementation Requirements:

- Account Manager should include a YES/NO setting to indicate: Whether the account can be used for consumable orders
- Default Setting: All accounts will default to YES
- Manual Override: MCN staff can manually set the flag to NO for accounts not permitted to be used for consumables.

Important:

- Accounts marked as NO for consumables can still be used for equipment bookings.
- This separation ensures users can book tools while restricting consumable-related expenses as needed.

9.31 MCN: Linked Consumables of Resources

Administrators can configure a list of consumables for each resource. Once consumables are linked to a resource, users will be required to place an order for the minimum quantity of each consumable when making a booking.

How to Set Up Linked Consumables:

- Navigate to Resource Manager

  Access the Resource Manager module from the admin interface.

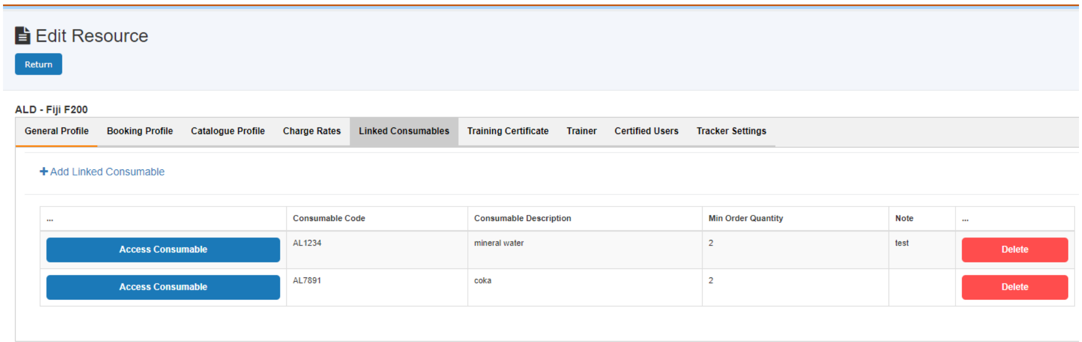
- Add Linked Consumables

  - Click on **Add Linked Consumables** to select items from the **Consumable Library**.
  - Specify the **minimum required quantity** for each booking if applicable.

- Manage Linked Consumables

  - You can view, update, or remove linked consumables from the resource at any time by accessing the Linked Consumables page for that resource.

Once configured, the system enforces the consumable order requirement at the time of booking to ensure proper tracking and cost recovery.



9.32 MCN: Linked Resources of Consumables

Administrators can view which resources are linked to a specific consumable.

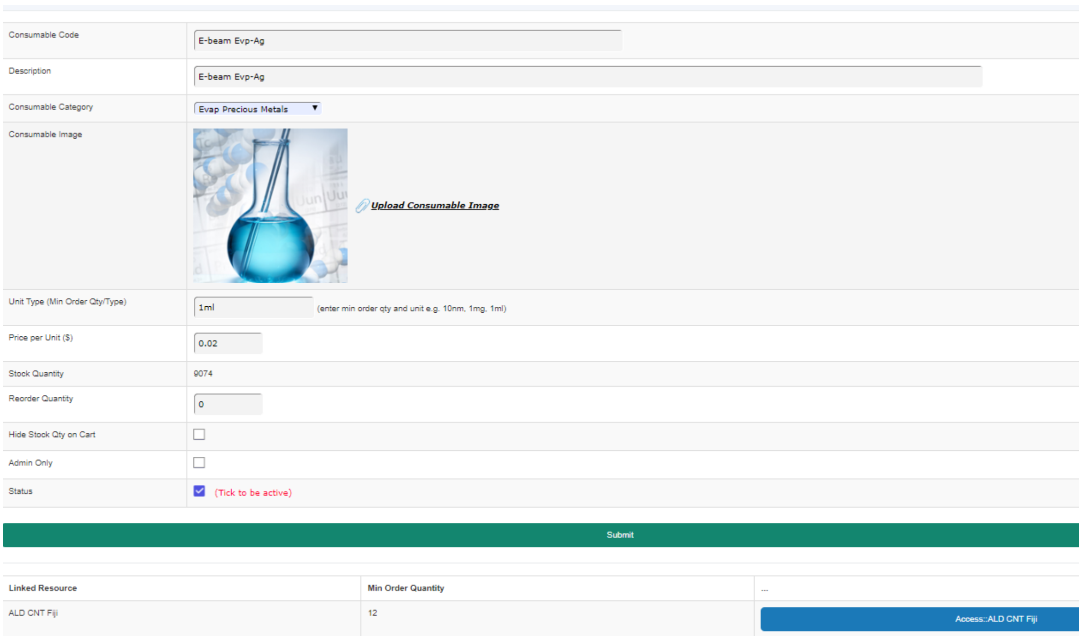
How to View Linked Resources:

- Navigate to the Consumables Library

  Go to the Consumables Library and select the desired consumable item.

- Access Linked Resources
  - The system displays a list of linked resources where the selected consumable is required.
  - Click on each listed resource to view or manage its configuration.

This feature helps administrators track the usage scope of each consumable across the facility.



9.32.1 Unassisted Bookings with Linked Consumables

When a resource has linked consumables enabled, users are required to place a consumable order for each booking session. For resources without linked consumables, the system does not enforce this requirement and bookings proceed as usual.

Booking Workflow with Linked Consumables:

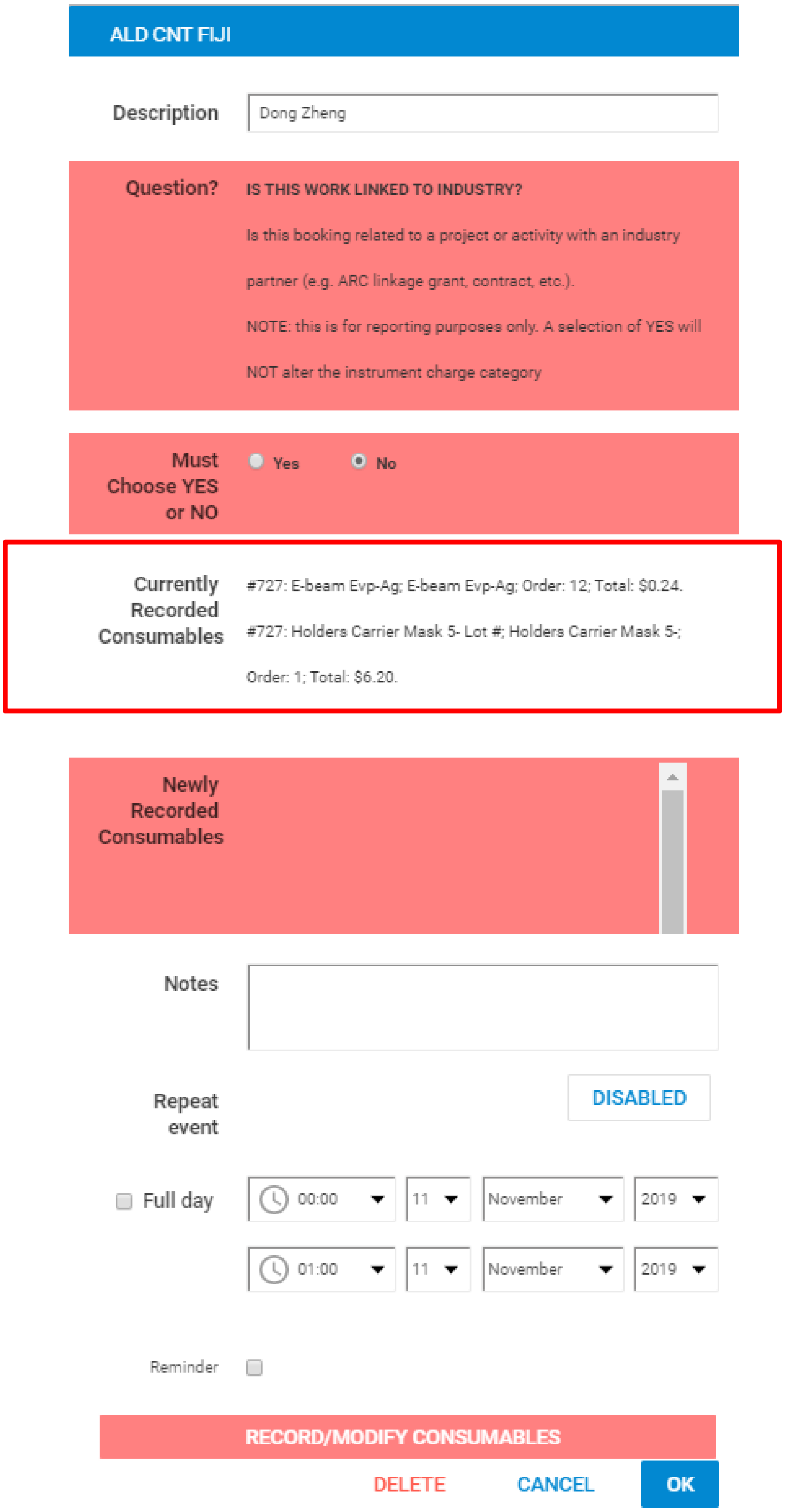
- **Consumable Order Requirement**

  Users must record or order consumables before completing a booking. The system enforces a minimum order quantity as defined for each linked consumable.

- **Accessing the Consumable Order Form**
  - When making a booking, click on the Record Consumable button on the popup booking form.
  - A new page opens, based on the linked consumables configured for that resource.

Recording the Order:

- Enter the order quantity and select the appropriate billing account.
- Click Submit to place the order.
- Click Close to return to the booking form and complete the booking process.
- The system checks against the minimum required quantity and automatically updates the stock level.



Order Status and Display:

- Orders made through bookings are automatically marked as delivered or closed.
- The booking tooltip shows consumable order details, including order number.

- The order summary appears in the highlighted section of the booking form.

System Alerts and Exceptions:

- If users fail to order consumables, the system displays an alert message preventing booking submission.
- For resources without linked consumables, bookings proceed without consumable ordering.

9.32.2 Assisted Bookings with Linked Consumables

For assisted bookings, the process of recording consumables follows the same mechanism as unassisted bookings. The key difference is that the staff member performs the booking on behalf of a user, and the system assigns both the booking and consumable order to the selected user.

Key Requirements:

- User Selection Consistency

  When staff create a booking and record linked consumables, the same user must be selected for both:

  - The booking session
  - The consumable order

Booking and Consumable Recording Process:

- Create a New Booking

  Staff selects the user for whom the booking is being made.

- Record Consumables

  - On the Record Consumable page, staff must ensure the same user is selected as the booking user.
  - Enter the required quantity and account, then submit the consumable order.

- System Validation

  The system verifies that:

  - The selected user matches between booking and consumable order.

- The minimum quantity requirement is met.
- Stock quantities are updated accordingly.

9.32.3 Timeline Bookings and Linked Consumables

When using the timeline calendar view for bookings, the system dynamically adjusts the Record Consumable tooltip display based on whether a resource has linked consumables enabled.

Tooltip Behaviour:

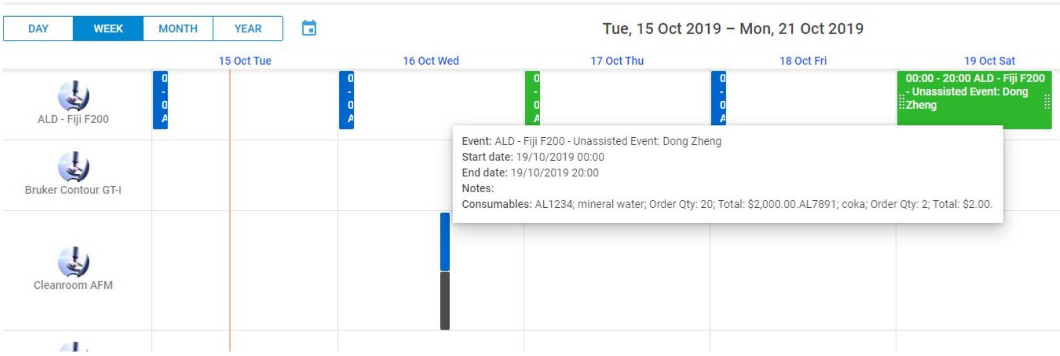
- **Resources with Linked Consumables**

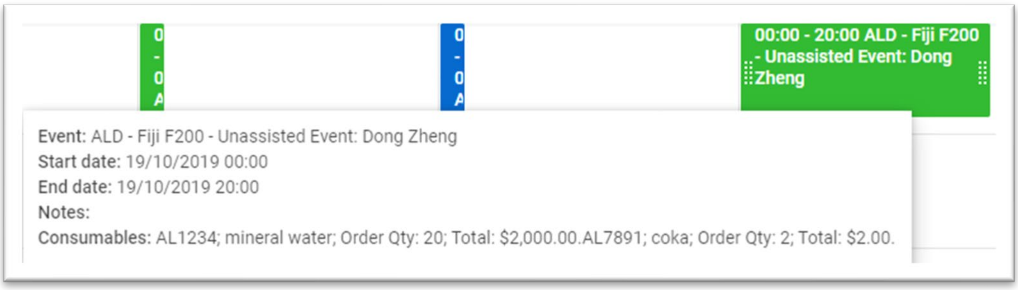
The Record Consumable tooltip is shown for each booking on the timeline. Users can click this to enter consumable order details.

- **Resources without Linked Consumables**

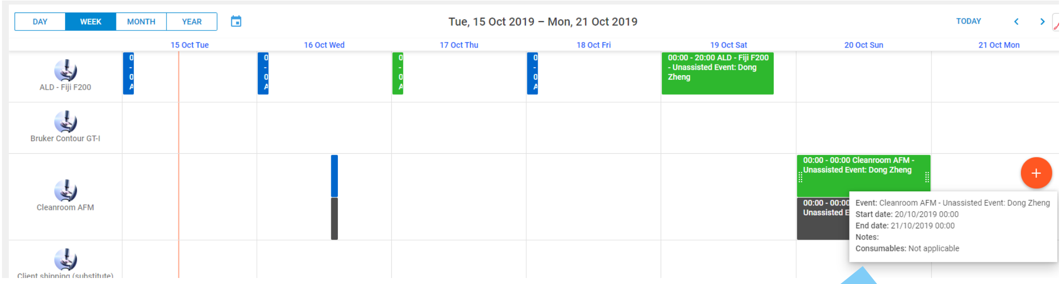
The tooltip will display "Not applicable", indicating that no consumable entry is required for that booking.

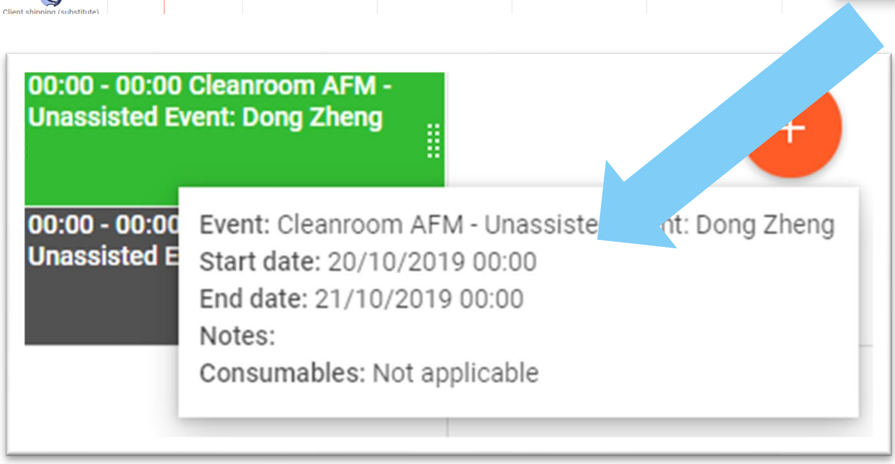
This ensures visual consistency across the timeline interface while clearly distinguishing resources that require consumable orders.

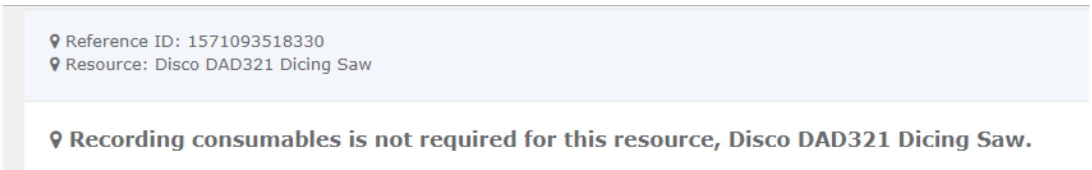




- Resource without linked consumables: show 'Not applicable"







9.32.4 MCN: What Happens if Bookings Are Cancelled?

If a booking that has an associated consumable order is cancelled:

- The linked consumable order is automatically cancelled.
- The stock quantity is adjusted accordingly to reflect the cancellation.

This ensures that consumable inventory remains accurate and up to date.

9.32.5 MCN: What Happens if Consumable Orders Are Cancelled?

If a consumable order associated with a booking is cancelled:

- The booking itself remains active and is not affected.
- The cancelled consumable order is marked as "Cancelled" in the booking calendar tooltip and order summary.

This provides transparency and allows users and administrators to distinguish between active and cancelled consumable entries.

9.32.6 MCN: My Orders Recorded by Bookings

There are two types of consumable orders in the system:

- Orders placed via the Shopping Cart
- Orders generated through bookings

Key Features:

- Orders generated via bookings include the booking reference in the order summary.
- Users can access their consumable orders by clicking on the My Consumable Order button on the booking calendar page. This allows users to review, track, and reconcile their consumable usage at any time.

9.32.7 MCN: Consumable Orders Recorded by Bookings

Consumable orders in the system fall into two main categories:

- Shopping Cart Orders: Placed manually by users outside of the booking process.
- Booking-Linked Orders: Automatically created when users record consumables during a booking.

Key Features of Booking-Linked Orders:

- **Booking Reference Display**

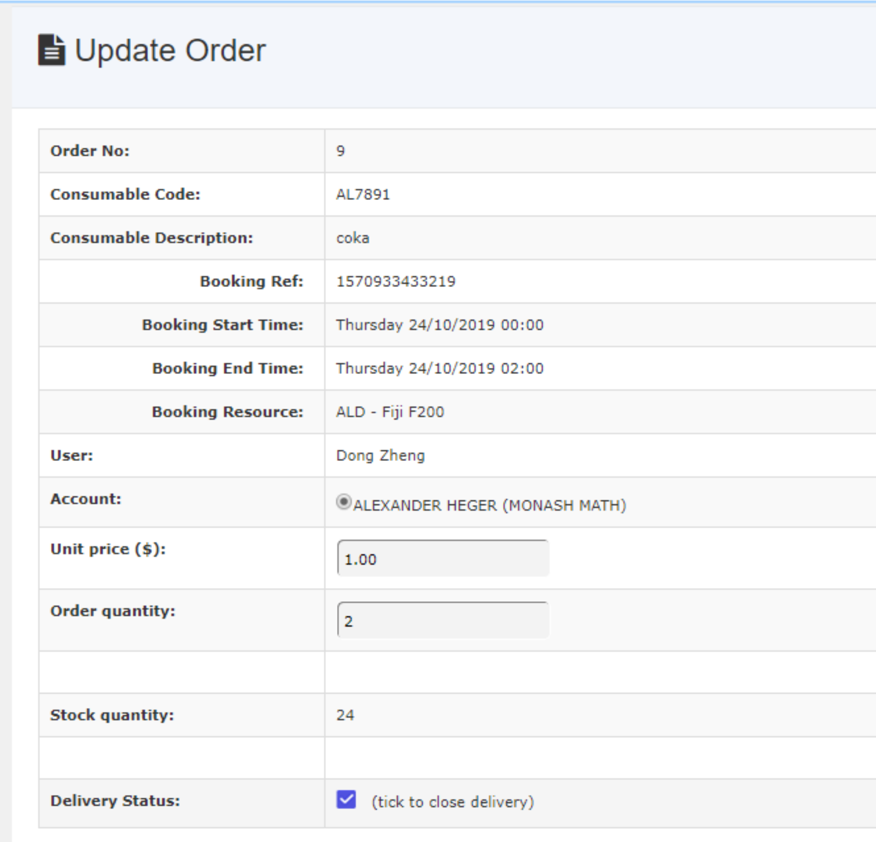
  Orders created via bookings include the booking reference in the order summary, providing clear traceability.

- **Linked Booking Details**

  When viewing or editing the consumable order:

  - The associated booking information is displayed on the order form.
  - This ensures transparency and allows users or staff to update or review both the booking and its consumable order in one place.

This linkage facilitates accurate recordkeeping, cost attribution, and inventory management tied directly to equipment usage.



Update Order

Order No:	9
Consumable Code:	AL7891
Consumable Description:	coka
Booking Ref:	1570933433219
Booking Start Time:	Thursday 24/10/2019 00:00
Booking End Time:	Thursday 24/10/2019 02:00
Booking Resource:	ALD - Fiji F200
User:	Dong Zheng
Account:	ALEXANDER HEGER (MONASH MATH)
Unit price ($):	1.00
Order quantity:	2
Stock quantity:	24
Delivery Status:	(tick to close delivery)

9.32.8 MCN: Booking with Time-Based Consumable Usage

In some scenarios, consumable usage is time-dependent, and the exact quantity cannot be determined by the user in advance. ACLS supports automatic time-based consumable charging, eliminating the need for manual input and improving billing accuracy.

Case Study: 3D Printer with Resin Consumption

- Scenario:

  A 3D printer uses resin as a consumable. The amount of resin used correlates with the booking duration, but users cannot precisely estimate usage beforehand.

- Objective:

  Charge users based on booking time, combining both equipment rate and consumable rate.

- Example:

  - User: John Smith
  - Booking Duration: 2 hours
  - Resource Rate: $10/hour
  - Resin Rate (Time-Based Consumable): $15/hour
  - Total Charge: 2 × ($10 + $15) = $50

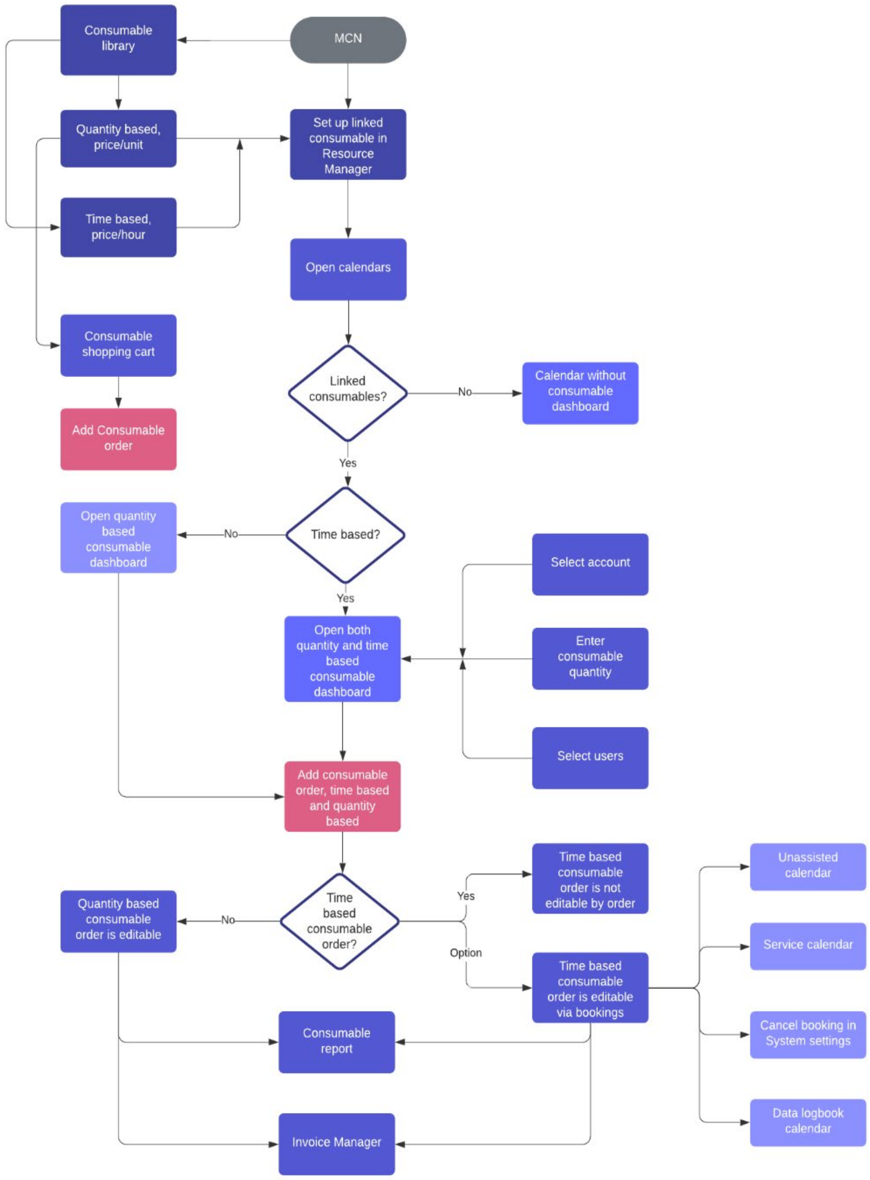
Benefits:

- Prevents underreporting or overreporting of consumables
- Automates billing based on actual booking time
- Ensures transparency and fairness

Implementation in ACLS:

- Unit of Consumption: Defined as time (e.g., hours) in the consumables library.
- Rate Type: Set to Time-Based for the consumable.
- Booking Integration: ACLS automatically calculates the consumable quantity based on the duration of the booking.
- Charge Application: Total charge is shown on the booking confirmation and in the consumable order record.

Flow Chart: Time-Based Consumable Charging



9.32.9 MCN: Set Up Time-Based Consumable Charge Rate

ACLS supports time-based consumable charging by linking the consumable cost directly to booking duration. This is ideal for resources where consumable usage scales with time, such as 3D printers, deposition systems, or laser cutters.

Step-by-Step Setup:

- **Go to Consumable Library**
    - Navigate to the Consumable Library.
    - Select and edit the consumable you wish to configure for time-based charging.

- **Enable Time-Based Pricing**
  - In the consumable profile, locate the Time-Based Price/Hour setting (new field).
  - Enter the hourly charge rate for the consumable (e.g., $15/hour).

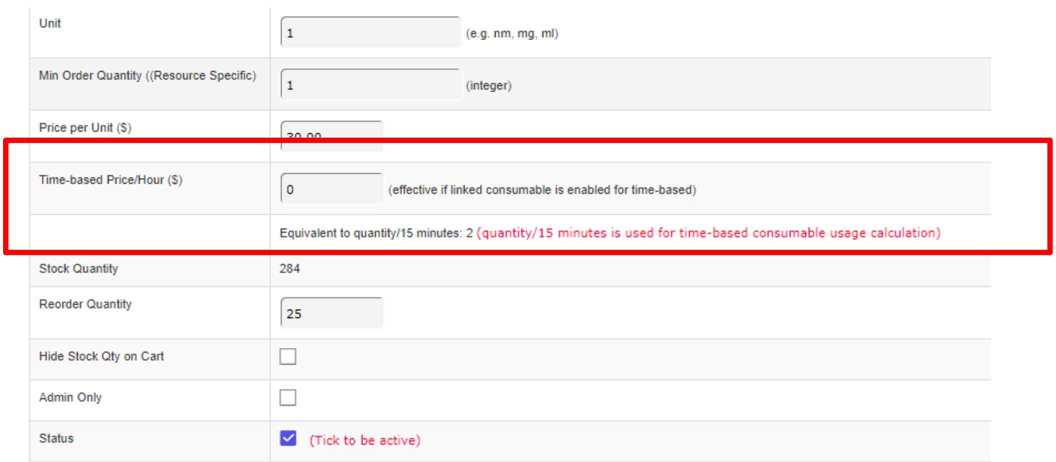
- **Automatic Time Conversion**
  - ACLS internally converts the hourly price into quantity per 15-minute block, matching the calendar's minimum time resolution.
  - For example, $15/hour becomes 0.25 units every 15 minutes.

Why 15-Minute Units?

The ACLS booking calendar operates on a 15-minute minimum timeslot. To ensure alignment between booking duration and consumable charge, the system:

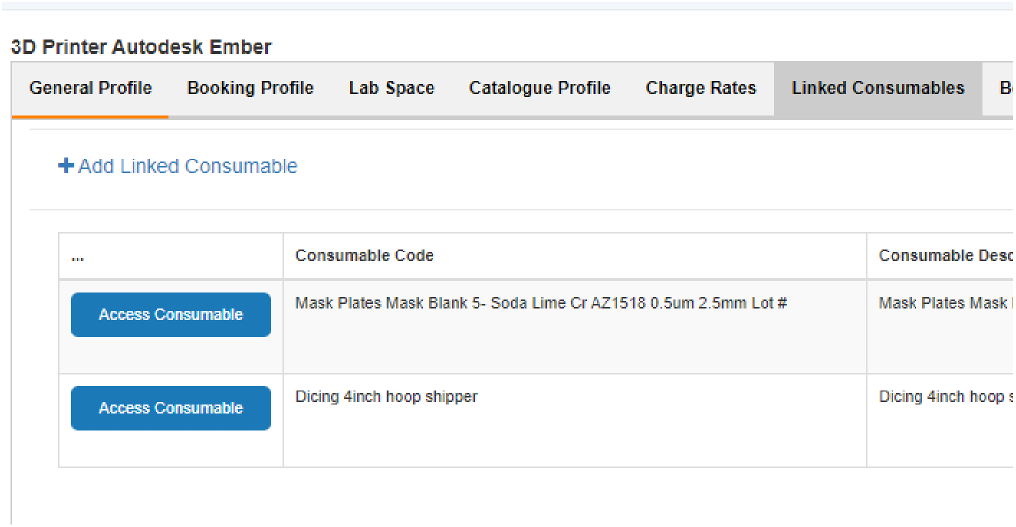
- Calculates time-based quantity in 15-minute intervals.
- Applies the corresponding charge during booking submission.

This configuration ensures accurate, automated billing without relying on manual user input.



9.32.10 MCN: Link Time-Based Consumables to Resources

To apply time-based consumable charging to specific resources, administrators must link the relevant consumables via the Resource Manager.



Step-by-Step Setup:

- **Navigate to Resource Manager**
  - Select the resource you want to configure.
  - Click on Add Linked Consumables.

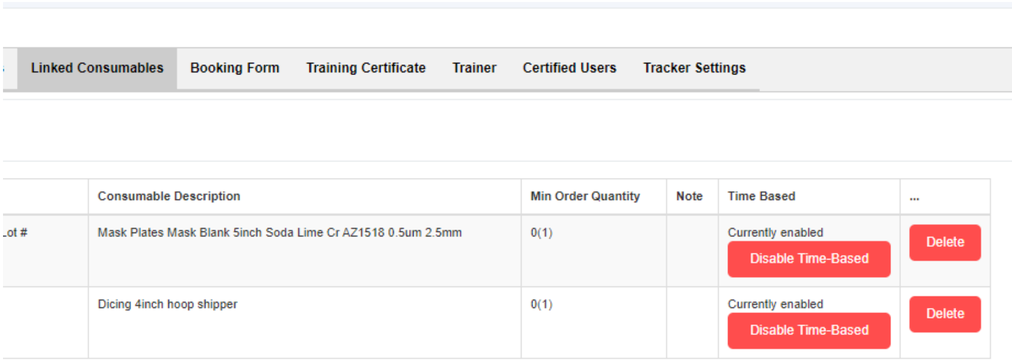
- **Link Time-Based Consumables**
  - Choose the consumable(s) from the Consumable Library.
  - Ensure the selected consumables are already configured with a Time-Based Price/Hour.

- **Toggle Usage Mode**

  For each linked consumable, you can toggle between:

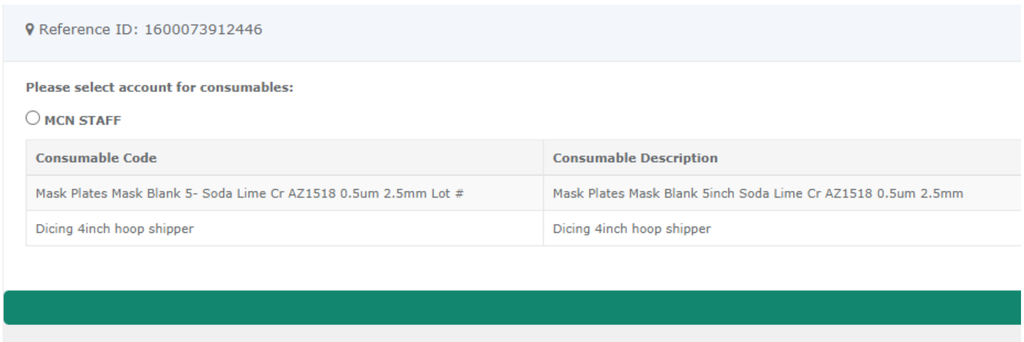
  - Time-Based Usage: Charge is automatically calculated based on booking duration.
  - Quantity-Based Usage: Users manually enter the quantity consumed during booking.

This flexible configuration allows each resource to support both fixed-quantity and duration-dependent consumables, depending on operational needs.



9.32.11 *MCN: Time-Based Consumable Usage*

ACLS fully supports time-based consumable usage, even in cases where mixed (time-based and quantity-based) consumables are linked to the same resource.



Key Behaviours and Workflow:

- **Automatic Quantity Calculation**

  When a time-based consumable is linked to a resource:

  - Users and staff are not required to enter quantity manually.
  - ACLS automatically calculates the consumable quantity based on the booking **duration**.

- **Booking Process**

  - User or staff selects the account for billing.
  - The calendar displays a cached preview of the consumable order for reference.
  - Upon saving the booking, ACLS:
    - Calculates the consumable quantity using the **time-based rate**.
    - Creates an **automated order** with an indicator showing it is time-based.

- **Order Management**
    - Admin can manually modify the generated order if needed.
    - If the booking time is changed, the linked consumable order is automatically updated to reflect the new duration.

- **Booking Views Compatibility**
    - The Unassisted Booking Calendar
    - The Assisted Booking Calendar
    - The Timeline Booking Calendar

  All have been enhanced to **support time-based consumables**, ensuring a consistent experience.

- **Cancellations**

  If a booking with a time-based consumable is cancelled via the Service Booking Calendar, the corresponding time-based consumable order is also cancelled automatically, and stock levels are updated accordingly.

This feature ensures accurate, time-aligned consumable charging with minimal user input and maximum automation.

9.32.12 MCN: Set Up Staff-Time Resource Discount

ACLS allows administrators to apply training hour discounts for staff time on specific resources. This is useful for reducing charges during supervised training or setup sessions.

How to Configure:

- **Navigate to Resource Manager**

  Go to the Resource Manager module.

- **Access Discount Settings**

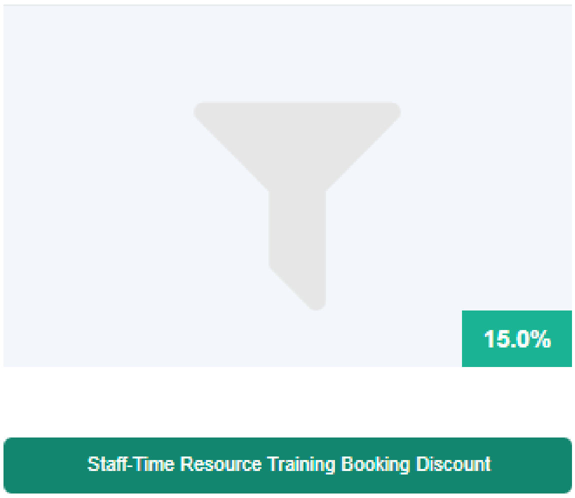
  Click on Staff-Time Resource Training Hour Discount for the selected resource.

- **Enter Discount Value**

- Input the discount amount or percentage as applicable.
- Click Accept to apply the discount.

- **Audit Trail**
  - All changes to the discount settings are logged and recorded for future reference and compliance checks.

This feature ensures flexible billing for training scenarios while maintaining transparency and traceability.



9.32.13 MCN: Apply Staff-Time Resource Training Booking Discount to Invoices

ACLS allows the staff-time training hour discount to be automatically applied during invoicing, ensuring accurate cost recovery and transparent reporting.

Booking Invoice (Manual Invoice Generation):

- Admin can manually generate an invoice by selecting:
  - **Month/Year**
  - **Supervisor**

- The system applies the configured training hour discount to any bookings tagged as staff-time training.

- Two new data columns are included in the invoice for clarity:
  - **Staff-Time Training Hours**

- **Staff-Time Discount**

Batch Invoice (Bulk Generation):

- The batch invoice process also supports application of the staff-time training discount.
- Discounted hours and values are calculated and reflected just as in manual booking invoices.

This feature ensures consistent billing treatment for training sessions across manual and batch invoice workflows, with clear traceability of discounted hours.

10 Appendix B - Modification for ANFF-WA

10.1 ANFF-WA: Modification Background

ANFF-WA requires a way to reserve equipment overnight without having those hours included in usage statistics. Specifically, tools may be booked overnight (e.g., from 8:00 PM to 10:00 AM) to prevent others from reserving the time, but these hours should **not** be counted in the facility's usage reports (e.g., Excel exports used for internal reporting or funding reconciliation).

To accommodate this, we adopt the proposed solution:

A configurable option in the resource settings to exclude specific time ranges (e.g., 8:00 PM to 10:00 AM) from usage hour reporting.

10.2 ANFF-WA: Resource Setting Changes

A dedicated ANFF-WA reporting control is introduced in the Resource Manager to configure this behaviour on a per-resource basis.

New settings in the Resource Profile include:

- **Report Enabler**
    - *Checkbox to enable special reporting hour control.*
    - When **unchecked**, usage hours are reported in full as per the booked duration.
    - When **checked**, only the portion of the booking that falls within the defined reportable hours is included in the reports.
- **Report Start Time**
    - Defines the starting hour (e.g., 10:00 AM) for usage hours to be included in reporting.
- **Report End Time**
    - Defines the ending hour (e.g., 8:00 PM) for usage hours to be included in reporting.

Example:

A user books a tool from **9:00 AM to 4:00 PM** (7 hours total).

If **Report Start Time = 10:00** and **Report End Time = 15:00**, only **5 hours** (10:00 AM – 3:00 PM) are counted in the usage report.

10.3 ANFF-WA: Report Manager

The Report Manager has been updated to support the ANFF-WA reporting rules:

- Both operation and training hour reports now respect the reporting hour control settings.
- ANFF WA Hours are displayed as a separate column in the reports to distinguish adjusted usage from raw booking duration.
- Applicable to:
  - **Monthly reports**
  - **Custom period reports**
  - **Batch report exports**

These enhancements ensure that ANFF-WA can meet its specific reporting needs while maintaining accurate resource booking and access control.

Previous 1 2 3 4 Next

Search: Copy CSV Excel PDF Print

Start Time	End Time	Booked Hours	ANFF Booked Hours	Booked On	Notes
02/05/2019 10:00	02/05/2019 13:00	3	3	01/05/2019	CoPd deposition
14/05/2019 14:00	14/05/2019 17:00	3	1	14/05/2019	CoPd alloy fabrication
15/05/2019 12:30	15/05/2019 14:30	2	2	15/05/2019	CoPd alloy thin film
17/05/2019 10:30	17/05/2019 13:00	2.5	2.5	17/05/2019	CoPd deposition
17/05/2019 13:00	17/05/2019 17:00	4	2	17/05/2019	Shut-down due to compressed airline works
21/05/2019 12:00	21/05/2019 15:00	3	3	21/05/2019	CoPd deposition
23/05/2019 11:00	23/05/2019 13:30	2.5	2.5	23/05/2019	target changes Fe-larger thanCo Co-larger thanNi add additional Al foil to target shutter and target shield of Pd
24/05/2019 12:45	24/05/2019 15:45	3	2.25	24/05/2019	CoPd thin film deposition
		23	18.25		

11 Appendix D – Modification for UOW-SMAH-B32

This appendix outlines the operational and system modifications implemented in ACLS for the Faculty of Science, Medicine and Health (SMAH) at Building 32 (B32), University of Wollongong (UOW), with a focus on **Equipment Maintenance Management** and **Asset Lifecycle Tracking**.

11.1 UOW-SMAH-B32: Modification Background

Problem Statement:

Users and managers require real-time visibility into equipment availability, especially during periods of fault, damage, or scheduled maintenance. A comprehensive maintenance management module is needed to:

- Mark equipment availability status (e.g. faulty, damaged, or scheduled for service).
- Allow users to notify lab staff of equipment issues.
- Automatically update users with relevant alerts.
- Track asset maintenance history and lifecycle data.

Equipment Status Indicators:

The system uses a **traffic light status system** to represent equipment condition:

Status	Description
Green light	Equipment fully operational (no issues)
Amber light	Minor issue – still usable (e.g., broken handle)
Red light	Equipment inoperable – must not be used
Room-wide red	Critical incident – entire room shutdown, all tools locked out

In the event of a **red light or room-wide shutdown**, all affected equipment becomes unavailable, and **notification emails are sent to users with upcoming bookings**, alerting them of the incident and advising them to consult lab staff.

Incident Notification and Fault Reporting:

Users can report faults via a dedicated **Incident Notification interface**, which includes:

- Fault category selection
- Free-text description of the issue
- Assessment of damage severity
- Response urgency (low, medium, high)

All reported incidents are forwarded to staff, logged in the system, and linked to affected assets. Follow-up actions and communications are tracked.

Scheduled Maintenance Setup:

Lab staff can define **scheduled maintenance periods** for equipment at the time of registration. The following metadata is recorded:

- Maintenance frequency (e.g., quarterly, annually)
- Estimated cost
- Supplier/contractor details
- Purchase cost and purchase date
- Replacement date and expected lifespan

These parameters feed into the **Dashboard Reminder System**, which triggers alerts for upcoming maintenance tasks.

Equipment Maintenance Dashboard Features:

The Dashboard includes enhanced visibility and reminders for:

- Upcoming scheduled maintenance
- Overdue maintenance
- Logged incidents requiring attention
- Asset approaching end-of-life
- Internal vs. external service records

Asset Lifecycle and Service Record Management:

Each asset entry includes:

- Original purchase cost
- Depreciation tracking
- Service contract details (scope and cost)
- Lifespan estimate and End-of-Life (EOL) alerting
- Supplier information and contact details
- Required software
- Networking status
- Asset number

- Optional notes section (e.g., passwords, admin info)

All **repair and maintenance records** are logged, including:

- Date
- Type (scheduled vs unscheduled)
- Performed by (internal or external)
- Description of issue and resolution
- Cost

Terminology Reference:

Term	Definition
Service	Unscheduled service (fault or incident repair)
Maintenance	Scheduled/preventive maintenance
Internal Maintenance	Maintenance performed by in-house staff
External Maintenance	Maintenance conducted by third-party vendors
Incident	User-reported equipment issues, categorized and submitted via the portal
Asset	A registered resource with lifecycle tracking enabled
Material	Any associated item—hardware, software, or accessory
Labour	Time or effort involved in repair/maintenance tasks
Resource Assembly	The components or sub-parts that make up a resource (e.g., optics in a system)

11.2 UOW-SMAH-B32: 2018 Requested Changes

The following system modifications and user interface customisations were requested by UOW SMAH-B32 in 2018 to enhance usability, improve asset and contract tracking, and streamline reporting.

- Booking Home Page (General and System Administrators)
- Hide "Resource Catalogue" from the home page view to simplify user interface.

Dashboard Customisation:

Adjust the dashboard layout for **General and System Administrators** to display only the following items:

- My Home: Hide sub-items: Forms, Resource Catalogue, Corea Analytics
- My Profile
- Training Records
- Resource Status
- Resource Alerts

Incidents Module:

- **Restrict Incident Access:**

Disable the **Incident** section for all users **except System Administrators**, to limit incident management to authorised personnel.

Contract (Funding) Enhancements:

Extend the **Contract** tab to include the following metadata for tracking funding and procurement details:

- **Purchase Date**
- **Funding Category (dropdown list – created via "Register Funding Category")**
- **Cost Centre Owner (dropdown list – created via "Register Cost Centre Owner")**
- **Cost Centre Number (character limit: 30)**
- **Amount ($)**
- **Notes**

Finance Report: Funding Report Addition:

Develop a new **Funding Report** under the Finance Report module, summarising financial metadata per resource with total funding amount. Columns to include:

- Resource Group
- Resource Name
- Resource Assembly
- Purchase Date
- Funding Category (dropdown option)
- Owner
- Cost Centre Number
- Amount ($)
- Notes

Register Funding Category:

Create a **Funding Category Editor**, similar in structure to the **Incident Category Editor**, to allow admins to manage funding categories centrally.

Contract Record Desk Enhancements:

For both **Contract (Maintenance)** and **Contract (Warranty)**:

Ensure that the **Reminder Date checkbox remains ticked** (persistent) when editing existing records, to prevent accidental loss of scheduled reminders.

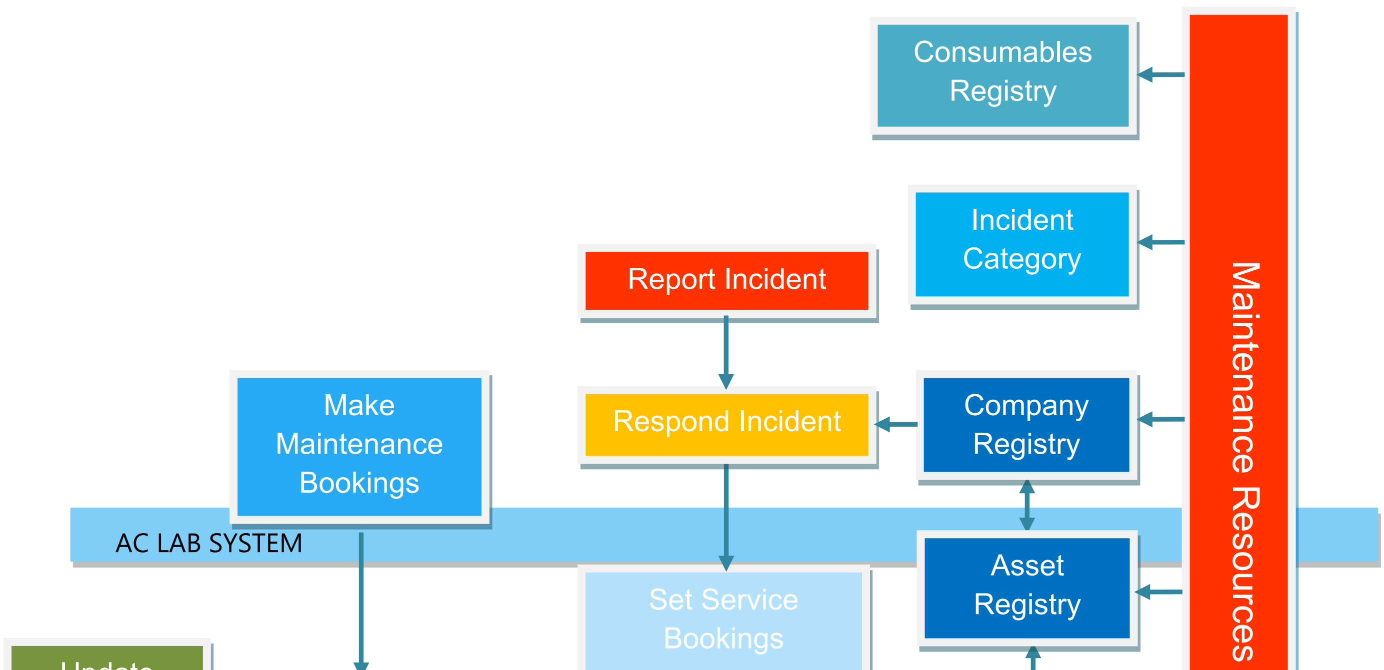
Incident Date Selection:

Modify the **Incident Reporting interface** to allow users to **manually select the Incident Date**, instead of auto-filling with the current submission date.

Search Resource Profile: New Filter:

Add **"Maintenance Agreement Number"** as a searchable criterion in the **Search Resource Profile** tool, to improve filtering and traceability of assets under service agreements.

Flow Chart of Process



11.3 UOW-SMAH-B32: How to Set Up Incident Category

To enable users to properly report incidents via the ACLS interface, administrators must first configure the **Incident Categories**.

Step-by-Step Guide: Registering an Incident Category:

- **Navigate to Maintenance Resources**
  - From the main admin menu, go to **Maintenance Resources**.
- **Access the Incident Category Editor**
  - Click on **Register Incident Category** to launch the category management interface.

Incident Category Configuration Parameters:

Each incident category must be defined with the following details:

Field	Description
Incident Category Title	The display name of the incident category (e.g., *Power Failure*, *Contamination*)
Ownership of Actions	Staff members assigned to this category will automatically receive incident notifications

It is important to assign the correct staff members to ensure timely response and resolution.

11.4 UOW-SMAH-B32: How to Report an Incident

(System Administrator Only)

The **Incident module** allows authorised users to report faults, damages, or operational issues associated with equipment. While the incident menu is visible to all users, some functions are role-based.

Incident Module Functions and Access Control:

Function	Access
Report Incident	Available to **all users** for submitting incidents.

Search Incident	Users can search and view only **their own submitted incidents**.
	System Administrators and authorised staff may access all incident logs.

Steps to Report an Incident:

To lodge an incident:

- Navigate to the Incident module.
- Click on Report Incident.

You will be prompted to enter the following information:

- Select Resource Group
- Select Resource
- Select Incident Category (configured in Section 11.3)
- Enter Description of the fault or incident
- Select Incident Date (users may choose the actual date of occurrence)
- Click Submit.

Notification Workflow:

Upon submission:

- The system automatically emails a notification to:
    - The **staff-in-charge**
    - The **owner(s)** of the selected **Incident Category**

This ensures a timely response and proper assignment of incident resolution responsibilities.

11.5 UOW-SMAH-B32: How to Respond to an Incident

Once an incident is reported, authorised staff can manage and resolve it using the Incident Response Interface. All incidents requiring attention are listed in the My Attention dashboard.

Step-by-Step Guide to Responding:

- **Access the Incident**

  - Go to **My Attention**
  - Click **To Update** or **To Respond** next to the relevant incident

- **Review Incident Details**

  - The system displays:
    - Incident report information
    - Last action/response note
  - Staff may edit or append the **Incident Description** as needed

---

Required Fields for Response:

On the response page, fill out the following:

Field	Description
Processing Status	Set to **Open** (in progress) or **Closed** (resolved)
Incident Description	Editable field to update or clarify the original submission
Light Indicator	Reflects equipment status using colour codes (see below)
Level of Actions	Select the appropriate severity level (matches light indicator)
Company	Choose the service/maintenance provider from the dropdown list
Action Note	Brief note detailing the action taken or planned
Unscheduled Service Booking	Optional: If selected, define start and end time for service booking

---

Light Indicator Definitions:

Indicator	Meaning
Green	Equipment fully operational – no issue
Amber	Minor fault – equipment still functional (e.g., cosmetic damage)
Red	Medium fault – equipment is inoperable (e.g., critical component broken)
Flash Red	Severe fault – incident affects multiple items or room-wide (e.g., leak, damage)

Finalising the Response:

- **Response History:**

  Displayed at the bottom of the page. Click "and more..." to view detailed logs.

- **Click Continue to move to the final confirmation screen.**

- **On the confirmation screen:**
    - Click **Edit** to go back and modify your input
    - Click **Complete** to submit the final response and close the action

After submission, the system updates the status of the resource and notifies the relevant stakeholders based on incident ownership and category.

11.6 UOW-SMAH-B32: How to Search for an Incident

The ACLS system provides flexible tools for staff to search and review incident records. These tools support operational follow-up, auditing, and maintenance history review.

Staff Access: Incident Search Tools:

Authorised staff members can search incidents using various filters:

- **By Status (e.g., Open, Closed)**
- **By Resource (filter by equipment or room)**
- **By Incident Category (e.g., Electrical Fault, Contamination)**

These filters allow staff to efficiently locate and monitor incident records across the facility.

User Access: My Reported Incidents:

All users can access the My Reported Incidents section to view the status and history of their own submitted incidents.

- Click on Processing Details to view a full record of staff responses and actions taken.
- The system supports multi-step resolution, meaning users and staff can track all stages of the response lifecycle—even if the incident ticket remains open during follow-up actions.

Incidents can remain open across multiple updates to allow comprehensive history tracking before final closure.

11.7 UOW-SMAH-B32: How to Make Scheduled Maintenance & Unscheduled Service Bookings

The ACLS system provides structured workflows for both scheduled maintenance and unscheduled service bookings. These tools allow SMAH staff to track service activities, manage asset lifecycles, and maintain a comprehensive digital record of equipment upkeep.

Unscheduled Service Bookings:

By default, unscheduled service bookings are only created through the incident response process. When responding to an incident, staff can optionally enable a service booking and define the start and end time for repair or maintenance work (see Section 11.5).

Pre-Configuration Setup:

Before creating service or maintenance records, ensure the following components are properly configured:

Register Company:

- Go to: Maintenance Resources → Register Company
- Input relevant supplier or maintenance provider details
- Up to three contacts can be added per company
- To deactivate a company, uncheck the "Enabled" box

Register Resource Profile and Assembly:

- SMAH supports a two-tiered asset model: Resource and Resource Assembly
- All assemblies must be tied to a registered Resource Profile
- A Resource or Assembly can be designated as an Asset for tracking purposes

---

Asset Metadata Fields:

Data fields for asset registration include:

Field	Example / Notes
Purchase Date	15/07/2010
Original Cost	$155,000
Depreciation	5% per annum
Service Contract Details	$15,000/year – covers 2x scheduled services, parts, travel. No breakdown cover
Lifespan	7 years
End-of-Life Date	15/07/2017 – triggers dashboard warning as this date approaches
Asset Number	e.g. 12 588746 48976 (University barcode)
Location	Bldg 32.115
Supplier Details	KI Scientific, 41564 Smith Street, Sydney. Contact: Peter Jones (pjones@ki.com.au)
Required Software	"Flowjoe" (Mac OS 10.4+), networked, data point A-226
Notes / Passwords	Software password: SMAH446

Additional fields in Resource Manager include:

- Manufacturer
- Purchase Order / Model / Serial Numbers
- Depreciation % and calculated current value
- Contract details and types (see below)
- Software details, passwords, and general notes

Contract Record Desk:

Click on Contract Record Desk in the asset registration form to record associated contracts.

Contract Types:

The system supports the following predefined contract types:

- **Consumables**
- **Maintenance**
- **Service**
- **Purchase**
- **Warranty**
- **Funding**

Each contract record supports file uploads (PDF), notes, and status tracking.

Consumable Contract Example:

Field	Sample Entry
Purchase Date	01/01/2012
Description	Formalin, 5 L bottle
Quantity	2
Total Cost	$24 (auto-calculated)
Notes	N/A

Warranty / Maintenance Contract Example:

Field	Example
Purchase Date	13/12/2008
Provider	Thermo
Valid From – To	01/01/2010 – 31/12/2011
Total Cost	$1,500
Status	Inactive
Cost/Year	$750 (auto-calculated)
Notes	Two-year contract, expired

Service History Example:

Service Date	Incident #	Provider	Cost	Notes
05/03/2010	4	Thermo	$1000	
16/09/2010	12	Thermo	$500	

Register Consumables:

- Go to Register Consumables
- Register or edit active consumables (expired items editable within 30 days)
- Fields include:

Field	Example
Description	Nitrogen Gas, G-size cylinder
Cost	$12
Supplier	BOC
Catalogue Number	123
Valid From – To	01/01/2010 – open

Status	Active
Notes	N/A

Consumable reporting and usage tracking will be addressed in a future development stage.

Scheduled Maintenance Bookings:

To book scheduled maintenance, choose the booking type:

- **Internal – for in-house maintenance (no supplier required)**
- **External – requires selection of registered service provider**

This booking type can be created through Maintenance Manager and will block the equipment calendar for the selected period, ensuring users cannot book during service windows.

11.8 UOW-SMAH-B32: Contract Reminder Alert

To support proactive contract management, ACLS provides an automated Contract Reminder Alert system for Maintenance and Warranty contracts. This feature ensures that staff are notified in advance of upcoming contract expirations.

Activation and Notification:

- **Once the contract reminder alert is enabled for a specific contract, the system will:**
  - **Send automated email alerts** prior to the expiry date
  - Target the notification to designated staff based on system configuration

---

Configuring Email Recipients:

To ensure alerts reach the appropriate personnel:

- Go to Email Receiver in the system administration panel.
- Register or update the staff members who should receive contract expiry notifications.
- Multiple recipients can be added as needed to ensure redundancy and team awareness.

It is recommended to include both administrative and technical contacts to prevent any contract lapse or service disruption.

11.9 UOW-SMAH-B32: Search Contract

The Search Contract interface has been enhanced to meet the specific operational and audit requirements of SMAH. The updated search tool allows users to efficiently locate contract records based on multiple filter criteria.

Search Filters and Criteria:

The following fields are available to tailor your contract search:

Field	Description
Resource	Optional field – search contracts associated with a specific equipment item
Resource Group	Optional – filter contracts by resource group
Resource Assembly	Optional – locate contracts linked to subcomponents or assemblies
Company	Optional – search by registered supplier or service provider
Contract Type	Tick one or more from the following categories:
	- All
	- Consumable
	- Breakdown
	- Maintenance
	- Purchase
	- Warranty
Date Range	Optional – filter results by contract start and/or end date

---

This advanced contract search supports flexible filtering for compliance checks, procurement reviews, and maintenance audits.

11.10 UOW-SMAH-B32: Access to Resource Lifespan

The Resource Lifespan Summary provides a comprehensive overview of the registered assets and their remaining useful life. This tool supports proactive planning for equipment replacement and budget forecasting.

How to Access:

- Navigate to Report Manager
- Select Resource Lifespan Summary

Viewing the Report:

The report displays key information such as:

- Resource Name
- Purchase Date
- Depreciation Rate
- Lifespan (Years)
- End-of-Life Date
- Current Value (auto-calculated)
- Location
- Asset Number

If no search keywords are entered, the system will return a complete list of all registered resources with lifespan data.

This summary helps identify high-value or aging equipment for renewal planning, especially for grant audits or capital replacement programs.

11.11 UOW-SMAH-B32: Finance Report

The Finance Report module in ACLS provides a structured overview of cost-related information tied to asset contracts. It supports audit readiness, financial planning, and operational budgeting through multiple reporting views.

Report Objectives:

- Summarise cost components of maintenance, service, consumable, and other contract types.
- Enable granular and aggregate reporting for resources and assemblies.
- Support exportable and filterable formats for administrative and finance teams.

Available Report Types:

Users can select from three predefined report formats:

Report Type	Description
Summary by Resource	Consolidates contract costs grouped by resource (default view)
Summary by Contract Type	Aggregates costs based on contract categories
Itemised Report	Line-by-line detail for each contract record (excludes assets)

Report Filters and Search Options:

Option	Details
Report Type	Radio buttons: Summary by Resource (default), by Contract Type, or Itemised
Resource	Optional – filter by a specific resource
Resource Group	Optional – group-level filter
Resource Assembly	Optional – filter by specific assembly component
Company	Optional – search by supplier or service provider
Contract Type	Tick boxes: All, Maintenance, Service, Consumable, Asset
Date Range	Optional – defines the reporting period

Date Filter Logic:

Contract Type	Date Field Used for Filtering
Maintenance	*Valid To* date
Service	*Service Date*
Consumables	*Start Date*
Asset	*Purchase Date*

Resource Selection Logic:

The report dynamically adjusts its scope based on your resource selection:

- **Resource Group only selected → Report runs for all resources in that group.**
- **Resource only selected → Report runs for that specific resource.**
- **Resource Assembly only selected → Report runs for the selected assembly.**
- **No resource selected → Report runs against all registered resources.**

Important Notes:

- Itemised Reports do not include assets, since assets themselves are not contract types.
- Assets may have multiple contracts (e.g., service, warranty, consumable), but cannot be directly selected as a contract type in this context.

11.12 UOW-SMAH-B32: Booking Report

The Booking Report module has been enhanced for SMAH to support more flexible reporting options and introduce the concept of 'Report – Hours per Day', which enables refined control over daily usage reporting.

Available Report Types:

Users can choose from four booking report formats:

Report Type	Description
Summary by Resource	Aggregated booking hours per resource
Summary by Booking Type	Groups bookings by type (e.g., training, operation)
Summary by Supervisor	Displays booking totals grouped by supervising staff
Itemised Report	Detailed line-by-line view of each individual booking

---

Feature Highlight: Report – Hours per Day:

A new feature introduced in this module is 'Report – Hours per Day', allowing the system to define and limit how many hours per day are counted toward reporting—regardless of the actual booking duration.

How to Enable 'Report – Hours per Day:

To configure this setting:

- Go to Resource Manager
- For each relevant resource, locate the 'Report – Hours per Day' field
- Enter a numeric value (default is 0, which means no limit)

For example, if set to 8, a booking longer than 8 hours in a day will still only count as 8 reportable hours.

Use Cases:

This feature supports scenarios where:

- Overnight bookings are made but only a capped number of hours should be reported.
- Usage-based funding requires standardised hour capping per resource per day.
- Facilities want to align reporting with cost recovery or grant eligibility guidelines.

11.13 UOW-SMAH-B32: Set Up Unit Responsible

Each Resource Group in SMAH requires assignment of a Unit Responsible to ensure proper accountability and workflow support. This designation is critical for routing key responsibilities to the correct staff.

Responsibilities of Unit Responsible:

The assigned Unit Responsible will be accountable for the following functions:

- **Responding to Training and Support Requests**
- **Managing and Responding to Reported Incidents**
- **Issuing and Approving Training Certificates**

This ensures that users always have a clearly designated point of contact for support, compliance, and training matters.

How to Set Up Unit Responsible:

Step 1: Register Unit Responsible Staff

- **Navigate to Staff → Unit Responsible Manager**
- Add staff members to be designated as Unit Responsible
    - You can assign multiple staff if needed
    - Ensure contact details are current for automated notifications

Step 2: Assign Unit Responsible to Resource Group

- **Navigate to Resource Manager**
- For each Resource Group, select and assign the appropriate Unit Responsible from the list of registered staff

---

Assigning a Unit Responsible is required for all SMAH resource groups to enable seamless handling of user requests, training workflows, and incident escalations.

11.14 UOW-SMAH-B32: Set Up User Theme

The User Theme feature allows SMAH to categorise users based on their primary area of research focus. This enables tailored reporting, grouping, and analysis aligned with institutional strategic themes.

Available User Themes:

At this stage, the system supports the following three predefined themes:

- **Chronic Conditions and Lifestyle**
- **Diagnostics and Therapeutics**
- **Mental Health and the Ageing Brain**

How to Set Up User Theme:

- **Navigate to System Settings → User Theme**
- Add or edit theme categories as required
- Users can then be assigned to a theme upon registration or profile update

User Themes may be used in reports, dashboards, or grouped analytics to reflect research alignment with SMAH strategic priorities.

11.15 UOW-SMAH-B32: FAQ

1. **What happens after an incident is submitted by users?**

The staff-in-charge receives an email notification. If staff do not respond, there is no further system alert on the View Bookings or Resource Status page.

2. Why does the damage level indicator show "unknown" on My Dashboard?

This status means the incident has not yet been responded to. Until staff assess it, the system cannot assign a damage level.

3. Why are there two buttons for lodged incidents: "To Update" and "To Respond"?

- *To Respond: Appears when staff have not responded to the incident yet*
- *To Update: Appears when staff have responded, but the ticket remains open for further action*

4. Can we edit the response if we make mistakes?

*No. The system **records each response** as-is. If needed, submit a **new update** to correct the information.*

5. Can we edit the original incident description written by users?

*Yes. Staff can **edit the incident description** to clarify or update the user's original submission.*

6. What happens after staff respond to an incident?

- *An **email notification** is sent to the **reporting user** (only on the **initial response**)*
- *The **Resource Status page** reflects the current operational condition of the resource*

7. How do we get an explanation of an incident light indicator?

*Hover your mouse over the indicator to display a **tooltip with a description**.*

8. Can we edit and cancel scheduled maintenance and unscheduled service bookings?

Yes.

- *Scheduled maintenance bookings: Edit via the Booking Calendar*
- *Both types: Edit or cancel via the Data Logbook Manager*

9. Do we have to assign an asset to a resource before making maintenance or service bookings?

*No. Asset linkage is **not mandatory** for creating service or maintenance bookings.*

10. Can we search resource profiles using keywords?

*Yes. The system supports **keyword-based search** for quick access to resource profiles.*

11. Can we search contracts using keywords?

*Yes. Contracts can be easily found using **keyword filters**.*

12. **What are the criteria to set up consumables?**

*The system allows **only one active consumable** with the **same name** at any one time. This ensures correct selection when registering a consumables contract.*

13. **Can we upload more than more documents per contract?**

Yes. Multiple documents can be uploaded under each contract record.

14. **Can we issue training certificate to the user to record trainer and training date?**

*Yes. Go to the **User Profile**, then edit the **User Certificate** section to enter trainer and date.*

12 Appendix E – Modification for DEAKIN-IFM

12.1 DEAKIN-IFM: Define Business Hours

To identify and manage Out-of-Hours bookings at DEAKIN-IFM:

- Navigate to: **System Settings → Configure System → Business Hour Settings**
- Define the standard business hours for the facility.
- The system will use these hours to flag bookings occurring outside normal operational periods.

12.2 DEAKIN-IFM: Set Up Technical Manager Group and Security Officer Group

ACLS has introduced two new generic groups:

- **Technical Manager**
- **Security Officer**

To configure:

- Go to Access Group Manager.
- Assign your designated user groups to these two generic roles accordingly.
- Update user access by applying the new access groups to relevant personnel.

Note:

- Security Officer group members are not permitted to make bookings. Their group is for administrative or oversight functions only.
- Booking permissions for Technical Managers follow the group's assigned policy.

12.3 DEAKIN-IFM: Set Certificate Expiry Control

A new certificate expiry mechanism allows greater control over training validity:

- Navigate to Training Manager.
- Select the relevant resource.
- Click Certificate Registration to edit certificate rules.

You can now choose between two expiry control options:

Option	Description
Valid Period	Certificate expires based on duration from the last access to ACLS.
Valid to Expiry Date	Certificate expires on a fixed expiry date, regardless of user activity.

To enforce expiry on a specific date:

- Enable the "Valid to Expiry Date" toggle.
- Enter the desired expiry date.

12.4 DEAKIN-IFM: Booking Summary View

A new Booking Summary View has been implemented to meet IFM-specific requirements.

This feature supports two distinct user perspectives:

Lab Trainer View:

- **Accessible by: Technical Managers and Lab Trainers**
- **Functionality:**
  - View and approve **unapproved bookings**
  - Grouped and sorted by **resource groups**
  - Expand/collapse booking status per group by clicking toggles
  - Displays booking windows:
    - **Last 6 hours**
    - **Current**
    - **Next 6 hours**

Technical Managers have access to both Lab Trainer and Security views.

Security View:

- **Accessible by: Security Officers**

- **Functionality:**
  - View bookings grouped and sorted by **resource location**
  - Tailored for security personnel to monitor activity across the facility


Booking Summary - Security View
Select facility location to access booking summary views
Switch To Lab Trainer View
gtp
Submit

Location	Facility	Last 6 Hours Status	Next 6 Hours Status
	ARES-G2 Rheometer		
	Autogrid - Strain measurement system		
	Bruker Multimode 8 AFM		
	CES Selector 1		
	Critical Point Drier CPD300		
	EM Membership		Available
	Gas Bottle, LN2 & Low O2		
	GTP Laboratories		Available
	Instron 30 - don*t use		Available
	Netzsch STA 449F3		
	PIPS Gatan		
	Porometer 3GZH Quantachrome		
	SEM Jeol Neoscope		
	SEM Zeiss Leo 1530	- **Busy:** Booked from 28/06/2017 18:00 to 30/06/2017 17:00 By Mr. SEYED HADI MOHAMADI AZGHANDI - **Certificate:** ZEISS LEO 1530 ADVANCED	
	TA - DSC		Available
	TA Q200 DSC	- **Busy:** Booked from 30/06/2017 09:00 to 30/06/2017 18:00 By Mr. Sobhan Fakhrhoseini - **Certificate:** TA Q200 DSC 2016	
	TEM Accutom 50		
	TEM FEG JEOL 2100F	- **Busy:** Service Event booked from 30/06/2017 09:00 to 30/06/2017 13:30 By Ms. Rosey van Driel	- **Busy:** Service Event booked from 30/06/2017 13:30 to 30/06/2017 23:45 By Ms. Rosey van Driel
	Test facility 2		
	Ultramicrotome UC-6		

12.5 DEAKIN-IFM: Approve Out-of-Hours Bookings on My Attention

The My Attention interface now includes enhanced approval functionality for out-of-hours bookings:

- **Features available under:**
  - **Approve Bookings**
  - **Approve Out-of-Hours Bookings**

- **For each pending approval:**
  - View the user's **latest training records**
  - Directly **contact the user via email** if clarification or follow-up is required

12.6 DEAKIN-IFM: Account Owners

To comply with IFM's invoicing requirements, ACLS introduces the concept of Account Owners. This allows invoices to be generated and addressed either to the account owner or to the user's supervisor.

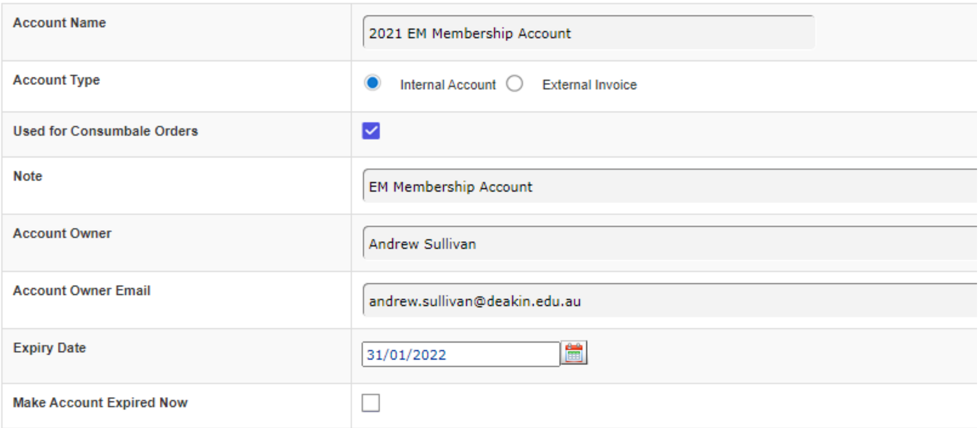
Setup Instructions:

- Go to Account Manager.
- For each account, enter:
  - **Account Owner Name**
  - **Account Owner Email**

Note:

- By default, all existing accounts do not have account owners configured.
- If no account owner is defined, account owner invoices cannot be generated by the system.

This setup ensures greater flexibility and control in financial reporting and aligns with IFM's internal billing workflow.



12.7 DEAKIN-IFM: Account Owner Invoices

ACLS provides two invoicing tools to support IFM’s financial workflows, including the new capability to invoice **Account Owners**:

Resource Booking Invoicing:

- Generates individual invoices for selected bookings.
- Two invoicing options:
  - **Supervisor Invoicing** (existing functionality)
  - **Account Owner Invoicing** (new feature for DEAKIN-IFM)
- Use this when you need to invoice per booking or user on a case-by-case basis.

Resource Batch Invoicing:

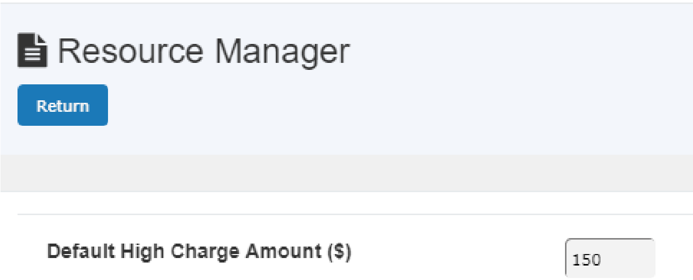
- Generates batch invoices across multiple bookings, users, or accounts.
- The batch invoicing interface has been redesigned to match ACLS's tile-based UI for consistency and ease of use.
- Emailing options:

    - Send invoices to **selected supervisors or account owners**
    - Or send invoices to **all** in a single action

This dual-mode invoicing allows flexibility to align with both supervisor-based and account-owner-based billing preferences at IFM.

12.8 DEAKIN-IFM: High charge bookings

To enhance cost control and financial oversight, ACLS now supports **high charge alerts** for bookings that exceed a predefined threshold.



Configuration Steps:

- Set Default High Charge Value

    - Go to **Resource Manager**.
    - Define a **default high charge amount** that can apply across resources.

- Apply Default to All Resources (Optional)

    - You can **flush** the default high charge amount to all resources in bulk.

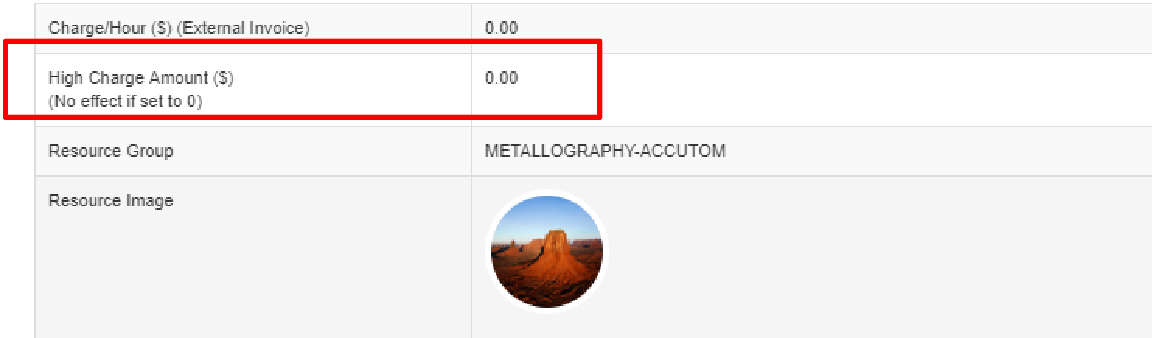
- Set Resource-Specific High Charge Value

    - Alternatively, define a **custom high charge amount** for individual resources within their respective profiles.

Notification Functionality:

- When a booking's cost exceeds the configured **high charge threshold**, the system:
  - **Automatically sends an email alert** to the **account owner** associated with the booking.

This feature is designed to flag unusually high charges and ensure timely financial awareness and approval if required.



12.9 DEAKIN-IFM: Risk Level

A new **Risk Level** control has been introduced for **unapproved bookings**, allowing lab staff to flag bookings that may require additional attention.

Key Features:

- Applicable only to unapproved bookings.
- Navigate to: **Dashboard → Approve Bookings**
- Within the Approve Bookings interface:
  - All pending bookings are listed for action.
  - A new checkbox labeled **"Medium Risk"** has been added to each booking entry.

Purpose:

- Allows approvers (e.g., Technical Managers or Lab Trainers) to:
  - Flag bookings with **medium risk** for internal tracking.
  - Aid in risk-based prioritization and oversight before approval.

This feature enhances the approval workflow by integrating a simple yet effective risk classification mechanism.

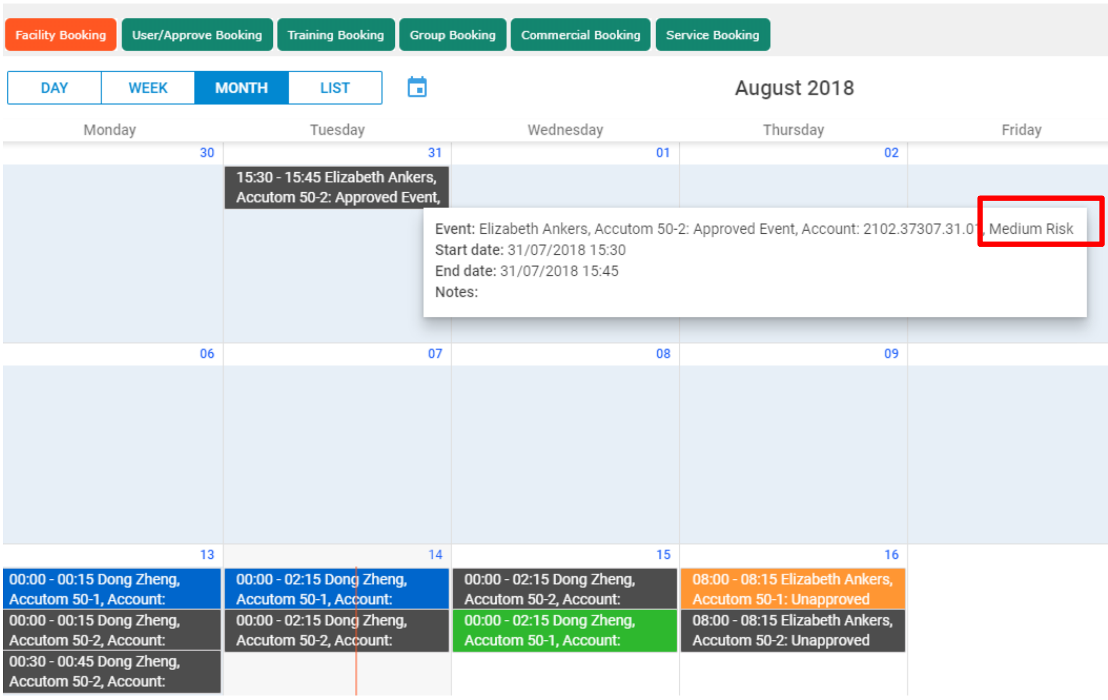
12.10 DEAKIN-IFM: Display Booking Risk Level

Once a booking is approved with a designated **risk level**, ACLS will display this information on all relevant calendars.

Functionality:

- If a risk level (e.g., Medium Risk) was selected during the booking approval process:
    - The **risk indicator** will be shown alongside the approved booking entry.
    - Displayed on **all calendar views**, ensuring visibility for staff and users.

This visual cue helps users and staff quickly identify bookings that carry a flagged risk level, promoting situational awareness and lab safety.



12.11 DEAKIN-IFM: Display Risk Level in Security View

To support lab safety and monitoring protocols, the **Security View** in ACLS now includes **risk level indicators**.

Functionality:

- If a booking was approved with a Medium Risk flag:
    - The risk level is **displayed in the booking details** within the **Security View** interface.

- Security personnel can quickly identify bookings that may require elevated awareness.

This enhancement ensures that risk classification is consistently visible across all relevant ACLS views, including those used by security officers.

If needed, you can attach or refer to the snapshot to illustrate how this appears in the interface.

12.12 DEAKIN-IFM: FAQ

1. How does the "Valid to Expiring Date" work?

When a trainer issues a certificate to a user, the system sets the expiry date based on the issue date and the defined valid period.

- *Example: If the certificate validity is 12 months and issued on 1 Jan 2014, the expiry date will be 1 Jan 2015.*
- *The certificate expires on the set expiry date, regardless of the user's access to ACLS during that period*

2. Are there any changes to the way certificates are issued?

No changes have been made to the certificate issuance process.

- *However, if you wish to extend a certificate's expiry, you must cancel and re-issue the certificate with a new expiry date.*
- *The system does not support direct modification of expiry dates.*

3. What are the major differences between Lab Trainer View and Security View?

- ***Lab Trainer View**: Allows approval of* unapproved bookings.
- ***Security View**: Provides a read-only interface for monitoring;* ***booking approvals are not available****.*

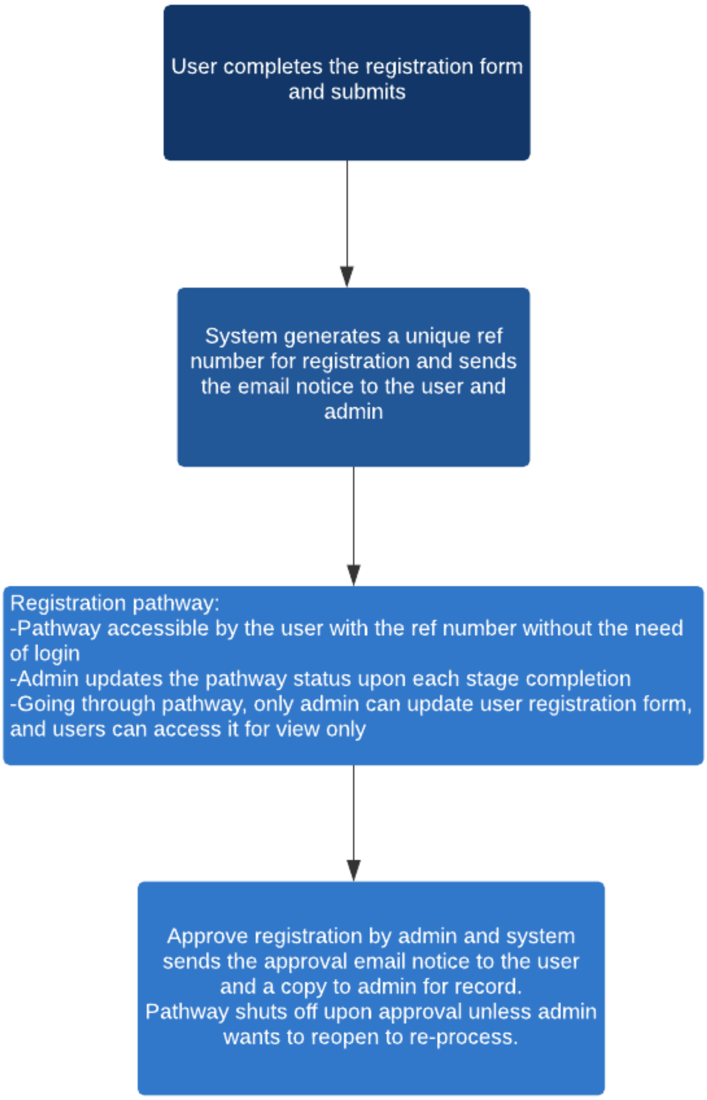
4. **What is displayed upon Security Officer login?**

- *Security officers are directed to the **Security View** automatically upon login.*
- *The view is accessible via both **desktop and mobile devices**, offering flexibility for onsite monitoring.*

13 Appendix F – Modification for UWA-CMCA

13.1 UWA-CMCA: 2018 Requested Changes

The following changes were implemented in ACLS to meet the requirements of CMCA at UWA:



Online Registration Enhancements:

- Registration form expanded to 4 pages.
- Registration Pathway:
  - New structured workflow for user registration approval.
  - Users and staff can view pathway status.

- Upon completion of all steps, admin staff can approve the user registration.

User Access Expiry Alerts:

- If a user's access expiry date is less than 2 weeks away, a warning alert appears on the booking page.
- When users update their registration, the system notifies admin staff for expiry date extension.
- Once the expiry date passes, the user's access to ACLS is disabled.

Account Selection for Bookings:

- If a user has multiple accounts, they are required to select the appropriate account from a dropdown.
- A message "Please choose the correct account for booking" has been added to guide selection.

Booking Restrictions:

- Only active users can be selected when booking instruments.
- This restriction applies across all booking tools.

Booking Search by Active Users:

- Administrators can search for users who made bookings within a defined time period for a specific resource.

Off-Business Time Billing Multiplier:

- A ¼ billing multiplier is automatically applied to bookings made during off-business hours:
  - From 5:00 PM to 9:00 AM on weekdays
  - From 5:00 PM Friday until 9:00 AM Monday
- Standard billing applies to Monday–Friday, 9:00 AM–5:00 PM.

Usage Reporting by Time Type:

- Reports now display usage hours and charges segmented by business time and off-business time.

Registration Flow Enhancements:

- Flow chart integration for user registration process.
- Registration page includes sections for:
    - New User Meetings (NUM)
    - Existing User Meetings (EUM)

- Users are grouped in dropdowns under NUM/EUM tabs, based on meeting type.

Training Plan: CMCA Courses:

- For each user, three repeated course sections include:
    - Course Dates (dropdown, only showing next available date)
    - One-to-One Training (toggle or checkbox)
    - Technique Group (dropdown: Optical/Confocal, Cytometry, XRD, NMR)
    - Instrument (dropdown: ALL CMCA INSTRUMENTS; editable)
    - Comments (single-line text input)

Training Plan: Electron Microscopy:

- **SEM Training Plan**
    - Course Dates (dropdown: next available only)
    - One-to-One Training
    - Instrument Options: Zeiss, Verios, Tescan
    - Discipline (dropdown): Biosciences, Physical Sciences, Geosciences
    - Required Modules (tick box): Imaging, Basic EDS, Advanced EDS
    - Comments (single-line)

- **TEM Training Plan**
    - Course Dates (dropdown: next available only)
    - One-to-One Training
    - Instrument Options: 2100, Titan
    - Discipline (dropdown): Biosciences, Physical Sciences, Geosciences
    - Comments (single-line)

Swipe Card Access Request:

- **Areas (tick boxes):**
  - CMCA@Bayliss
  - CMCA@Physics
  - CMCA@Perkins
  - CMCA@IOMRC

Samples Section (No Change):

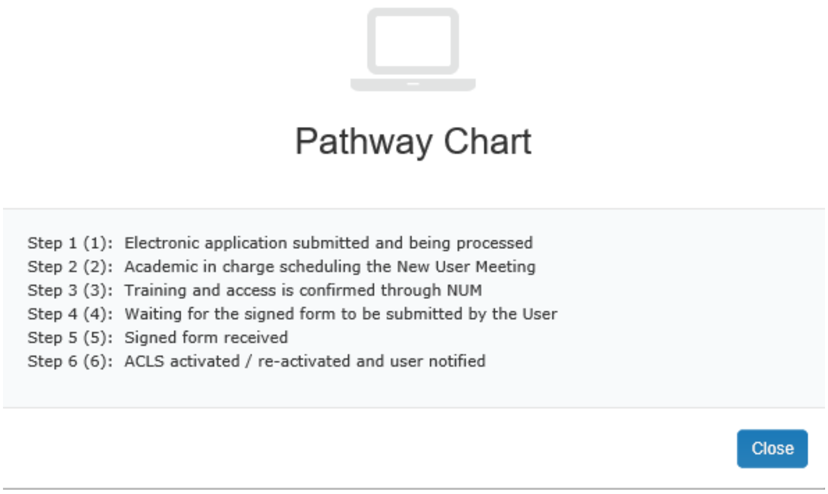
- **Includes:**
  - Sample information adequacy (Yes/No)
  - Date samples are ready
  - Preparation location (selectable/editable)
  - Preparation facility (selectable/editable)
  - Health and safety notes (paragraph)
  - Additional comments (paragraph)

13.1.1 *UWA-CMCA:* To Set Up Registration Pathway

The **Registration Pathway** is a configurable workflow used to manage and approve user registration requests. This feature allows CMCA staff to define a multi-step process tailored to their operational requirements.

Default Setting:

The system includes a built-in initial step: "Received Registration". Admin staff can **modify, remove, or append** additional steps to reflect the full registration process.



Navigation:

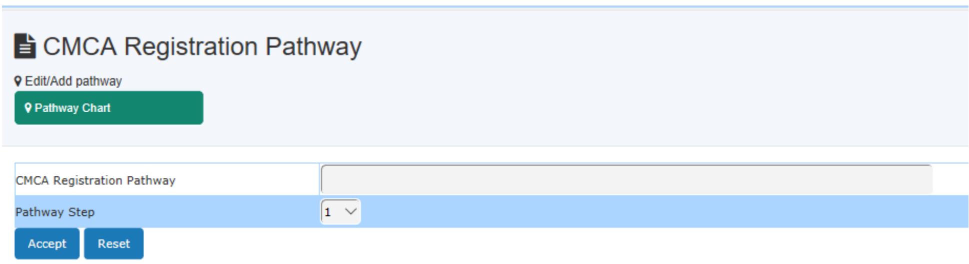
Go to: **System Settings → CMCA Registration Pathway**

Configuration Details:

- Each step is assigned a step number to determine its position in the approval sequence.
- The system displays all steps in order, helping both users and staff track registration progress.

To Add a New Step:

- Click “Add Step”.
- Enter a step name and step number.
- Save the step to include it in the registration flow.



Limits:

- You can configure up to 20 steps in the registration pathway.

This feature provides a flexible approval framework to ensure that all required checkpoints are completed before user access is granted.

13.1.2 *UWA-CMCA:* To Register

As per CMCA requirements, the ACLS registration process consists of a **4-page form**, which users must complete in full to submit their registration.

Page Overview:

- **Page 1: Registration**
  - Captures basic user information.
  - Users may **save a temporary draft**, retained for up to **14 days**.
- **Page 2: Project Description and Risk Assessment**
  - Users must provide a project overview and identify any relevant risks.
- **Page 3: Fund Sources and Payment Details**
  - Users specify their **funding source(s)** and enter **billing information**.
- **Page 4: Terms & Conditions / Submission**
  - Final declarations and form submission.
  - Upon submission:
    - A **confirmation screen** is displayed.
    - A **registration reference number** is generated.
    - A **confirmation email** is sent to the user.

Post-Submission Features:

- A printable summary copy of the registration is available.
  - Useful for filing or capturing a **wet signature**, if required.
- The registration reference number can be used to:
  - **Track registration status** in the pathway.
  - **Reference** in correspondence with CMCA staff.

Email Notifications:

- A registration notice is sent to the email address defined in Configure System → Contact Us Email.
- To notify additional staff:
  - Go to **System Settings ➔ Email Receiver**.
  - Add email addresses of team members who should receive new registration alerts.

13.1.3 *UWA-CMCA:* Approve Registration

With the implementation of the Registration Pathway, user registrations must now be approved through a structured workflow.

Steps to Approve a User Registration:

- Navigate to: User Profile → Registration Pathway Manager
- Select the user whose registration you wish to review.
- On the pathway management page, you will see:
  - A **visual summary** of the current status of each registration step.
  - Only after **all steps in the pathway are marked as completed**, the system enables final approval.

Additional Actions:

- **Contact User:**

  Click the Contact User button to initiate email communication.

- **Access Registration Form:**

  Click "Click to access registration form" to view or edit the form details.

  - **Admins**: Can **edit** the form.
  - **Staff**: Can **view** the form only (read-only access).

This workflow ensures that all required steps and checks are completed before user access is granted, maintaining consistency and compliance with CMCA's operational processes.

13.1.4 *UWA-CMCA:* New User Meeting (NUM)

The New User Meeting (NUM) feature is integrated into the Registration Pathway Manager to support the structured onboarding of both new and existing CMCA users.

Accessing NUM:

- Navigate to: User Profile → Registration Pathway Manager
- Click either:
  - **New User Meeting** – for users who have not yet been approved.
  - **Existing User Meeting** – for registered and active users.

Meeting Record Management:

- Click User Meeting Records to access previously recorded NUMs.
- Each meeting entry requires completion of the NUM form.

Form Requirements:

- For both new and existing user meetings:
  - The **NUM form must be completed**.
  - You must **select the user** from a **dropdown list** to associate the form with their profile.

This process ensures proper documentation and alignment between training, induction, and access control across CMCA platforms.

13.1.5 *UWA-CMCA:* NUM Settings

All dropdown lists used in the New User Meeting (NUM) forms can be fully configured through the ACLS system settings.

How to Configure Dropdown Lists:

- Navigate to: System Settings → NUM Configuration
- Each dropdown list—such as CMCA Swipe Card Access, Instrument, Technique Group, Discipline, and Preparation Facilities—can be:
  - **Added**
  - **Edited**
  - **Removed**

Configuration for all dropdowns follows the **same standard method**, ensuring consistent management and customization of NUM form fields.

Example – Setting Up CMCA Swipe Cards:

To configure swipe card access areas:

- Go to System Settings → CMCA Swipe Card Locations
- Add or modify entries (e.g., CMCA@Bayliss, CMCA@Physics, etc.)
- Save changes to make them available in the NUM form dropdown.

These settings allow CMCA administrators to maintain accurate and flexible meeting forms tailored to operational requirements.

13.1.6 *UWA-CMCA:* Set Up Business Time and Multiplexer

To enable differential billing for business and off-business hours, ACLS allows CMCA to configure business hours and apply an off-hours billing multiplier.

How to Set Business Hours:

- Navigate to: **Staff → System Settings → Configure System → Business Hour Settings**
- Define the start and end time of standard business hours (e.g., 9:00 AM to 5:00 PM).
- Weekends (Saturday and Sunday) are automatically treated as off-business time.

Multiplexer Application:

- Once business hours are set, ACLS applies the off-hours billing multiplier (e.g., ¼ standard rate) to:
  - Bookings outside of business hours (evenings, early mornings)
  - **All weekend bookings**

This setup ensures accurate billing calculations for both business and off-business time as per CMCA's charging policy.

13.1.7 *UWA-CMCA:* Usage Reports

As outlined in the CMCA proposal (ACLS Change of Order (201606-CMCA) – Final.pdf), ACLS booking and batch reports have been enhanced to support separate calculations for business hours and off-business hours.

Report Enhancements:

- Booking Reports and Batch Reports now display:
  - **Usage duration and charges during business hours**
  - **Usage duration and charges during off-business hours**
- The calculation takes into account the business hour definitions and the configured off-hours billing multiplexer.

New Reporting Platform:

A new reporting interface has been implemented for improved usability:

- Features:
  - **Search** and **shortlist** records
  - Export options: **CSV**, **Excel**, and **PDF**
- This enhanced platform is now used across all ACLS report tables.

Important Note:

- The multiplexer feature is newly introduced in ACLS.
- For existing batch reports generated before this update:
    - Business time and off-business time values will display as **zero**.
    - To populate these fields, you must **re-run the batch reports**.

These improvements provide accurate, transparent billing and reporting based on defined operating hours, supporting CMCA's operational and financial governance.

13.1.8 *UWA-CMCA:* User Registration Form

The User Registration Form has been upgraded with a modern metadata-driven design to provide a more polished and flexible interface.

Accessing the Form:

- Navigate to: **User Profile → Registration Form**

Key Features:

- Available for each individual user profile
- Utilizes the new meta data form layout, offering:
    - Cleaner presentation
    - Enhanced data organization
    - Improved readability for both users and administrators

This form serves as the central record of user-provided information during registration and can be referenced or updated as needed (admin access only).

13.1.9 *UWA-CMCA:* FAQ

1. **How can I set up "Funding Source"?**

*This option is restricted to **admin users**.*

*Go to: **System Settings → Funding Sources***

2. **How can I set up "Special Requirements"?**

*This option is restricted to **admin users**.*

*Go to: **System Settings → Special Requirements***

3. How can I set up “CMCA Facilities”?

*This option is restricted to **admin users**.*

*Go to: **System Settings → CMCA Facilities***

4. How can I set up “CMCA Labs”?

*This option is restricted to **admin users**.*

*Go to: **System Settings → CMCA Labs***

5. How can I set up “UWA Payment Option”?

*This option is restricted to **admin users**.*

*Go to: **System Settings → UWA Payment Option***

6. How can I set up “Non-UWA Payment Option”?

*This option is restricted to **admin users**.*

*Go to: **System Settings → Non-UWA Payment Option***

7. Why can’t I approve the registration?

*You can only approve a registration once the **entire registration pathway is completed (closed)**.*

8. Upon approval, can the user access the registration form?

Yes.

- *The user can view their form by navigating to User Profile Manager.*
- *However, users cannot edit the form after approval—it is read-only for them.*

13.2 UWA-CMCA: 2020 Requested Changes

To support CMCA’s updated billing structure and user access model, ACLS has implemented a Tiered Instrument and Subscription System.

Instrument Tiering and Charging Model:

- Each instrument is assigned to a single tier (Tier 1, Tier 2, or Tier 3) based on complexity and operational costs.
- Instruments cannot belong to more than one tier.

Billing Options:

- Pay-as-you-go (hourly billing)
- Pre-paid blocks of hours (discounted rates)

Users can hold multiple subscriptions across different tiers, but blocks are not interchangeable between tiers.

Subscription Rules and Functionality:

- Users must pre-purchase block hours per tier if choosing the discounted block rate.
- No shared blocks – each subscription is assigned to a single user.
- No upgrading of blocks (e.g., from 50 to 100 hours); users must purchase a new block.
- Block validity: All blocks expire 12 months after purchase.
- In-hours and out-of-hours rates are the same (no time-based rate variation).
- Group subscriptions are discontinued.

System Functionality in ACLS:

- Users will see remaining hours per tier when booking instruments.
- When 10 hours remain, both the user and admin will receive an automated email alert.
- Admin can configure:
  - Instrument-to-tier mapping
  - Tier rates and available block sizes
  - Hour pricing and expiration

Working Principles Summary:

Principle	Description
Tier Assignment	Instruments grouped into **Tier 1, 2, or 3** based on complexity and cost
Purchase Options	Hourly or block-based charging
Block Usage	Block hours are tied to one user and tier only
Discount Scaling	Larger blocks offer greater discounts
12-Month Expiry	Blocks must be used within 12 months
No Block Upgrades	Once exhausted, a new block must be purchased

---

UWA Internal Rates (Example):

Hours	Tier 1	Tier 2	Tier 3

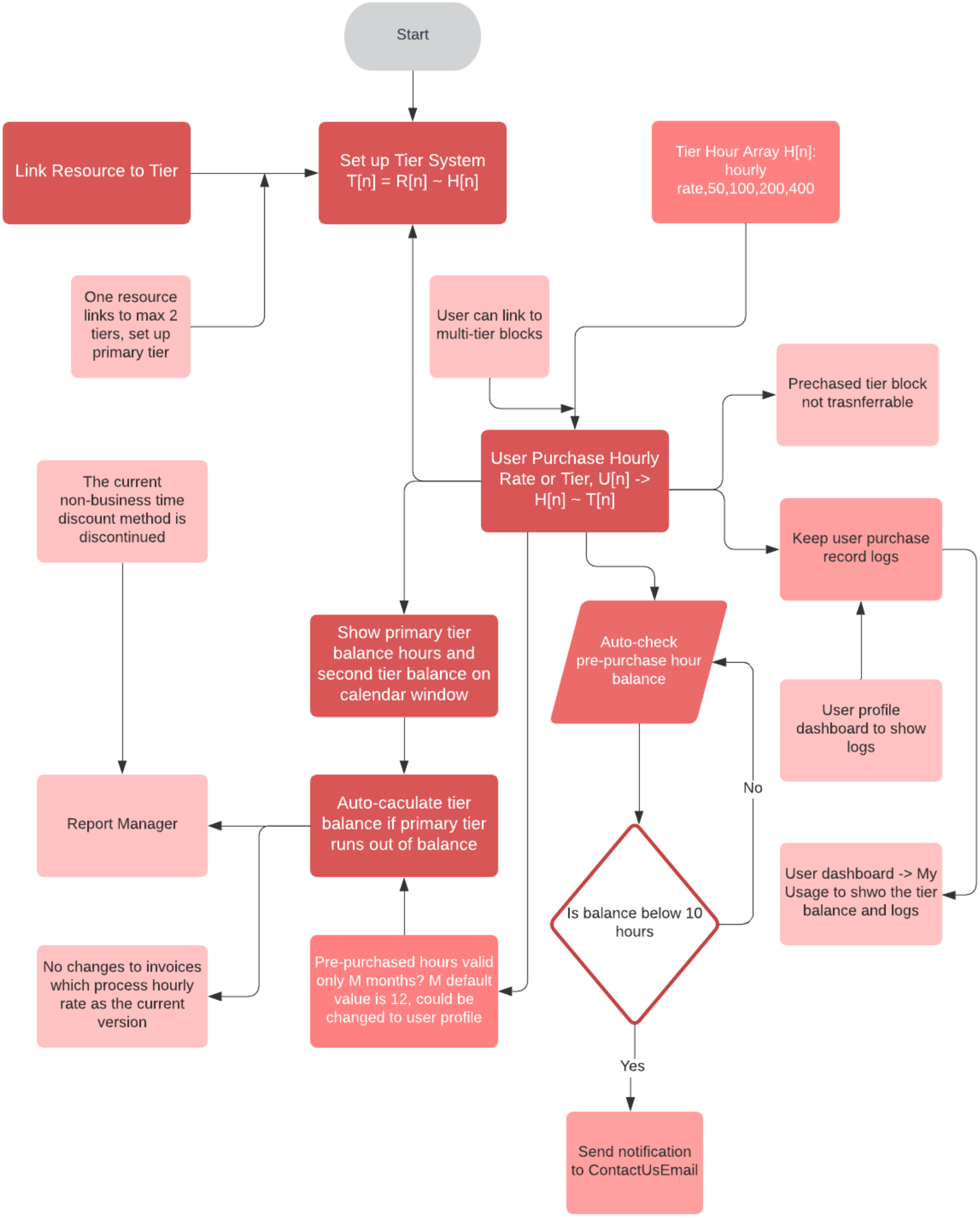
1	$x	$x	$x
50	$xx	$xx	$xx
100	$xxx	$xxx	$xxx
200	$xxxx	$xxxx	$xxxx
400	$xxxxx	$xxxxx	Not Available

External Rates:

External rates follow a 3:1 multiplier compared to UWA internal rates, reflecting UWA's two-thirds contribution to CMCA operations.

Hours	Tier 1	Tier 2	Tier 3
1	$3x	$3x	$3x
50	$3xx	$3xx	$3xx
100	$3xxx	$3xxx	$3xxx
200	$3xxxx	$3xxxx	$3xxxx
400	$3xxxxx	$3xxxxx	Not Available

Flow Charts:



13.2.1 *UWA-CMCA:* Set up tiers

To configure the instrument tier system as required by CMCA's 2020 model:

Steps to Set Up Tiers:

- Navigate to: Staff → Utility → Charge Category Manager
- Use the interface to:
  - **Create multiple charge categories**, each representing a **Tier** (e.g., *Tier 1*, *Tier 2*, *Tier 3*)

  - Assign appropriate **names** and **descriptions** for clarity

Each charge category (tier) will be used later to associate specific instruments and define pricing structures for block hours and hourly usage.

13.2.2 *UWA-CMCA:* Set up resource tier and rates

Each instrument (resource) at CMCA must be assigned to one tier only, and have its associated rates configured accordingly.

Steps to Configure:

- Navigate to: **Resource Manager → Charge Rates**
- For each resource:
  - Assign it to a specific tier (Tier 1, Tier 2, or Tier 3)
  - Define rates for:
    - Hourly usage
    - Block purchase options (if applicable)
    - UWA and external users, if different
- The selected tier and associated rates are displayed in the resource list table, providing a quick reference for administrators.

This setup ensures each instrument follows the correct pricing model and is fully integrated into the CMCA tiered subscription framework.

13.2.3 *UWA-CMCA:* Purchase hours

Users can pre-purchase blocks of hours for use on instruments within a specific tier. These purchases are managed via the User Tier Manager.

Steps to Record a Purchase:

- Navigate to: **User Profile → User Tier Manager**
- Select the relevant user (e.g., User "Aati").
- For each tier:
  - Choose the Tier (Tier 1, 2, or 3)
  - Enter the block of hours purchased
  - The system will update the current balance for that tier

- All purchased hour records are:
  - Logged for audit and reference

- Include booking-based usage deducted against the balance

This ensures transparency and traceability for each user's subscription activity across multiple tiers.

13.2.4 *UWA-CMCA:* Expiry date of the purchase:

All pre-purchased hour blocks are valid for 12 months from the date of purchase.

Expiry Rules:

- Upon initial purchase, the expiry date is set to one year from the purchase date.
- If the user tops up (purchases additional hours within the same tier), the system will:
  - Reset the expiry date to one year from the new purchase date.

This ensures that unused hours cannot accumulate indefinitely and encourages appropriate planning within research project timelines.

User Name	Aati, Sultan
Purchased Tier	○ tier 1 ○ tier 2 ○ tier 3
Purchased Hours	○ 50 Hours ○ 100 Hours ○ 200 Hours ○ 400 Hours
Current Purchased Tier and Hours	tier 2: 100 hours
Current Purchased Hour Balance	100.00
Current Purchased Hour Expiry Date	20/01/2022 **(Days left to expire: 364)**
Current Purchased Tier and Hours	tier 3: 200 hours
Current Purchased Hour Balance	200.00
Current Purchased Hour Expiry Date	20/01/2022 **(Days left to expire: 364)**
Current Purchased Tier and Hours	tier 1: 50 hours
Current Purchased Hour Balance	69.00
Current Purchased Hour Expiry Date	21/01/2022 **(Days left to expire: 364)**

13.2.5 *UWA-CMCA:* Charge by hour or by tier:

ACLS supports two billing modes for CMCA users: hourly charging (default) and tier-based charging.

Default Mode – Charge by Hour:

- All users are initially set to hourly billing.
- Users can book instruments as usual, with charges applied per hour at the standard rate.
- Tier-Based Mode – Charge by Tier:
- When Charge by Tier is enabled for a user:
  - The user must have pre-purchased hours available in the relevant tier.
  - Users cannot book instruments in a tier if they do not have sufficient balance.

This dual-mode billing system allows a smooth transition from hourly to tier-based usage and ensures enforcement of the pre-purchase model when required.

User Name	Category	Charge By
Aati, Sultan	tier 1	○ by hour ● by tier
Aati, Sultan	tier 2	○ by hour ● by tier
Aati, Sultan	tier 3	○ by hour ● by tier

13.2.6 *UWA-CMCA:* Charge by internal rate or external rate:

ACLS supports differentiated charging for internal (UWA) and external (non-UWA) users.

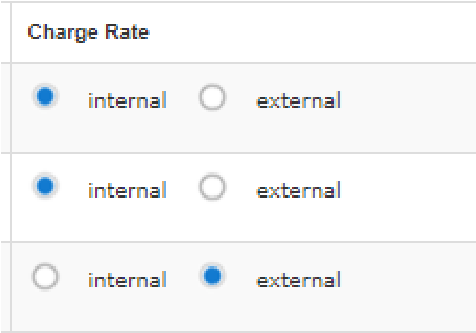
Default Setting:

- All users are initially charged at the UWA internal rate by default.

Admin Control:

- Administrators have the ability to override the default rate on a per-user and per-resource basis.
- This allows flexibility to:
  - Apply external rates to non-UWA collaborators or external institutions
  - Maintain correct cost recovery across diverse user types

This rate configuration ensures accurate billing aligned with UWA's funding and operational models.



User Name	Category	Charge By	Charge Rate
Aati, Sultan	tier 1	by hour by tier	internal external
Aati, Sultan	tier 2	by hour by tier	internal external
Aati, Sultan	tier 3	by hour by tier	internal external

13.2.7 *UWA-CMCA:* Balance logs for the purchased tiers:

The balance logs page allows administrators to track and manage hour purchases, usage, and rate settings for each user.

Functions Available:

- **View and track:**
  - All purchased hour blocks per user and tier
  - Booking usage deducted from each block
  - Remaining balance and expiry date

- **Define user-specific settings:**
  - Charge Mode: Select by hour or by tier
  - Rate Type: Select internal or external rate

Default Settings:

- **Charge by Hour**
- **Internal Rate**

These defaults allow all users to continue making bookings without requiring upfront hour purchases, ensuring no interruption in access.

Admins can adjust these settings individually based on the user's funding type, usage model, or institutional affiliation.

System checks balance hour expiry date and resets to zero if expired, also send the notification to the admin for reset balance.

13.2.8 *UWA-CMCA:* Cancel the purchased hours:

Administrators have the ability to cancel previously purchased hour blocks for a user under specific circumstances (e.g., billing correction, user withdrawal, policy enforcement).

Key Behaviours:

- **Admin Access Only:**

  Only admins can initiate the cancellation of purchased hours.

- **Impact on Balance:**
  - If the cancelled amount exceeds the current balance, the user's remaining balance is set to zero.
  - No negative balance is recorded or allowed.

Audit Logging:

In the purchased logs, cancelled blocks appear as negative entries, clearly marked for traceability.

This functionality supports administrative flexibility while maintaining data integrity in hour usage and billing records.

13.2.9 *UWA-CMCA:* Reset balance hours:

Administrators have the ability to manually reset a user’s balance hours for any tier.

Functionality:

- Accessible only to admin users
- Allows setting the user’s balance hours to a new value, overriding existing balances

Important Note:

This action should be used with caution, as it will permanently replace the current balance. It is recommended to log the reason for any reset and notify the affected user if applicable.

Purchased Tier	Current Purchased Hour Balance	Reset
Category 2	355.00	Reset Tier Balance to Zero

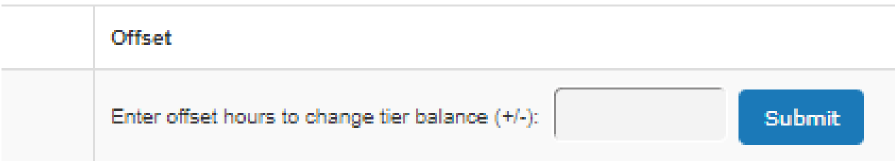
13.2.10 *UWA-CMCA:* Offset balance hours:

The Offset Balance Hours function allows administrators to adjust a user's balance by adding or subtracting hours as needed.

Functionality:

- Accessible only to admin users
- Enables incremental adjustment of existing balance hours (positive or negative)
- Common use cases include:
  - Manual corrections
  - Compensation for billing discrepancies
  - Ad hoc adjustments (e.g., grant extensions, instrument downtime)

Unlike a full reset, offsetting modifies the existing balance rather than replacing it.
All offset actions are logged for reference and audit.



13.2.11 *UWA-CMCA:* Alternative ways to check balance and logs

ACLS provides both users and staff with convenient access to hour balance and usage logs for transparency and self-service.

For Users:

- Navigate to: **My Profile → Tier Balance and Logs**
- Users can:
  - View current balance hours per tier
  - Review purchase history
  - Track booking-based usage

For Staff/Admins:

- Navigate to: **User Profile → Tier Balance and Logs**
- Staff can:
    - View the same information available to the user
    - Perform administrative actions such as:
        - Purchase logging
        - Offsetting or resetting balances
        - Cancelling blocks

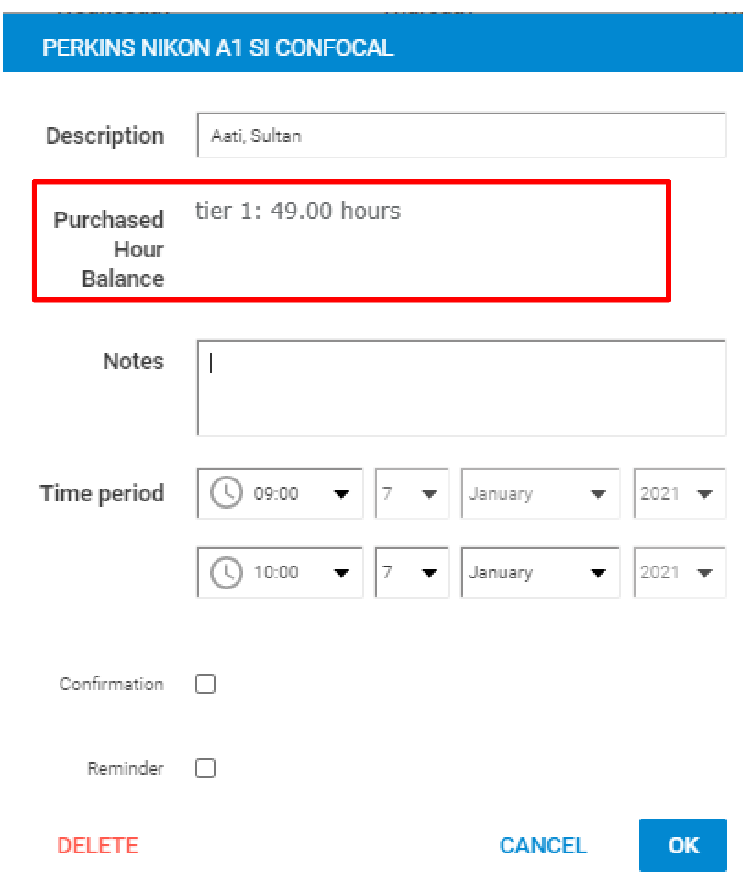
These access points ensure that both users and staff can stay informed and maintain accountability over subscription usage.

13.2.12 UWA-CMCA: Tier and Balance Indicators During Booking

To support transparency and user awareness, ACLS provides real-time tier and balance indicators during the booking process.

Booking Interface Enhancements:

- When making a booking, the booking lightbox window clearly displays:
    - The tier of the selected resource
    - The user's current balance of hours for that tier



Balance Deduction Logic:

- Upon booking confirmation: The corresponding number of hours is automatically deducted from the user's balance.
- If the booking is later cancelled: The previously deducted hours are restored to the balance.

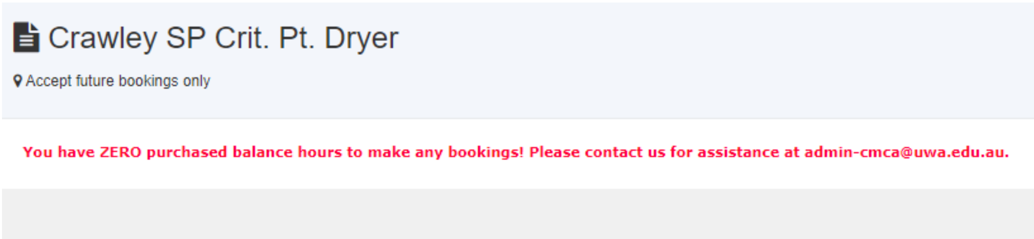
Calendar Display:

The resource's tier is displayed directly on the calendar interface, giving users clear context when planning bookings.

Booking Restrictions:

- If a user has no remaining balance for the relevant tier:
  - An alert message is shown, and
  - The user cannot proceed with the booking.

This mechanism ensures users can only access instruments when they have sufficient prepaid hours, reinforcing fair and accurate usage enforcement.



13.2.13 *UWA-CMCA:* Booking with tiers – user and training calendar

When a user has tier-based billing enabled, ACLS supports seamless integration with both standard bookings and training bookings.

Functionality Overview:

- **Staff-Initiated Bookings:**
  - Staff can book instruments on behalf of the user using the standard calendar interface.
  - Bookings are automatically deducted from the user's balance for the relevant tier.

- **Training Calendar Bookings:**
  - Staff can schedule training sessions for users using the Training Calendar.
  - These training bookings also consume hours from the user's tier balance.

Automation:

No manual adjustment is required — ACLS automatically:

- Identifies the tier of the booked resource
- Deducts the booking time from the user's applicable purchased hour block

This ensures that all types of usage — including staff-assisted and training — are consistently accounted for under the tiered subscription model.

13.2.14 UWA-CMCA: Tier and Balance Display on Timeline Calendar

The Timeline Calendar provides a dynamic and comprehensive view of tier-based availability and balances across multiple resources.

Key Features:

- **For each resource listed:**
    - The resource's tier and the user's purchased hour balance are dynamically displayed.
    - This differs from the Single Resource Operation Calendar, which only displays information for one resource at a time.

- **Real-time updates ensure users and staff can:**
    - Quickly assess booking eligibility
    - Monitor remaining balances without navigating away

Booking Restrictions:

Bookings cannot be made if:

- The user's balance is zero, or
- The user's balance is less than the number of hours being booked

This ensures that tier-based billing logic is strictly enforced across both standard and timeline views, maintaining operational integrity and preventing overuse.

13.2.15 *UWA-CMCA:* Booking cancellation

When a user is on tier-based billing, ACLS automatically manages balance restoration for cancelled bookings.

Cancellation Handling:

If a booking is cancelled (by user or staff):

- The booked hours are automatically restored to the user's tier balance.
- No manual intervention is required.

This ensures accurate tracking of prepaid usage and prevents hour loss due to cancellations, while maintaining consistency in the user's balance logs.

13.2.16 *UWA-CMCA:* Training Bookings

Training bookings are excluded from tier-based billing.

Key Behaviour:

When using the Training Booking Calendar:

- ACLS does not deduct hours from the user's purchased tier balance.
- Training bookings are treated as non-billable under the tiered subscription model.

This distinction ensures that users are not charged for training activities and that only actual resource usage is accounted for in their prepaid balance.

13.2.17 *UWA-CMCA:* Retrospective Bookings

ACLS allows staff to manage retrospective bookings (bookings entered for past usage) with full integration into the tier-based billing system.

How to Edit Retrospective Bookings:

- Navigate to: **Data Logbook Manager**
- From this interface, staff can:
  - Create or modify past bookings
  - Ensure accurate recording of actual usage time

Tier Balance Handling:

When a retrospective booking is saved:

- ACLS will deduct the appropriate hours from the user's tier balance, just like with standard bookings.

This ensures consistent treatment of all resource usage—past or present—within the tiered accounting framework.

13.3 UWA-CMCA: 2022 Requested Changes

- Registration pages: all pages
- New and existing user meetings module

13.3.1 UWA-CMCA: Registration pages

Page 1: changes are made in accordance with the change proposal. Save as a copy stays as what it is.

Before continuing to the Registration page, ensure you have the following information on hand:

- ✔ Contact details
- ✔ Your supervisor name and contact details (students and visitors only)
- ✔ Emergency contact details
- ✔ A short research project outline (to help CMCA understand your microscopy needs)

Retrieve the saved copy of registration document

Title	
Given name*	
Family name*	
Preferred Name	
Project ID	
UWA Student/Staff/Visitor Number or institute student/staff number	(leave blank if visitors card has not been issued)
Email*	(UWA or affiliate email address only)
Retype email*	
Login password*	
Retype login password*	
School/organization*	Choose school/organization from the list
Work phone*	(digits Only)
Mobile phone	
Work address UWA include MBDP	

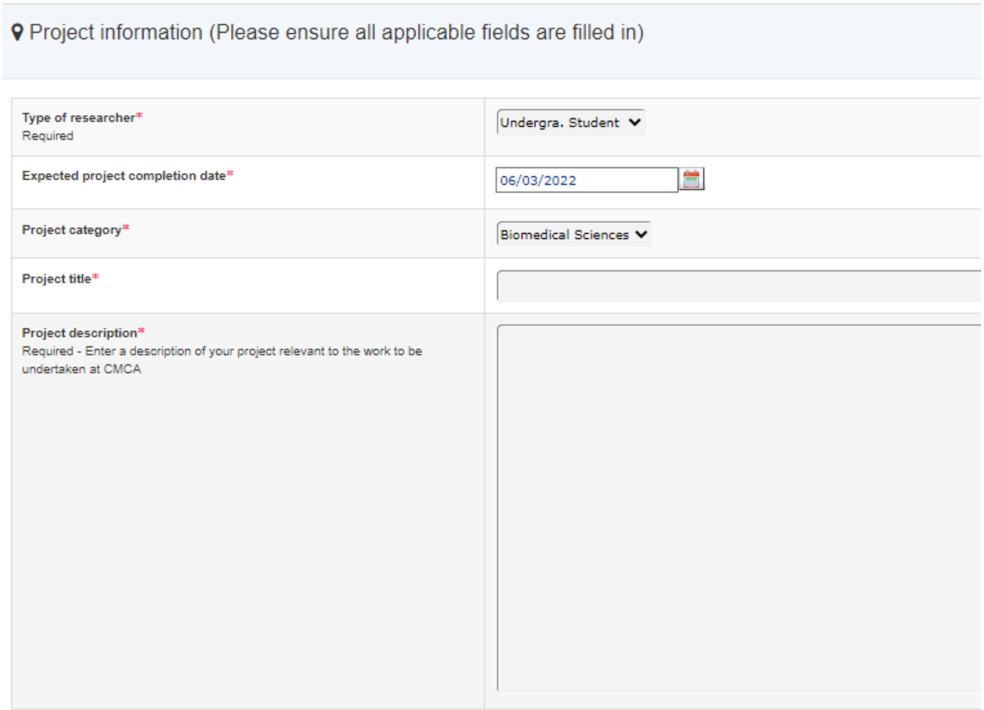
Please provide for someone we can contact in the event of an emergency

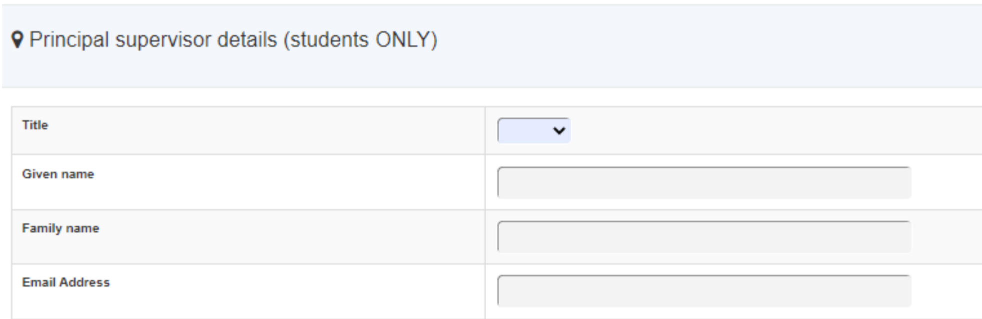
Name of emergency contact person*	
Phone number*	
Their relationship to you*	
Have you communicated with staff at CMCA about your project*	○ Yes ● No (If No, please contact staff at CMCA website)
Name of staff member contacted	

Which Centre facilities do you expect to use at CMCA during next 6 months?

Select all that apply* You must complete the appropriate training courses before you can use the instruments	☐ Bioimaging ☐ Cytometry ☐ Electron Microscopy ☐ ICPMS ☐ Ion Probes (only to approved users) ☐ Magnetic Resonance Imaging (MRI) ☐ Mass Spectrometry ☐ Nuclear Magnetic Resonance (NMR) ☐ Optical / Confocal microscopy ☐ Scanned Probe Microscopy (AFM, STM, Raman, Nanoindenter) ☐ X-ray microscopy (XRM) /microCT

Page 2: changes are made in accordance with the change proposal. Save as a copy stays as what it is.





Page 3: changes are made in accordance with the change proposal. Save as a copy stays as what it is.

Fund sources (please ensure all applicable fields are filled in)

Are you or do you intend to use another AMMRF node/facility?*	No
If yes, please specify (AMMRF Nodes)*	
Please specify all sources of funding*	☐ ------------------------------ ☐ 01-NHMRC: Project Grant ☐ 02-NHMRC: COE ☐ 03-NHMRC Development Grant ☐ 04-NHMRC Program Grant ☐ 05-NHMRC Fellowship ☐ 06-Targetted Government Funded Program ☐ 07-Trust or Scholarships (generic) ☐ 08-ARC DP ☐ 09-ARC COE ☐ 10-ARC LP ☐ 11-ARC Special Research Initiative ☐ 12-Internal University Grant (incl. UPA) ☐ 13-Industry Sponsored. Please specify the name of the company ☐ 14-Australian Postgrad Stipend ☐ 15-Self-Funded ☐ 16-Multiple Grants ☐ 17-Medical Research Institute ☐ 18-Co-operative Research Centre ☐ 19-Other. Please specify ☐ 20-Funding from an external university ☐ 21-NHMRC: Synergy ☐ 22-NHMRC: Partnership Projects ☐ 23-NHMRC: Other ☐ 24-NHMRC: Ideas Grants ☐ 25-ARC: DECRA ☐ 26-ARC: Future Fellowship ☐ 27-ARC: Industrial Transformation Hub/Centre ☐ 28-ARC: Other ☐ Please provide as many details as you can - i.e. names of the grants
Please specify the name of the company If specified 13 or 19	

Membership Fees

Options* select appropriate	○ UWA Honors $200 ○ UWA Others $1000

Select payment option

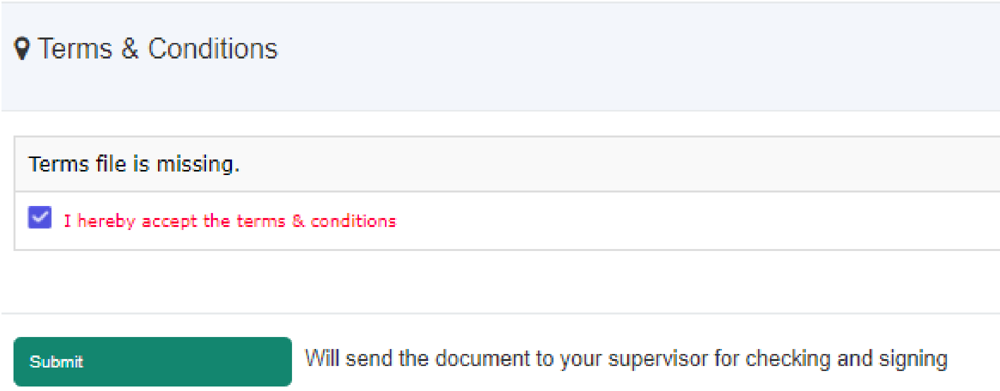
*	○ Payment details (internal) ○ Payment details (associate)

*: required fields

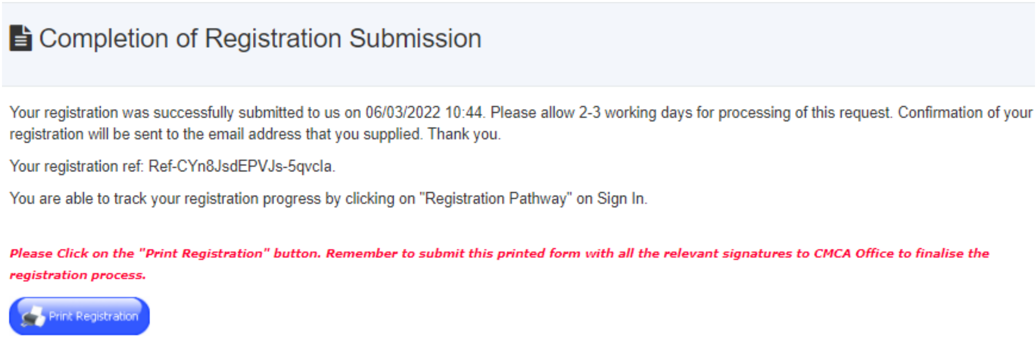
Continue

Save a Copy Will save the incomplete registration document for 14 days to allow further details to be completed after that time it is completely deleted

Page 4: remain the same.



Upon submission:



Printable copy: changes are made according to the CMCA registration pages.

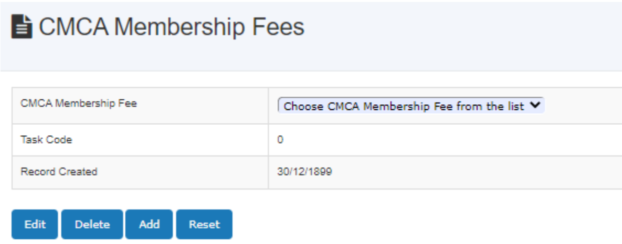
13.3.2 UWA-CMCA: Set up membership fees

ACLS allows administrators to configure and manage membership fees required for CMCA user access.

How to Set Up or Modify Fees:

- Navigate to: **System Settings → Membership Fee Settings**
- From this section, admins can:
  - **Define membership fee amounts**
  - **Update fee structures** as needed
  - Apply fees to **different user types** or **categories**

This feature supports flexible membership models and ensures fee updates are centrally controlled by authorized administrators.



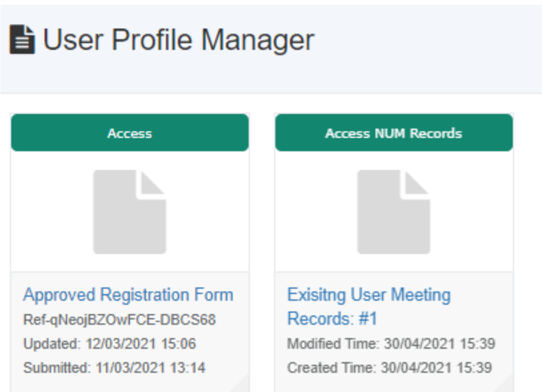
13.3.3 UWA-CMCA: User profile: Access filled-up registration form

ACLS allows administrators to view and manage the completed user registration form directly from the user profile.

Functionality:

- Navigate to: **User Profile → Registration Form**
- Admin users can:
  - **Access the full registration form** submitted by the user
  - **Edit or update form details** if corrections or administrative amendments are required

This feature ensures accurate user information is maintained and provides a central access point for registration records.



13.3.4 UWA-CMCA: New user meeting

The User Meeting module has been redesigned to support CMCA-specific onboarding requirements.

How to Set Up a New User Meeting:

- Navigate to: **Staff → Registration Pathway Manager**
- From this interface, staff can:

  - Schedule a **New User Meeting** for users who have **submitted their registration** but are **not yet approved**
  - Record meeting outcomes and associate them with the user's registration record

Key Notes:

- The updated module supports CMCA's revised registration workflow
- Only unapproved users will appear for scheduling under the New User Meeting section

This structured approach ensures all new users complete an appropriate onboarding discussion before gaining access to CMCA resources.

13.3.5 UWA-CMCA: Existing user meeting

As part of the CMCA user onboarding and compliance process, the Existing User Meeting module has been overhauled to better support ongoing engagement with active users.

How to Set Up an Existing User Meeting:

- Navigate to: **Staff → Registration Pathway Manager**
- From this interface, staff can:
  - Schedule an **Existing User Meeting** for users who are already **registered and active**
  - Record discussion points, course planning, or updates relevant to continued facility access

Key Notes:

- This feature complements the New User Meeting workflow, ensuring all users—new and returning—receive appropriate guidance
- Meeting records are stored and linked to the user's profile for administrative reference

The updated meeting module provides CMCA with a consistent process for both onboarding and maintaining engagement with its user base.

13.3.6 UWA-CMCA: User meeting records

ACLS maintains a complete log of all User Meeting Records to support CMCA's onboarding and compliance workflows.

Accessing Meeting Records:

- Navigate to: **Staff → Registration Pathway Manager**

- Click the **User Meeting Records** button to view historical meeting entries.

Functionality:

- All New User Meetings (NUM) and Existing User Meetings (EUM) are:
  - **Fully recorded**
  - **Organized by year** to simplify summary and audit
- Admin staff have the ability to:
  - **View** and **search** meeting history
  - **Edit records** when updates or corrections are needed

This structured archive ensures transparency, auditability, and efficient tracking of user engagement over time.

13.3.7 UWA-CMCA: User profile: Access meeting records

ACLS allows staff to access and review User Meeting Records directly from the user's profile for easy reference and follow-up.

How to Access:

- Navigate to: **Staff → Users → User Profile Manager**
- Select the relevant user, then:
  - Click on **User Meeting Records** to view all past meeting entries
  - A **printable copy** of each record is available for documentation or offline review

This provides a convenient, user-specific view of engagement history, supporting both operational oversight and training tracking.

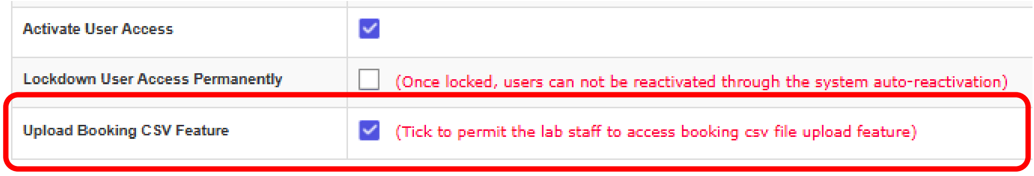
13.4 UWA-CMCA: 2024 Requested Changes – NMR Facility

- CMCA NMR admin uploads monthly csv file to ACLS
- ACLS can csv file and insert records to the booking records
- ACLS auto-deduct the booking hours from the tier balance, tier balance could go negative if the balance hours are not sufficient since the bookings are backward added to the booking records

13.4.1 UWA-CMCA: Nominate staff to upload booking csv

This is admin feature to nominate the staff who can upload NMR booking csv file and populate the bookings in Data Logbook Manager.

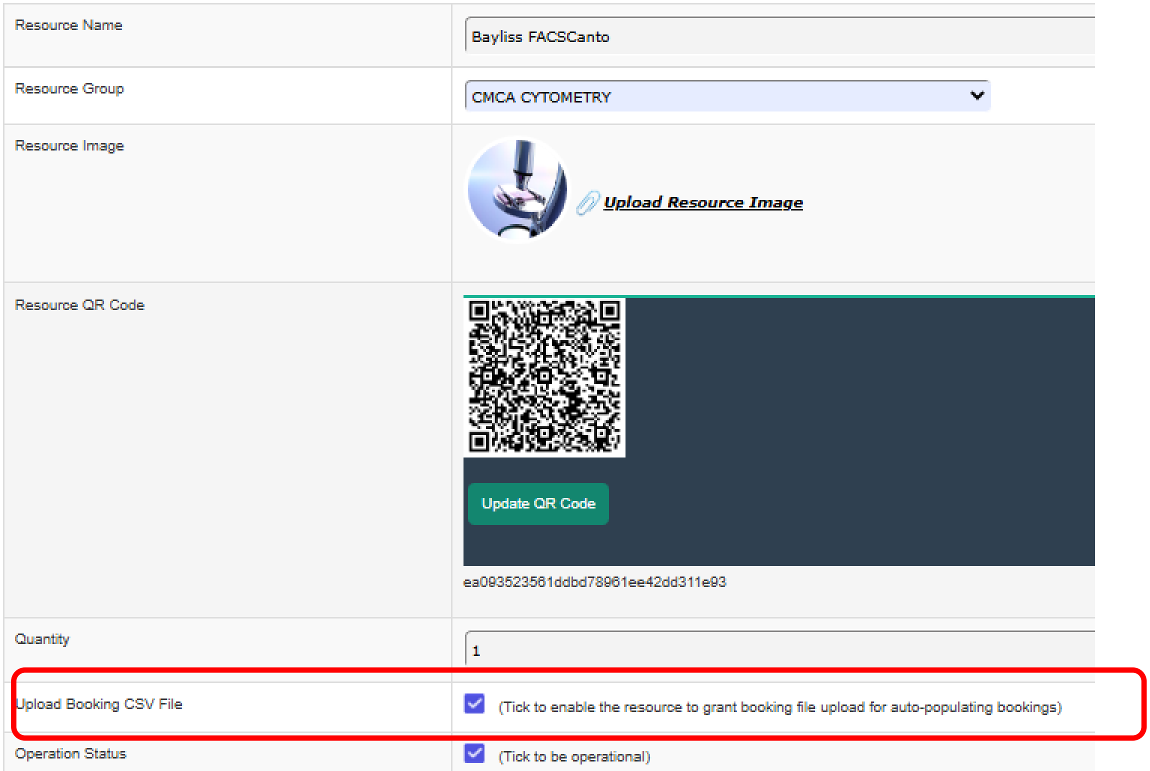
Go to Staff Tab -> User Profile -> User Profile Manager, search and pick the staff, then tick the ***Upload CSV Feature*** box in Access Tab and accept the changes.



13.4.2 UWA-CMCA: Nominate resource to the whitelist of requiring booking csv upload for walk-up retrospective bookings

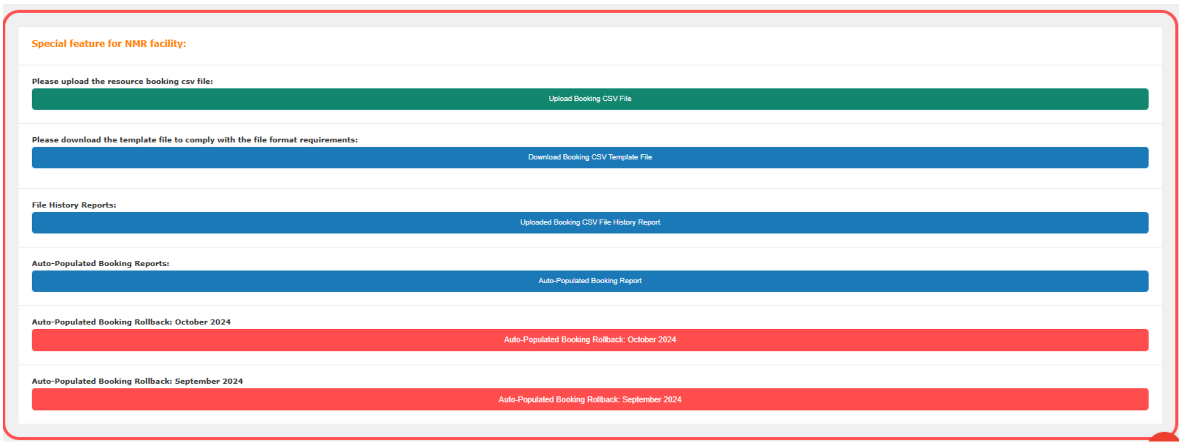
This is admin feature to nominate the resource that requires to upload NMR booking csv file and populate the bookings in Data Logbook Manager.

Go to Staff Tab -> Utility -> Resource Manager -> Booking Resources, pick the resource and enter the profile editor, then tick the ***Upload Booking CSV File*** box in Profile Tab and accept the changes.



13.4.3 UWA-CMCA: Upload Booking CSV File for Walk-up Retrospective Bookings

Go to Staff Tab -> Utility -> Data Logbook Manager, the new feature is highlighted as Special Feature for NMR facility.



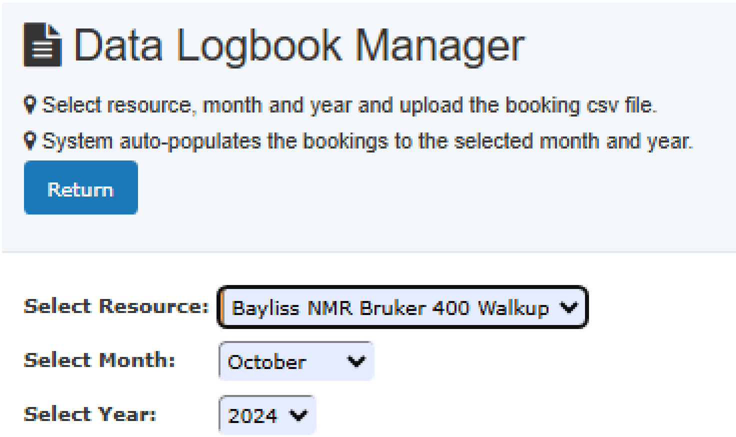
5 features are provided in this new NMR facility feature:

- Upload booking csv file
- Download booking csv template file
- Uploaded booking csv file history report
- Auto-populated booking report
- Imported booking rollback

13.4.4 UWA-CMCA: Upload Booking CSV File

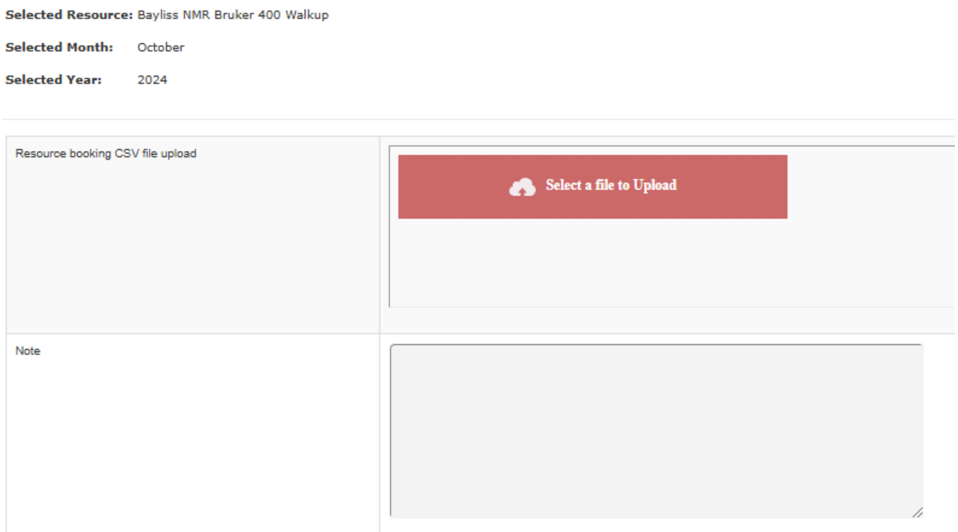
- **Step 1**

  Select resource, month and year, and submit. If you could not find the resources in the dropdown list, then you need to enable the feature setting in the resource manager to nominate the resource.



- **Step 2:**

  Upon selections being made, system checks if the csv file being uploaded and bookings being populated for the selected resource, month and year. If not, you can continue to upload the csv file.



However, if you did already, you are prompted to stop you repeating. You cannot repeat the process with the same booking file name, OR with the same resource, same month and same year.

You cannot re-run the completed process, that's the rule!

Selected Resource: Bayliss NMR Bruker 400 Walkup
Selected Month: October
Selected Year: 2024

CSV file already being uploaded and scanned for the selected resource, month and year, you can not do twice as the process can not reverse, please contact admin for support.

CSV file already being uploaded and scanned for the selected resource, month and year, you cannot do twice as the completed process cannot reverse unless you roll back the last upload file and auto-populated bookings.

- Step 3:

  Upon successful upload, the scan script scans the file and saves data (software username, software user code, resource, booking hours) to cache, click Next to continue.

- Step 4:

  Cached data will be validated against the ACLS csv user records, at the first time, you need to link the software user to the ACLS csv user. If any software user could not find the matched ACLS csv user, then you get the following warning:

Warning: The matched ACLS csv user is missing in the table, please fix the issue to continue.

Click *Edit* button to link ACLS user with the software user. If you cannot find the ACLS user to match the software user, please contact CMCA admin to onboard the user first.

Selected Resource: Bayliss NMR Bruker 400 Walkup
Selected Month: October
Selected Year: 2024
Software User Name: Adam Fielding
Software User Code: 22483617
Select ACLS User: Fielding, Adam

When all software users are matched with the ACLS csv user, you can complete the final step.

Resource	Software User Name	Software User Code	ACLS User Name	ACLS User Code	Booking Hours
Bayliss NMR Bruker 400 Walkup	Adam Fielding	22483617	Fielding, Adam	3133	6.06

Final step: system auto-populates the bookings and deducts the hours from the tier balance in the purchased the tier balance.

Important: the booking auto-populating process is completed, this is non-reversible process, you could check the booking on calendar.

Resource	User Name	User Code	Booking Hours	Populated Booking Start Time	Populated Booking End Time	Populated Booking Reference
Bayliss NMR Bruker 400 Walkup	Fielding, Adam	3133	6.06	01/10/2024 00:00	01/10/2024 06:03	7415093563660-nmr-sqNZPovJ

You can check the deducted hours and balance in Tier Manager.

13.4.5 UWA-CMCA: Download booking csv template file

The template follows the format defined in the proposal.

Software User Name	Software User Code	Resource Name	Booking Hours

13.4.6 UWA-CMCA: Uploaded booking csv file history report

The uploaded file records are stored for audit and review on yearly basis. Select year and submit.

Resource	Month	Year	Uploaded File Name	Uploaded Date
Bayliss NMR Bruker 400 Walkup	October	2024	booking template - october.csv	08/11/2024

13.4.7 UWA-CMCA: Auto-populated booking report

The populated booking records are stored for audit and review on yearly basis. Select year and submit.

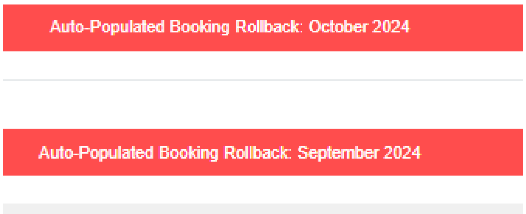
Resource	User Name (%)	User Code	Booking Hours	Populated Booking Start Time	Populated Booking End Time	Populated Booking Reference
Bayliss NMR Bruker 400 Walkup	Fielding, Adam	3133	6.06	01/10/2024 00:00	01/10/2024 06:03	7415093563660-nmr-sqNZPovJ

13.4.8 UWA-CMCA: Email notification

System sends email notification if the user purchased hour balance is less than ZERO after auto-populating the hours and deducting the balance.

13.4.9 UWA-CMCA: Rollback auto-populated bookings

This feature offers a solution to roll back the changes if you accidentally uploaded the wrong booking file with the wrong resources. You can only roll back the process within last two months. For example, if it is Nov 2024, then you can rollback bookings for Sep 2024 and Oct 2024.



The rollback process will take the following actions:

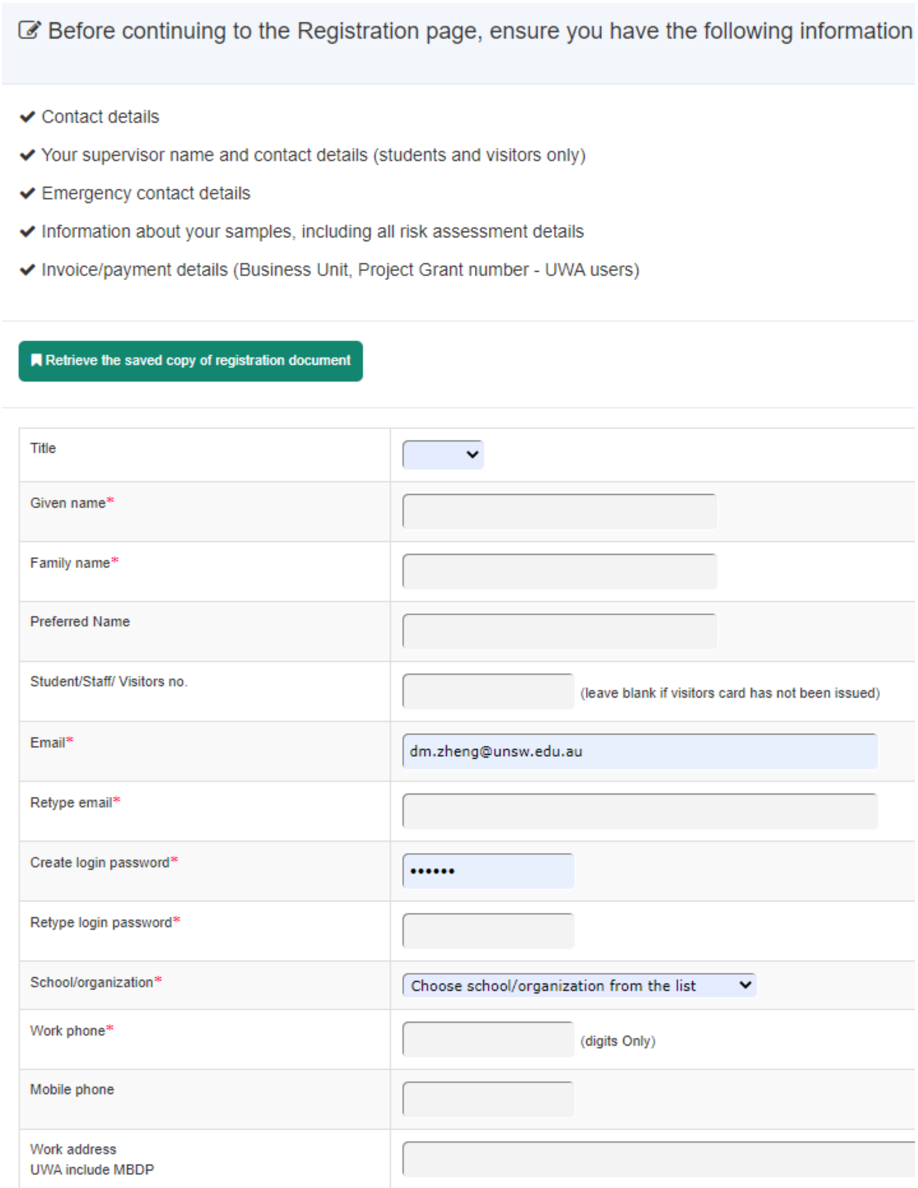
- Rollback the uploaded file
- Rollback the auto-populated bookings
- Rollback the purchased balance

14 Appendix G – Modification for UWA-RIMS

14.1 UWA-RIMS: 2022 Requested Changes

14.1.1 UWA-RIMS: Registration pages

Page 1: changes are made in accordance with the change proposal. Save as a copy stays as what it is.

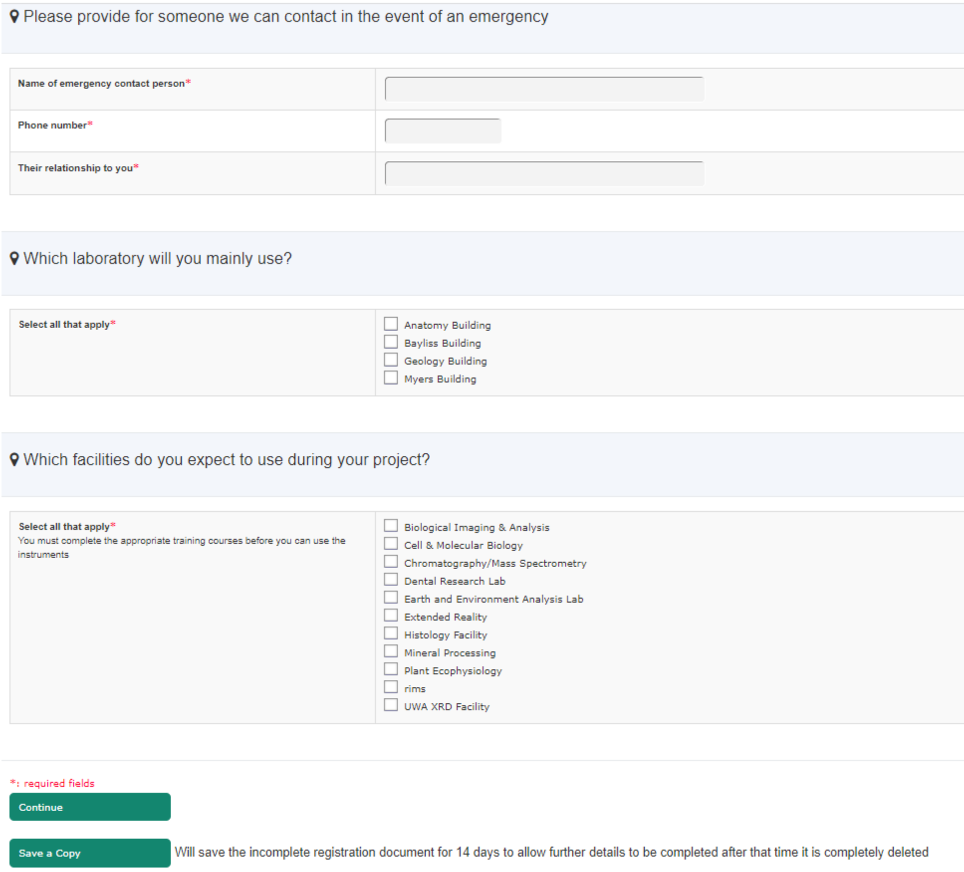


Before continuing to the Registration page, ensure you have the following information

- ✔ Contact details
- ✔ Your supervisor name and contact details (students and visitors only)
- ✔ Emergency contact details
- ✔ Information about your samples, including all risk assessment details
- ✔ Invoice/payment details (Business Unit, Project Grant number - UWA users)

Retrieve the saved copy of registration document

Title	
Given name*	
Family name*	
Preferred Name	
Student/Staff/ Visitors no.	(leave blank if visitors card has not been issued)
Email*	dm.zheng@unsw.edu.au
Retype email*	
Create login password*	••••••
Retype login password*	
School/organization*	Choose school/organization from the list
Work phone*	(digits Only)
Mobile phone	
Work address UWA include MBDP	



Please provide for someone we can contact in the event of an emergency

Name of emergency contact person*	
Phone number*	
Their relationship to you*	

Which laboratory will you mainly use?

Select all that apply*	Anatomy Building Bayliss Building Geology Building Myers Building

Which facilities do you expect to use during your project?

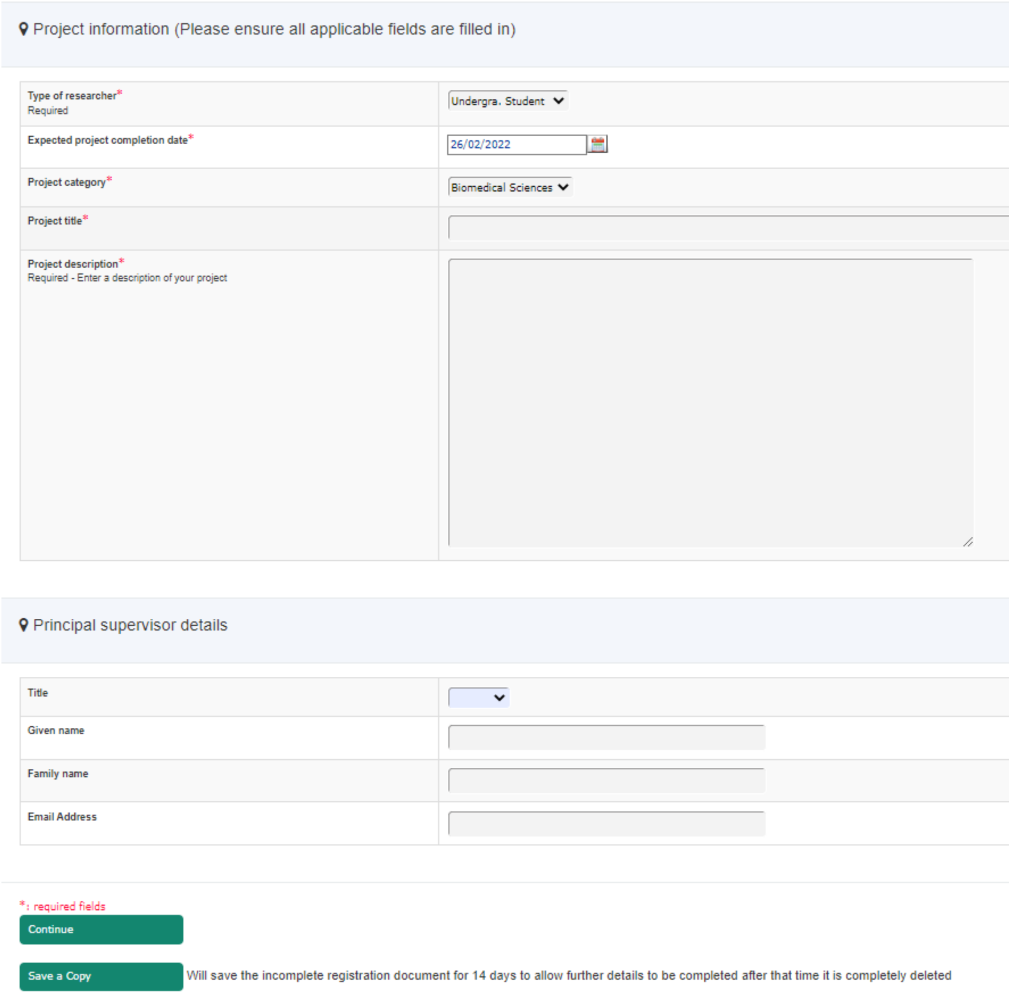
Select all that apply* You must complete the appropriate training courses before you can use the instruments	Biological Imaging & Analysis Cell & Molecular Biology Chromatography/Mass Spectrometry Dental Research Lab Earth and Environment Analysis Lab Extended Reality Histology Facility Mineral Processing Plant Ecophysiology rims UWA XRD Facility

*: required fields

Continue

Save a Copy Will save the incomplete registration document for 14 days to allow further details to be completed after that time it is completely deleted

Page 2: changes are made in accordance with the change proposal. Save as a copy stays as what it is.



Project information (Please ensure all applicable fields are filled in)

Type of researcher* Required	Undergra. Student
Expected project completion date*	26/02/2022
Project category*	Biomedical Sciences
Project title*	
Project description* Required - Enter a description of your project	

Principal supervisor details

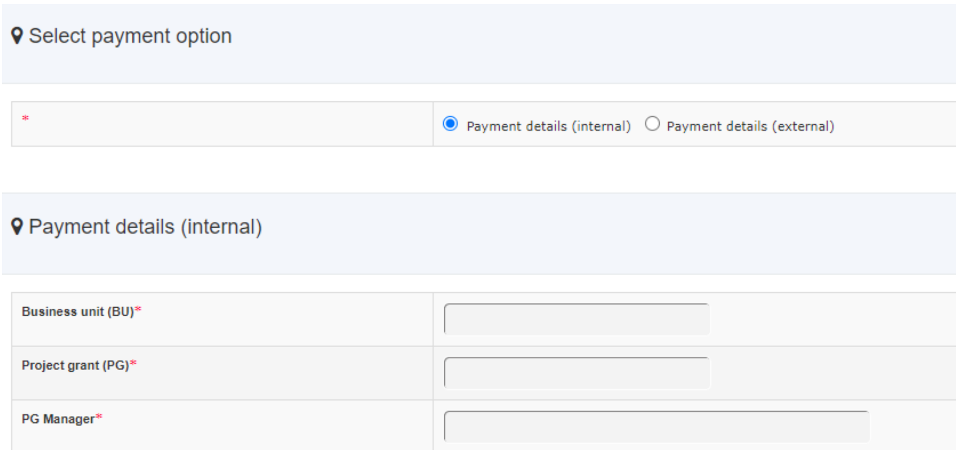
Title	
Given name	
Family name	
Email Address	

*: required fields

Continue

Save a Copy Will save the incomplete registration document for 14 days to allow further details to be completed after that time it is completely deleted

Page 3: changes are made in accordance with the change proposal. Save as a copy stays as what it is.



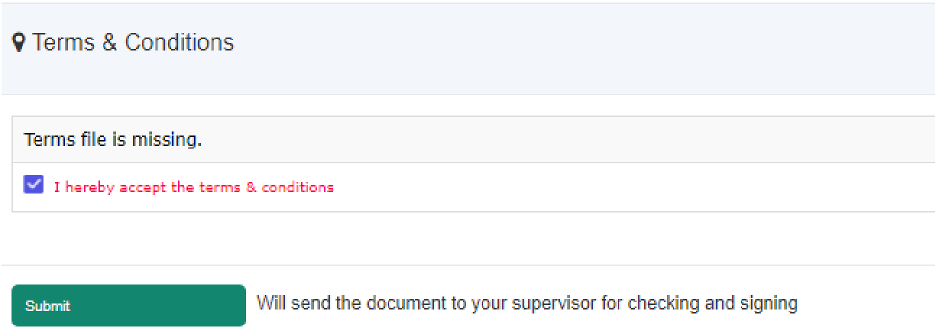
Select payment option

*	Payment details (internal) Payment details (external)

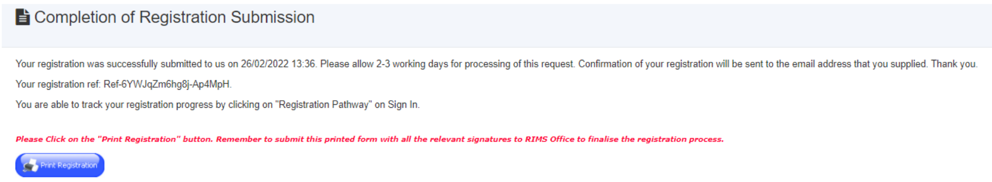
Payment details (internal)

Business unit (BU)*	
Project grant (PG)*	
PG Manager*	

Page 4: remain the same.



Upon submission, RIMS office is nominated. Email notifications go to the new user, facility contact email address and nominated staff via email receiver notification in System Settings



Printable copy: changes are made according to the RIMS registration pages.

14.1.2 UWA-RIMS: Instrument (Resource) charging

Charging for instrument (resource) usage in UWA-RIMS is managed through ACLS's configurable category-based booking hour charging system.

Reference Guide:

For detailed information on:

- Charge category setup
- Hourly rate configurations
- Tiered charging models
- Internal vs. external rates
- Booking time conditions (business hours, off-hours, tier usage)

Please refer to the ACLS Complete Guide – Charging and Configuration Section.

This ensures all resource charging is aligned with institutional policies and operational cost recovery models.

14.1.3 UWA-RIMS: System setting list

To align with UWA-RIMS integration, all relevant system configuration features in ACLS have been re-built and re-labelled under the UWA RIMS naming convention.

Key Points:

- All system setting lists and configuration pages have been:
  - Reconstructed to support UWA-RIMS requirements
  - Renamed for clarity and consistency (e.g., lists previously labeled for CMCA or general use now appear under UWA RIMS)

- This ensures:
  - Seamless alignment with the UWA Research Infrastructure Management System (RIMS)
  - Consistent terminology across modules and administrative interfaces

Administrators can find all RIMS-related configurations under the UWA RIMS sections within the System Settings tab.

14.1.4 UWA-RIMS: Set up UWA RIMS facilities

ACLS allows administrators to configure facility-specific contact details to support new user registration notifications within the UWA-RIMS framework.

Functionality:

- Admins can define facility names and assign corresponding contact email addresses
- These emails will be used to:
  - Receive new user registration alerts
  - Facilitate communication between users and facility coordinators

How to Set Up:

- Navigate to: **System Settings → UWA RIMS Facilities**
- For each facility:
  - Enter the facility name
  - Assign a valid contact email address

This ensures that new user requests are directed to the appropriate facility staff for timely processing and onboarding.

14.1.5 UWA-RIMS: Booking resource invoicing

Invoicing for booked resources within the UWA-RIMS framework is managed through the ACLS Invoicing Manager, which supports both individual and batch invoicing workflows.

Reference Guide:

For comprehensive instructions on:

- Generating booking invoices
- Batch invoicing by resource, user, or account
- Emailing invoices to supervisors or account owners
- Applying internal vs. external rates
- Invoice templates and export formats

Please refer to the **ACLS Complete Guide – Invoicing Manager Section**.
This guide provides step-by-step procedures for ensuring accurate and auditable billing of resource usage under UWA-RIMS.

14.1.6 UWA-RIMS: New user meeting

The User Meeting module has been enhanced to align with the UWA-RIMS registration and onboarding process.

Purpose:

To facilitate structured onboarding meetings with newly registered users before approval is granted.

How to Set Up a New User Meeting:

- Navigate to: Staff → Registration Pathway Manager
- Select New User Meeting to:
  - Schedule a meeting with users who have completed registration but are not yet approved

- Record meeting notes and outcomes for administrative tracking

This ensures that all RIMS-affiliated users receive the required orientation and approval process before accessing facilities or services.

14.1.7 UWA-RIMS: Existing user meeting

As part of the enhanced user onboarding and engagement process under UWA-RIMS, the User Meeting module has been updated to support Existing User Meetings.

Purpose:

To facilitate meetings with active users for ongoing engagement, training updates, or administrative review.

How to Set Up an Existing User Meeting:

- Navigate to: **Staff → Registration Pathway Manager**
- Select Existing User Meeting to:
  - Schedule and document meetings with users who are already registered and approved
  - Record outcomes and track meeting history

Key Difference from New User Meeting:

- New User Meeting includes the Risk Assessment Form
- Existing User Meeting does not require a risk assessment component

This distinction ensures compliance during initial onboarding while maintaining a streamlined process for follow-up meetings with established users.

14.1.8 UWA-RIMS: User meeting records

ACLS maintains a complete and auditable history of all User Meetings conducted under the UWA-RIMS framework.

Accessing Meeting Records:

- Navigate to: **Staff → Registration Pathway Manager**
- Click on the User Meeting Records button to:
  - View all New User and Existing User meeting entries
  - Search and filter records as needed

Edit Permissions:

- Admin staff have the ability to:
  - Edit existing records if corrections or updates are required
  - Maintain accurate documentation for compliance and audit purposes

This centralised record system ensures transparency, traceability, and accountability for all user engagement activities.

14.1.9 UWA-RIMS: User registration and meeting records at User Profile Manager

ACLS provides direct access to each user's registration form and meeting records through the User Profile Manager, enabling streamlined administrative oversight.

How to Access:

- Navigate to: **Staff → Users → User Profile Manager**
- From the user's profile page, you can:
  - Edit user profile details
  - View or update the user's completed registration form
  - Access all associated user meeting records

Additional Features:

A printable version of both the registration form and meeting records is available for:

- Filing
- Compliance review
- Sign-off processes, if needed

This consolidated view ensures efficient management of user data and engagement history under UWA-RIMS.

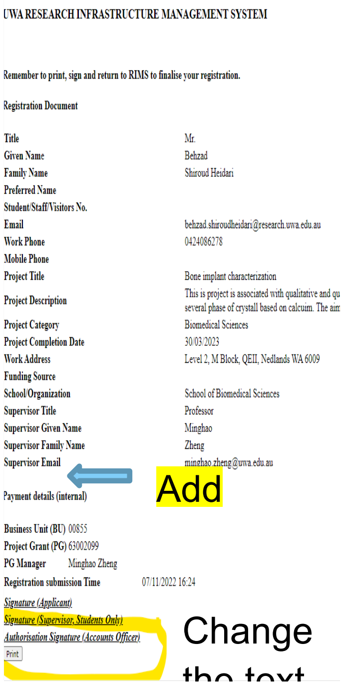
14.2 UWA-RIMS: 2023 Requested Changes – Part A

RIMS made the further changes in 2023 for Part A and Part B.

14.2.1 UWA-RIMS: Modification requirements:

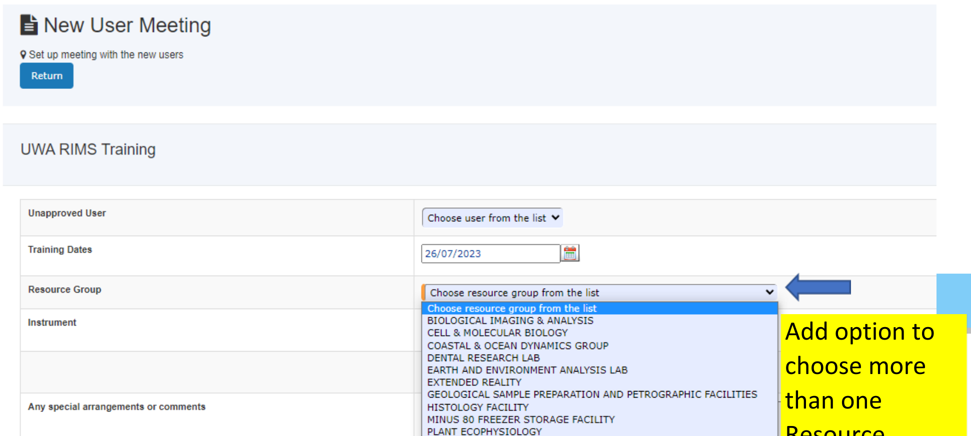
Item 1.1: Registration Page/s

Change the text "Accounts Officer" to PG Manager and include Resource Group in registration Document.



Item 1.2: New User Meeting and Existing User Meeting

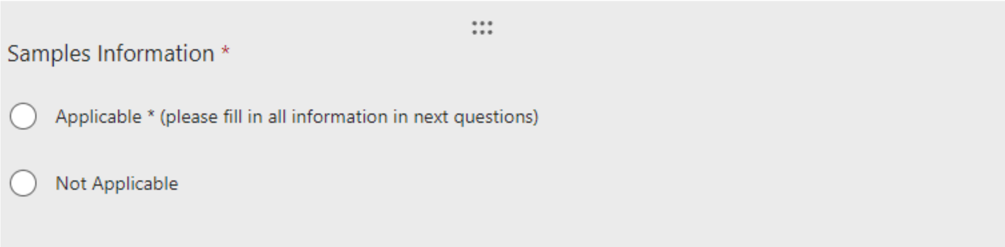
NUM/EUM - Facility selection. Add capability to select multiple facilities (resources) during the new user meeting, rather than needing to follow up new user registration but existing user registration to capture all facilities used.



New User Meeting- Samples information:

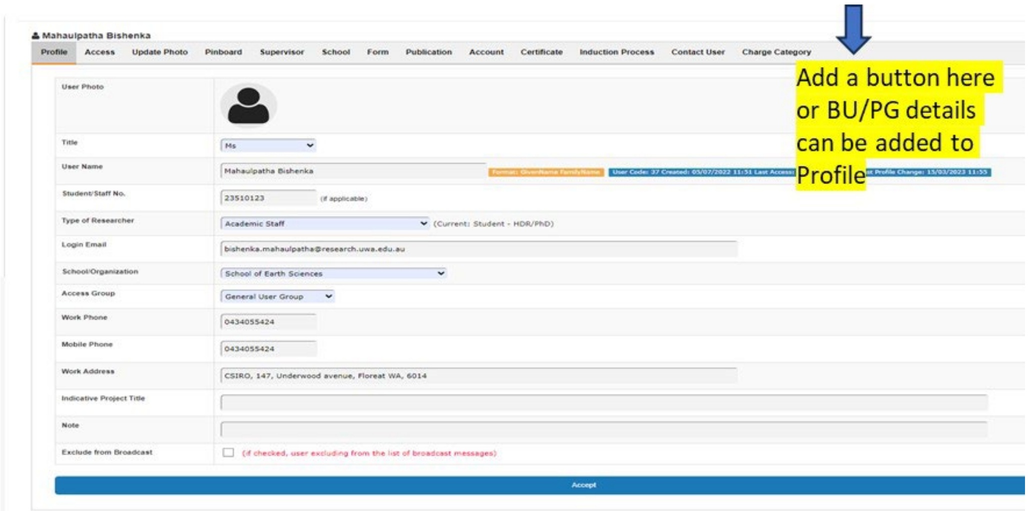
Can we include a tick box to disable/enable the need to populate?

Add this question below Samples.



Item 1.4: BU and PG details

Details are only listed in the registration forms at this stage. BU and PG details need to be embedded to the user profile or account so all the details can be linked to Booking report and Invoice.



EMAIL: eric.may@uwa.edu.au

DATE: June 15, 2023

DETAILS:

This Statement covers the work by your groups in January 2023.

Details of Bookings:

User	Resource	Booking Start Time	Booking End Time	Account	Booked Hours
Liu Libin	Aeris X-Ray Diffractometer	18/01/2023 09:00	18/01/2023 11:00	Internal Student-Account	2.00
Liu Libin	Aeris X-Ray Diffractometer	31/01/2023 08:00	31/01/2023 11:00	Internal Student-Account	3.00
Liu Libin	Aeris X-Ray Diffractometer	31/01/2023 14:00	31/01/2023 17:00	Internal Student-Account	3.00

Summary of Bookings:

Resource	User	Account	Resource Charge/Hour	Booked Hours	Charges
Aeris X-Ray Diffractometer	Liu Libin	Internal Student-Account	$20.00	8.00	$160.00
Sub-Total				8.00	$160.00
TOTAL				8.00	$160.00

An internal transfer from the fund details you have provided will be organized. Details are as follows:

Account	Charges
Internal Student-Account	$160.00

Add BU and PG details here

Invoice No: 00000024

Kind Regards,
Emielda Yusiharni

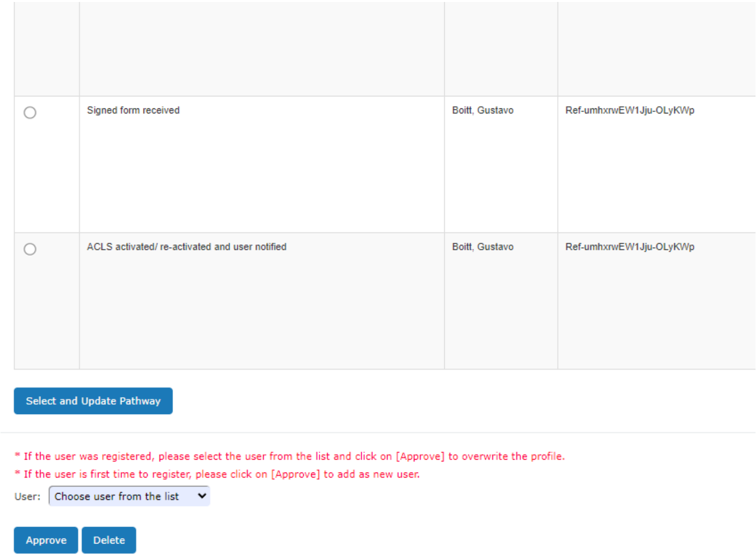
Phone: 64882714

Email: emielda.yusiharni@uwa.edu.au

Print

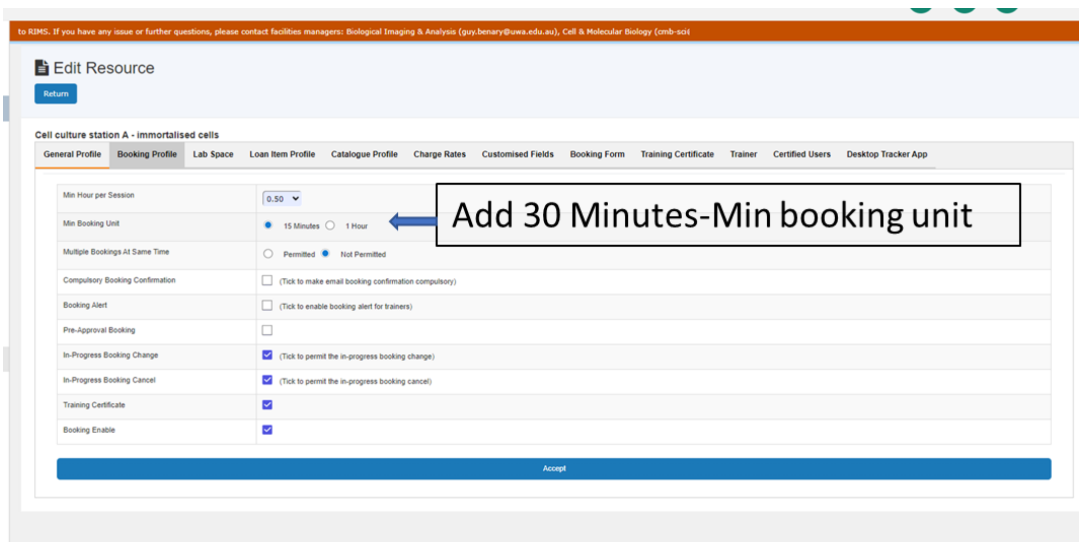
Item 1.5: User pathway manager:

Add Double confirmation button before deleting a user on Registration Pathway manager.



Item 1.7: Resource profile editor – booking profile

Add 30 minutes for Min Booking Unit

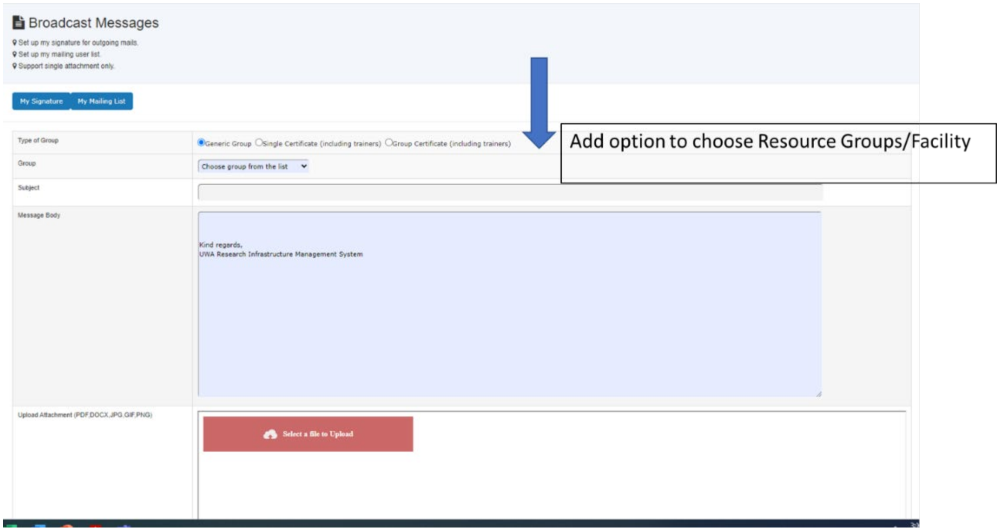


Item 1.8: Booking forms attachment

Currently attaching a hiring form to equipment for facility, but there is no clear place to obtain these on the website? The user attaches it, but the manager of the facility does not get notified of form or where to view. Can this be emailed with the booking notification or placed under the equipment resource / form repository?

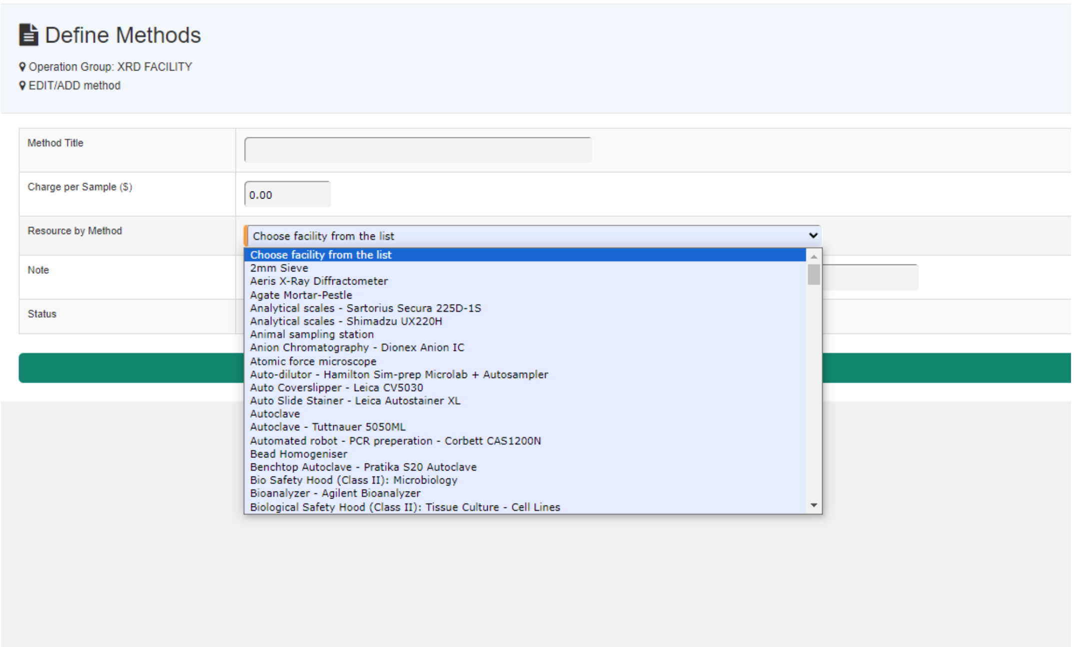
Item 1.9: Broadcast Message

Add option to choose Resource Groups/Facility



Item 1.10: Samples

Option to add multiple resources to a single Method (tick box? Or “Add more” button to generate additional drop-down lists?).



- Add to "Define Methods" a new box "Flat rate" (new project design/admin fee) where we can manually assign an additional value. Text box to add: Additional fee.
- Option to add an additional flat fee to a batch of samples (on top of the per sample cost).
- Add to "Define Method" an hourly rate fee. Text box to add: Charge per hour ($)
- Embed "Sample Methods" in initial Check In interface.

14.2.2 UWA-RIMS: Item 1.1: Registration pages

Enhancements have been made to the ACLS registration and profile management system in response to UWA-RIMS requirements, particularly regarding the handling of Postgraduate (PG) Manager details and invoicing logic.

Implemented Changes:

- **Terminology Update:**
  - Field label "Account Officer" is renamed to "PG Manager"
  - Resource Group selection is added to the registration form

- **New Functionality:**

  - PG Manager Email Address:
    - Added to the registration form
    - Used as the recipient for invoice notifications
  - PG Expiry Date:
    - Added to the registration form
    - Used to trigger automated reminders

Additional Enhancements:

- **User Profile Editor:**
  - A new checkbox is added under the PG/BU tab to designate the PG Manager as the invoiced staff

- **Auto-Reminder Feature:**
  - 30 days prior to PG expiry, an automated email reminder is sent to the user
  - A copy is also sent to the designated admin mailbox

These updates ensure that RIMS-aligned workflows are supported, improving clarity around supervision, invoicing, and postgraduate timeline tracking.

14.2.3 UWA-RIMS: Item 1.2: New User Meeting and Existing User Meeting

Enhancements have been made to the ACLS registration and profile management system to meet UWA-RIMS requirements, particularly around handling Postgraduate (PG) Manager details and invoicing logic.

Implemented Changes:

- **Terminology Update:**
  - The field label "Account Officer" has been updated to "PG Manager".
  - Resource Group selection has been added to the registration form to support facility-specific tracking.
- **New Functional Fields:**
  - **PG Manager Email Address**
    - Added to the registration form
    - Designated as the recipient for invoice notifications
  - **PG Expiry Date**
    - Added to the registration form
    - Used to trigger automated expiry reminders

Additional Enhancements:

User Profile Editor:

A new checkbox is available under the PG/BU tab in the User Profile Editor to assign the PG Manager as the invoiced staff.

Automated Reminder System:

30 days prior to the PG expiry date:

- **An automated reminder email is sent to the user**
- **A copy is sent to the designated admin mailbox**

These enhancements ensure ACLS fully supports UWA-RIMS workflows by improving visibility over supervision structures, invoicing responsibility, and postgraduate timeline management.

User meeting record table:

...	User Name	New User Meeting	Risk Assessment	Training Date	Technical Group	Instrument
Edit	Butler, Isabella (unapproved)	Yes	Yes	03/01/2024	CELL & MOLECULAR BIOLOGY	Analytical scales - Shimadzu UX220H (CELL & MOLECULAR BIOLOGY); Animal sampling station (CELL & MOLECULAR BIOLOGY);

14.2.4 UWA-RIMS: Item 1.4: BU and PG details

Enhancements have been introduced to support the display and tracking of Business Unit (BU) and Postgraduate (PG) information in user profiles, in alignment with UWA-RIMS requirements.

Key Features:

- **BU and PG Details:**
  - Automatically populated in the user profile upon registration approval
  - Displayed for information purposes only
  - Fields are not user-editable, but admins can update manually if necessary
- **Historical Records:**
  - If a user submits multiple registration forms over time, all historical BU and PG entries are listed under the new Registered BU/PG tab
- **Resource Group Tracking:**
  - A new Registered Resource Group tab has been added to display the resource groups associated with each user
  - This tab is informational only

System Administrator Utilities:

When BU/PG-related modification patches are deployed:

- A script can be executed by system administrators to backfill BU and PG data from existing registration records into user profiles

These updates ensure accurate attribution and administrative oversight of BU/PG assignments across a user's lifecycle within ACLS.

14.2.5 *UWA-RIMS: Item 1.5: User pathway manager*

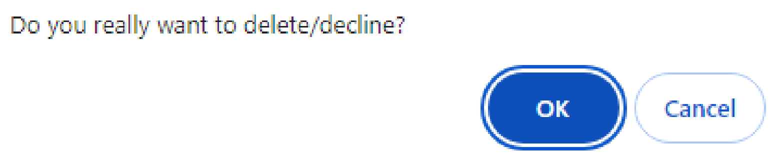
To safeguard against accidental data loss, ACLS now includes a confirmation alert when administrators attempt to delete a user's registration via the User Pathway Manager.

Key Enhancement:

When an admin initiates a registration deletion:

- A pop-up alert message appears to confirm the action
- This prevents unintentional removal of critical registration data

This feature strengthens data protection and reinforces deliberate administrative action when managing user pathways in the UWA-RIMS framework.



14.2.6 UWA-RIMS: Item 1.7: Resource profile editor – booking profile

The calendar time scale has been redesigned to offer greater flexibility in resource scheduling under UWA-RIMS.

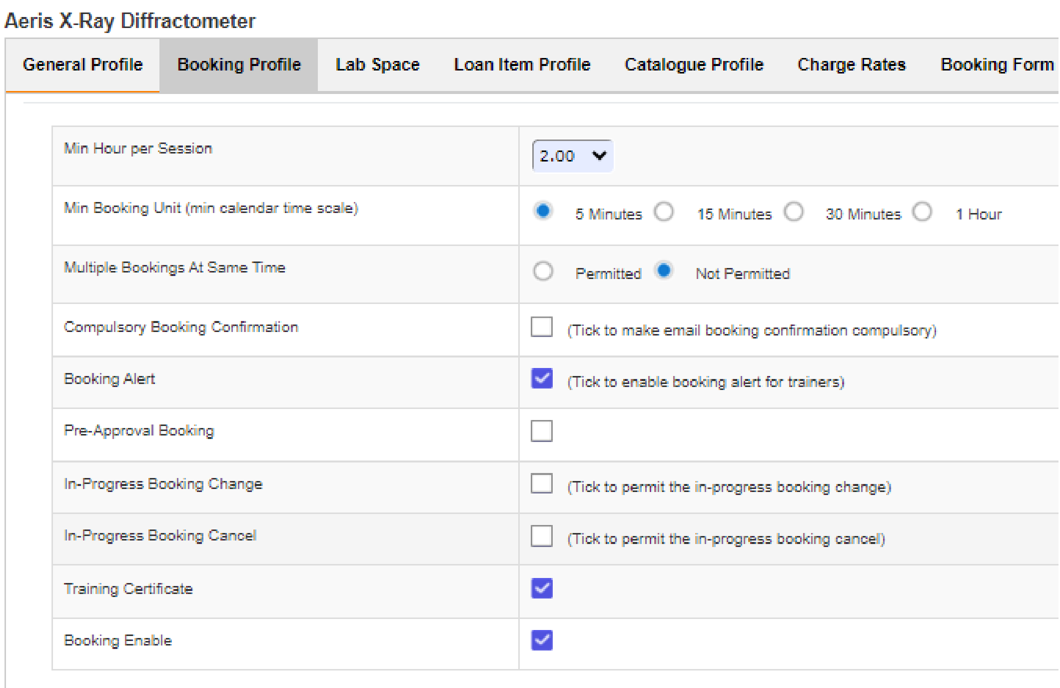
New Time Scale Options:

Administrators can now select one of the following calendar time scales for each resource:

- **5 minutes**
- **15 minutes**
- **30 minutes**
- **1 hour**

How to Configure:

- Navigate to: **Staff → Utility → Resource Manager → Booking Resources → Resource Profile Editor**
- Go to the Booking Profile tab
- Select the desired calendar time scale from the available options

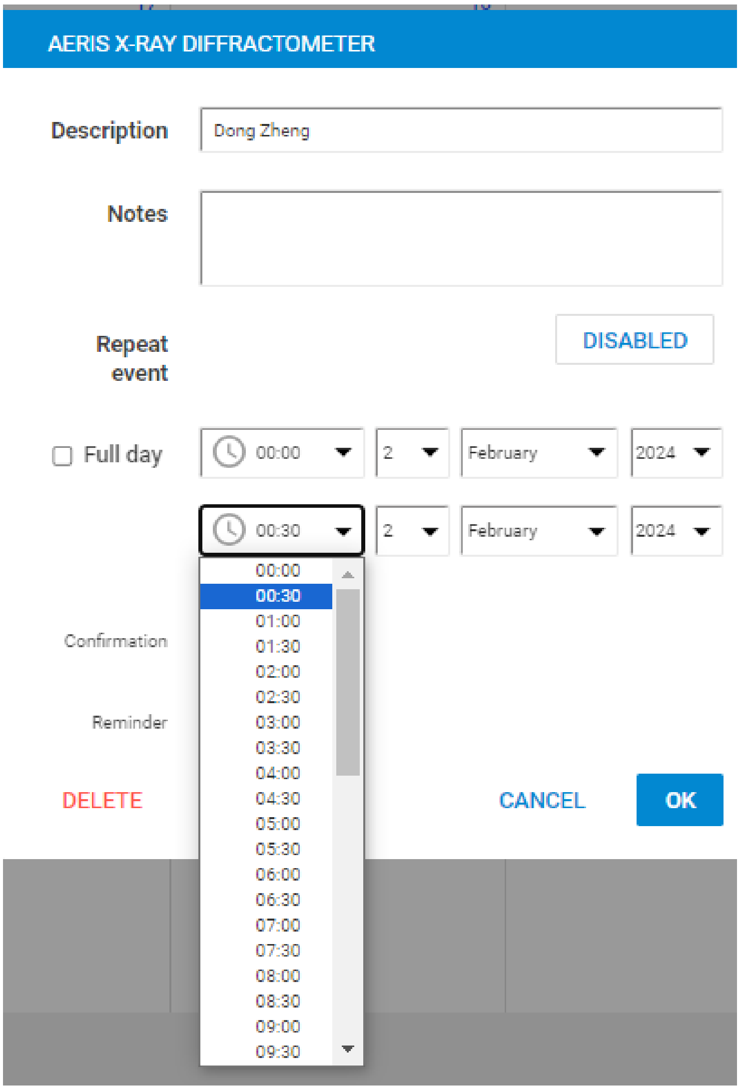


Behaviour:

The selected time scale governs how time blocks are displayed on the booking calendar. Calendar behaviour adapts to the resource's Minimum Booking Unit setting:

- *Example: If the minimum booking unit is 30 minutes, the calendar will visually align with that increment*

This enhancement supports more granular or coarser scheduling requirements depending on the operational needs of each facility.



14.2.7 UWA-RIMS: Item 1.8: Booking form attachment

ACLS now allows administrators to upload booking forms directly to the resource profile, providing an alternative to external URL links.

Key Enhancements:

In addition to the existing option to provide a form URL linking to an external source, admins can now:

- Upload a form file (e.g., PDF, DOCX) directly into the resource profile
- Attach it to the booking form interface for user access

How to Upload:

- Navigate to: **Staff → Utility → Resource Manager → Booking Resources → Resource Profile Editor**
- In the Booking Profile tab: Use the Upload Form option to select and attach a document from your local system

This feature offers a flexible and reliable way to ensure users have access to the correct documentation—whether hosted externally or stored within ACLS.

14.2.8 UWA-RIMS: Item 1.9: Broadcast messages

The Broadcast Message feature has been enhanced to support resource group targeting, enabling more precise communication within UWA-RIMS.

New Functionality:

Administrators can now:

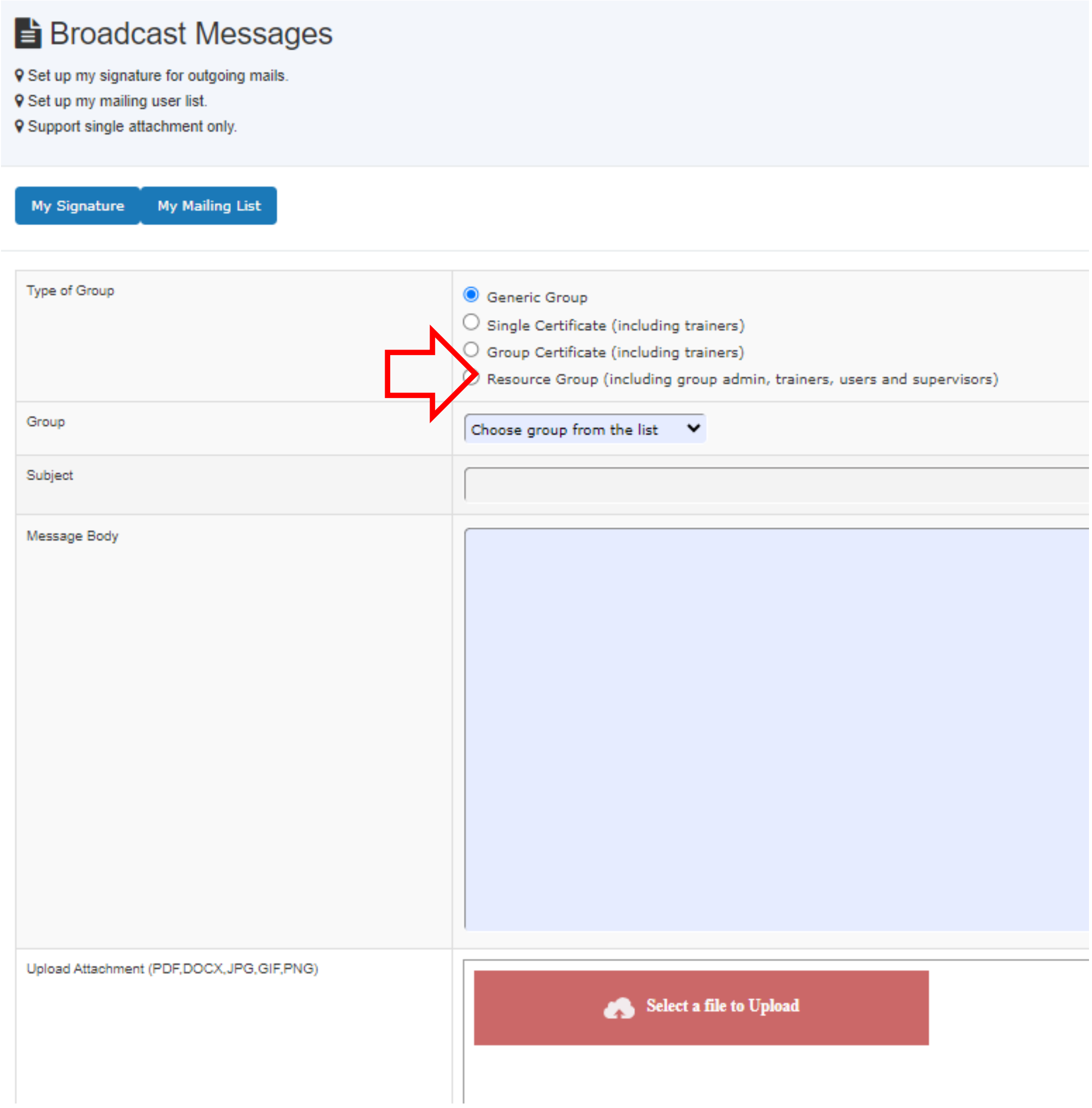
- Select specific resource groups when sending broadcast messages
- Ensure that only users associated with the selected group(s) receive the message

Use Case Examples:

Notify users about:

- Temporary resource outages
- Policy updates relevant to a specific facility or group
- Training requirements specific to certain instruments

This improvement enables more relevant and efficient messaging, reducing unnecessary communication noise and ensuring targeted alerts reach the right users.



14.2.9 UWA-RIMS: Item 1.10: Samples

Enhancements have been made to the sample processing and charging model within ACLS to support UWA-RIMS requirements, introducing new charge components and improving clarity on cost calculations.

Define Methods – New Charge Components:

Each method now supports the following charge elements:

- Admin Flat Charge

- Service Flat Charge
- Charge Per Hour (in addition to the existing Charge Per Sample)

These fields appear at the top of the method definition form for easy access during method setup.

Resource Association:

- Resource selection can now be associated with each method
- Currently used for information only, but future updates may introduce automation for Charge Per Hour based on linked resource usage

---

Process Samples:

Staff can:

- Enter the processed sample quantity as usual
- Now also enter processed sample hours (manual entry)

These entries are used for cost calculation when the method includes hourly charging

---

Charge Calculation:

Charge calculations are now clearly scripted and displayed on both:

- **Processed Sample Page**
- **Sample Invoice Page**
- **Total Method Charge Formula:**

Staff can select the processed sample quantity as usual, also the processed sample hours are included for manual hour entry subject to the resource or instrument usages.

Charge calculation is scripted for clarification on the process sample page.

Method total charge calculation: (processed sample quantity) x (charge per sample) + (processed sample hours) x (charge per hour) + admin flat charge + service flat charge and apply job discount if any.

Charge calculation is scripted for clarification on the sample invoice page.

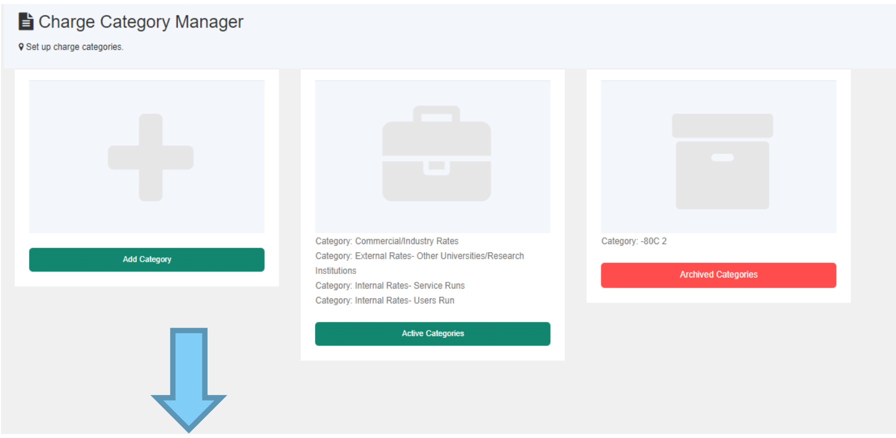
Method total charge calculation: (processed sample quantity) x (charge per sample) + (processed sample hours) x (charge per hour) + admin flat charge + service flat charge and apply job discount if any.

14.3 UWA-RIMS: 2023 Requested Changes – Part B

14.3.1 UWA-RIMS: Modification requirements:

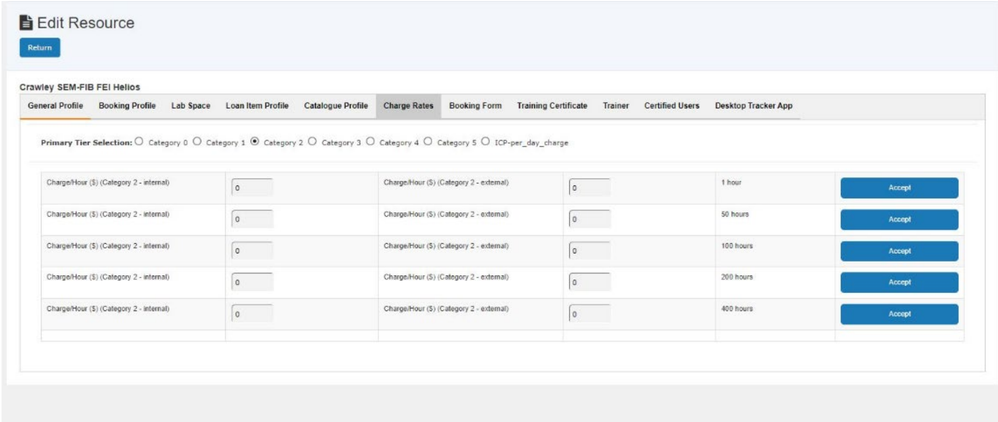
Item 1.3: Charge Modification (3 modules: RIMS current module, propose to add CMCA Module and Cell Biology and Imaging platform module). Can we combine current charge out model on RIMS with CMCA one and proposed Cell Biology and Imaging platform module, so we will have three charges out models/options?

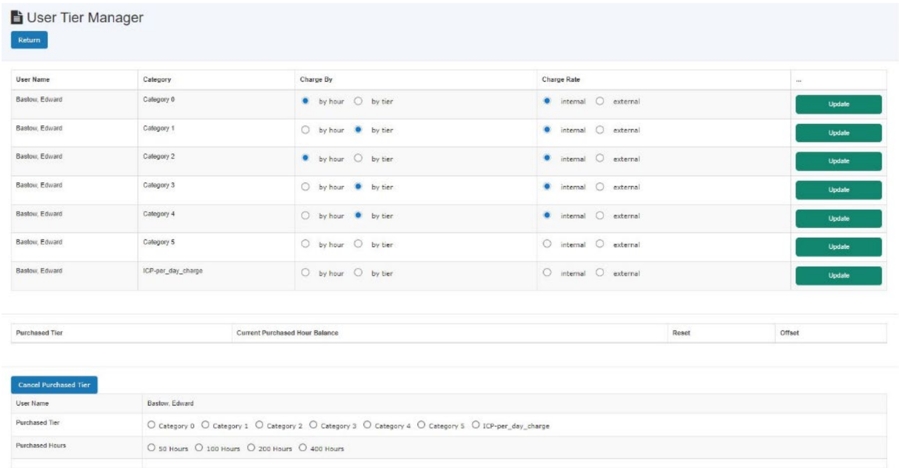
- RIMS Current module (no change)
- Addition of a tiered charge rate approach to facilitate option such as pay per hour and pre-purchase block of hours; this configuration exists in the CMCA ACLS.



Add two categories: CMCA charge category option and Cell Biology & Imaging Charge here, so each resource group would have three charge models/options to choose.

- CMCA charge module





- Cell Biology & Imaging (CBI) Recharge Module

Platform Subscription Charges – A tiered payment structure dependent on the relative size of lab or academic group.

Cell Biology & Imaging	
Subscription Access (Collaborator – Trained/Experienced User)	
Lab / Group Size	**Fee per annum, per lab/group***
1 Researcher	$1000 (1000 per person)
Up to 2 Researchers	$1900 (950 per person)
Up to 3 Researchers	$2700 (900 per person)
Up to 4 Researchers	$3600 (900 per person)
Up to 5 Researchers	$4250 (850 per person)
Up to 6 Researchers	$5100 (850 per person)
Up to 7 Researchers	$5950 (850 per person)
Up to 8 Researchers	$6400 (800 per person)
Up to 9 Researchers	$7200 (800 per person)

Up to 10 Researchers	$8000 (800 per person)
Up to 11 Researchers	$8250 (750 per person)
Up to 12 Researchers	$9000 (750 per person)
Up to 13 Researchers	$9750 (750 per person)
Up to 14 Researchers	$9800 (700 per person)
Up to 15 Researchers	$10500 (700 per person)
Up to 16 Researchers	$11200 (700 per person)
More than 16 Researchers (capped)	$12000
Students (Honours, Masters & HDR) pay flat rate of $500 per student per annum regardless of when they registered to the booking system.	

Requirements of CBI registration RIMS charging application.

- An e-mail feature will allow sending list of Lab members to the head of lab to confirm that they are all associated with his/her lab.
- Once the list of head of labs and their associated researchers and students was established – the registration fee is determined according to the above table.
- Approving this list (tick box, by one of the administrators) generates an email sent to the head of lab requesting the payment. (Automation request)
- An automated similar e-mail is sent to the academic every 10 day until the account is paid. Every e-mail indicates how many requests were sent. Include a request to cc in the relevant facility manager in the payment authorisation email, to ensure their access will be processed in RIMS without delay. (Automation request)
- We will also need an option to charge individual users later in the year if student/researchers join the lab in later stages of the year. The registration of these users to RIMS should be separated from the registration payment. This is very similar (or maybe the exact same module as the initial one – (automated fee modification based on dates of registration- example: registration starting on July will be charge half of the fee)

    - ACLS checks unpaid users who joined in the mid of year and notify the lab admin
    - Lab admin clicks a button to send unpaid notification to the supervisor for the further action
    - Lab admin enter the prorated figure for the unpaid users, system record for tracking

Item 1.6 Booking Reports Modification

- Add BU/PG Details for each user.
- Modify report format for period booking to include all details of each date/time of bookings. Below is an example of the report details.

14.3.2 UWA-RIMS: Set up charge module per resource group

ACLS now supports modular charging configurations per resource group through the new Charge Module Manager, providing flexible billing logic aligned with specific operational models such as CMCA and CBI.

How to Access:

Navigate to: **Staff → Utility → Charge Module Manager**

Available Modules:

Each resource group can be linked to one of the following charge modules:

- **Standard Module** – For basic hourly or flat-rate charging
- **CMCA Module** – Supports tiered subscriptions, prepaid blocks, and time tracking
- **CBI Module** – Designed for complex biomedical workflows and lab-specific billing logic

---

Key Features:

- **Per-Group Configuration:**

  Each resource group can be independently assigned to one of the three modules.

- **Audit Trail:**

  All changes to charge module assignments and resource group linkages are recorded as tracing logs for auditability.

- **Visibility in Resource Manager:**
  - Once a charge module is assigned to a resource group, it becomes visible in Resource Manager
  - Within Resource Profile Editor, admins can:
    - Access the Charge Rate tab
    - Configure charging settings based on the selected module

This modular system provides administrative flexibility while preserving consistency across resource-specific billing setups.

14.3.3 UWA-RIMS: About standard module

The Standard Module represents the default ACLS charging model used within UWA-RIMS for most general-purpose facilities.

Key Characteristics:

- **Hourly Rate Charging Model:**
  - Users are charged based on the duration of the booking
  - Rates are determined by the resource's assigned charge category
- **Booking Flow:**
  - Users can book resources as usual through the standard calendar interface
  - Charges are automatically calculated based on booking time × hourly rate
- **Simple and Widely Applicable:**
  - Ideal for facilities with straightforward usage-based billing
  - Suitable for environments that do not require tiered subscriptions or sample-based charges

The Standard Module provides a clean and reliable charging mechanism for resource usage, aligning with the baseline expectations of UWA-RIMS.

14.3.4 UWA-RIMS: About CMCA module

The CMCA Module introduces a tier-based charging system that supports prepaid usage blocks and subscription-style billing, designed to meet the needs of complex research facilities such as CMCA.

Key Features:

- **Tier Structure Charging:**
  - Resources are grouped into Tier 1, Tier 2, or Tier 3
  - Users purchase blocks of hours per tier
  - Charges are deducted from their tier balances upon booking

- **Billing Flexibility:**
    - Supports both internal and external rates
    - Users may choose prepaid blocks or pay-as-you-go hourly rates (if permitted)

Administration Requirements:

When a resource group is linked to the CMCA Module:

- Admins and resource group managers must use the CMCA User Tier Manager to:
    - Assign user tiers
    - Manage purchased hour balances
    - Monitor expiry dates and usage

Reference:

Full implementation details and usage instructions for the CMCA Module are available in the **ACLS Complete Guide 2024 – CMCA Section**.

This module is ideal for facilities requiring **advanced billing control**, **subscription management**, and **differentiated resource pricing** based on complexity and access tiers.

14.3.5 UWA-RIMS: About CBI module

The **CBI Module** is a **subscription-based charging model** designed specifically for the **Cell Biology & Imaging (CBI)** facility. It supports **annual group subscriptions** and **student flat rates**, offering a scalable and capped pricing model based on lab size.

Overview of Charging Model:
CBI charges are based on the **number of researchers** in a lab or group, using a tiered pricing structure. The model includes:

- Per-lab/group annual fee, scaling with group size
- Flat-rate fee for students (Honours, Masters, HDR) — regardless of registration date

---

CBI Subscription Fee Table:

Group Size	Annual Fee (Per Lab)	Per-Person Rate
1 Researcher	$1,000	$1,000
Up to 2 Researchers	$1,900	$950
Up to 3 Researchers	$2,700	$900
Up to 4 Researchers	$3,600	$900
Up to 5 Researchers	$4,250	$850
Up to 6 Researchers	$5,100	$850
Up to 7 Researchers	$5,950	$850
Up to 8 Researchers	$6,400	$800
Up to 9 Researchers	$7,200	$800
Up to 10 Researchers	$8,000	$800
Up to 11 Researchers	$8,250	$750
Up to 12 Researchers	$9,000	$750
Up to 13 Researchers	$9,750	$750
Up to 14 Researchers	$9,800	$700
Up to 15 Researchers	$10,500	$700
Up to 16 Researchers	$11,200	$700
More than 16 (capped group)	$12,000	—
Students (all types)	**$500 per annum**	—

System Configuration and Management:

Step 1: Set Up Yearly Subscription Charge Model

- Access: **Staff → Utility → CBI Subscription Module Manager**
- Admin configures the subscription fee table for the:
  - Current year (e.g. 2024)
  - Next year (e.g. 2025)

- The model is hardcoded based on predefined group sizes, with built-in validation and history logs for tracking model changes.

2024 Model	Researcher Lab/Group Size	Fee per Annum, per Lab/Group	...
	Student (Flat Rate)	$500.00 (per person)	0.00 Submit
	1 Researcher	$1000.00 ($1000.00 per person)	0.00 Submit
	2 Researcher	$1900.00 ($950.00 per person)	0.00 Submit
	3 Researcher	$2700.00 ($900.00 per person)	0.00 Submit
	4 Researcher	$3600.00 ($900.00 per person)	0.00 Submit
	5 Researcher	$4250.00 ($850.00 per person)	0.00 Submit
	6 Researcher	$5100.00 ($850.00 per person)	0.00 Submit
	7 Researcher	$5950.00 ($850.00 per person)	0.00 Submit
	8 Researcher	$6400.00 ($800.00 per person)	0.00 Submit
	9 Researcher	$7200.00 ($800.00 per person)	0.00 Submit
	10 Researcher	$8000.00 ($800.00 per person)	0.00 Submit
	11 Researcher	$8250.00 ($750.00 per person)	0.00 Submit
	12 Researcher	$9000.00 ($750.00 per person)	0.00 Submit
	13 Researcher	$9750.00 ($750.00 per person)	0.00 Submit
	14 Researcher	$9800.00 ($700.00 per person)	0.00 Submit
	15 Researcher	$10500.00 ($700.00 per person)	0.00 Submit
	16 Researcher	$11200.00 ($700.00 per person)	0.00 Submit
	More than 16 Researchers (capped)	$12000.00	0.00 Submit

Step 2: Link Supervisor and Research Group to Subscription Model

- Admin or resource group manager selects the supervisor overseeing the group.
- Actions available after selecting supervisor:
  - **Notify Supervisor to:**
    - Approve the researcher list
    - Initiate or confirm payment
  - **Mark payment status for each researcher**
  - **Exclude researchers (who will revert to the Standard Module)**
  - **Recalculate group size and fees dynamically upon researcher changes**

Special Considerations:

- **Mark as Student vs Researcher:**
  - Users can be flagged as:
    - Students → Charged a flat rate of $500/year
    - Researchers → Included in group size-based calculation

- **Exclusion from CBI Model:**
  - Excluded users:
    - Are charged under the Standard Module
    - Are removed from group size count, automatically updating fee calculations

---

System Support and Visibility:

- Model summaries and logs are available for each year
- Tools are in place to:
  - Track participation
  - Audit changes
  - Generate reports for subscription compliance and billing

The CBI Module provides a comprehensive and controlled approach to subscription-based access, balancing scalability with institutional cost recovery and administrative clarity.

14.3.6 UWA-RIMS: Archive selected supervisor

To maintain accurate subscription records under the CBI module, ACLS allows administrators to archive supervisors who are no longer participating or were incorrectly assigned.

Functionality:

- Admins can archive a supervisor if:
  - The supervisor is no longer part of the subscription model, or
  - The supervisor was mistakenly assigned to a research group

- Archiving a supervisor will:
  - Preserve historical records of their previous association
  - Remove them from the active subscription list
  - Prevent new group linkage or payment processing under their name

This feature ensures data accuracy and prevents outdated or incorrect supervisor assignments from affecting current group subscription calculations.

14.3.7 UWA-RIMS: Missing researchers

To ensure all eligible users are included in the **CBI subscription model**, ACLS provides a mechanism to detect and add **missing researchers** under a supervisor's group.

Functionality:

After a supervisor is activated in the CBI Subscription Module:

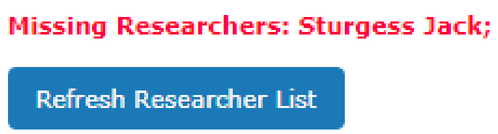
- The system checks for new users linked to that supervisor who are not yet included in the subscription group
- If any users are missing, an alert message is displayed listing the missing names

Action Required:

Admin should click the Refresh Researcher List button

- This will reload the group and automatically include any newly identified users

This ensures subscription group data remains up to date and all researchers under an active supervisor are correctly included in fee calculations.



14.3.8 UWA-RIMS: Full supervisor report

To support administrative oversight and reporting, ACLS provides a **full supervisor report** detailing all **subscription-related data** across supervisor-led research groups.

Functionality:

- Admins can generate a comprehensive report showing:
    - All supervisors enrolled in the CBI subscription model
    - Associated researcher group members
    - **Payment statuses**
    - Group size calculations
    - Student vs researcher designations
    - Subscription fees applied
- Reports can be exported in various formats (e.g. Excel, CSV, PDF) for:
    - Financial reconciliation
    - Reporting to facility management
    - Internal audit and compliance

This feature enables clear tracking of subscription commitments, enhances transparency, and supports streamlined financial workflows.

14.3.9 UWA-RIMS: Email notification to confirm researcher list

As part of the CBI subscription workflow, ACLS has implemented an **automated email notification template** to request supervisor confirmation of their researcher group.

Functionality:

- When a supervisor is linked to a subscription model, the system can:
    - Send a templated email requesting the supervisor to review and confirm the current list of researchers under their group
- The template includes:
    - Supervisor name
    - List of associated researchers
    - Instructions for approval or requesting changes
    - Direct links to the system for verification and response

Purpose:

- Ensures the accuracy of subscription group data before payment
- Allows supervisors to flag any errors or missing researchers
- Supports transparent and accountable group setup

This notification is a critical step in validating group size and subscription fees prior to invoicing.

Subject: Cell Biology & Imaging (CBI): Subscription Confirmation

Body:

Dear xxx,

For the purposes of your CBI subscriptions, the following RIMS users are registered under your research group:

- yyy (Visitor Postdoctoral Research Fellow)

- zzz (Student - HDR/PhD)

Please confirm this information is accurate or send any modifications to abc@uwa.edu.au.

Kind regards,

14.3.10 UWA-RIMS: Email notification for payment

To support the CBI subscription workflow, ACLS has implemented a dedicated **email notification template** to prompt supervisors to complete the **subscription payment process**.

Functionality:

Once the supervisor's researcher list is confirmed:

- The system sends an automated payment notification email
- This email includes:
  - Supervisor's name
  - Group size and associated subscription fee
  - Payment instructions or link to payment portal (if integrated)
  - Contact information for assistance or queries

Purpose:

- Provides a formal prompt for completing subscription payment
- Ensures supervisors are informed of:
  - **Amount due**
  - **Deadline**
  - **Next steps in the process**

This notification is essential for initiating payment collection and maintaining timely access to CBI resources.

Subject: Cell Biology & Imaging (CBI): 2024 Subscription Fees

Body:

Dear xxx,

Based on your confirmed RIMS user list (see below), the 2024 unpaid subscription fees for your research group are as follows:

- yyy (Student - HDR/PhD) (CBI Student), subscription fee is not paid yet: $500.00

- zzz (Academic Staff) (CBI Researcher), subscription fee is not paid yet: $1000.00

Total unpaid subscription fee: $1500.00

Please send authorisation of your BU/PG details to abc@uwa.edu.au. All queries and modification can also be directed here.

Kind regards.

14.3.11 UWA-RIMS: Charge category manager

To support distinct billing configurations for different facilities, ACLS has separated **RIMS** and **CMCA** charge category management.

Key Changes:

- **Independent Charge Category Structures:**
  - UWA-RIMS and CMCA now maintain separate charge category settings
  - This allows each facility to:
    - Define unique rate structures
    - Manage independent billing policies
    - Align with operational and financial governance requirements

- **System Behaviour:**
  - Admins will only see charge categories relevant to their assigned facility context
  - Changes made to RIMS charge categories do **not affect CMCA**, and vice versa

This separation ensures flexibility and clarity in managing resource charges across different institutional frameworks.

14.3.12 UWA-RIMS: Booking reports

Enhancements have been made to the **Booking Reports** module to align with UWA-RIMS reporting requirements.

Implemented Changes:

- **BU/PG Details Added:**
  - Each user's Business Unit (BU) and Postgraduate (PG) details are now included in the report output
  - This supports internal tracking and funding attribution
- **Detailed Period Booking Format:**
  - The period booking report format has been modified to:
    - Display each individual booking's date and time
    - Include full booking details for accurate time-based usage reporting

These improvements enhance transparency and enable comprehensive reporting for internal auditing, chargeback reconciliation, and supervisory oversight.

14.3.13 UWA-RIMS: Swipe Cards – multi-level locations

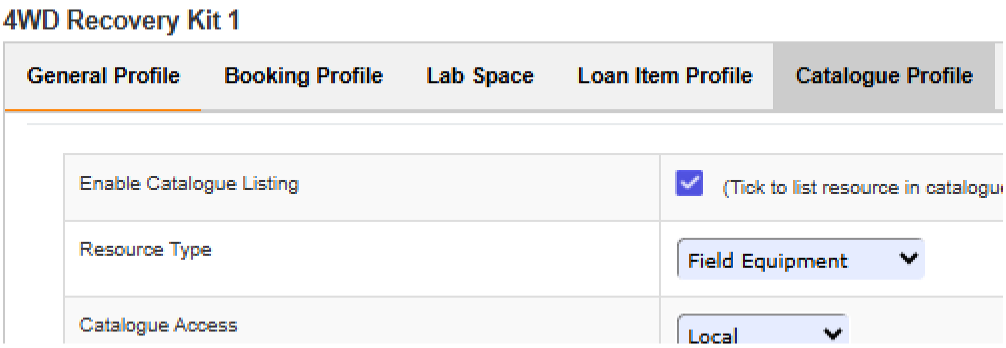
Multi-level location feature supports the max level 3.

14.4 UWA-RIMS: 2025 Research Equipment Portfolio

Research equipment portfolio is added to UWA RIMS ACLS to align with UWA asset management requirements and research equipment portfolio management by UWA library.

14.4.1 Enable/Disable Resource Listing on Catalogue

The feature provides a control to list the resource to the resource catalogue or not. Go to Staff tab -> Utility -> Resource Manager, pick a resource to edit and go to Catalogue Profile tab.



By default, all are set to enable listing.

14.4.2 Research Equipment Portfolio

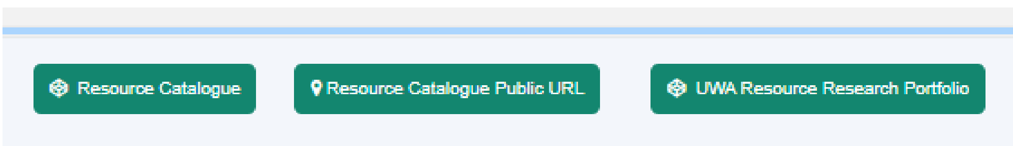
Go to the same Catalogue Profile tab in Resource Manager, admin can enter the following data. This is a manual process for data entry.

UWA Profiles and Research Repository:

- Title: General Profile > Resource Name
- Description: Catalogue Profile > Description
- Managing Organisational Unit: Drop down lists (School/Org)
- Location: Catalogue Profile > Location
- Staff name: Catalogue Profile > Custodian
- Staff ID: Custodian staff ID
- Phone: Custodian phone
- Email: Custodian email
- Website url: Catalogue Profile > Website
- Portfolio type: selection of equipment, facility or component
- Research technique: Drop-downlist (controlled vocabulary)
- Available for loan/booking: General Profile > Operational Status
- Equipment hierarchy: General Profile > Resource Group

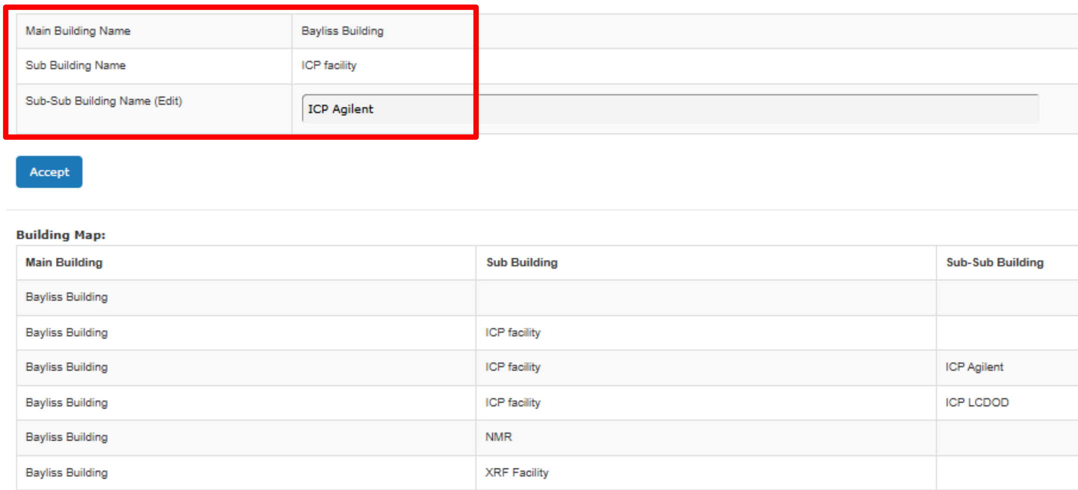
14.4.3 UWA Resource Research Portfolio – Admin Only

Next to the other two catalogue buttons, a new button is added to the booking resource dashboard.



The following headers are built to the portfolio table:

- Resource
- Resource group
- Research technique
- Staff name
- Staff site url
- Phone
- Email
- DOI
- Handle
- Website url
- Equipment hierarchy



Main Building Name	Bayliss Building
Sub Building Name	ICP facility
Sub-Sub Building Name (Edit)	ICP Agilent

Accept

Building Map:

Main Building	Sub Building	Sub-Sub Building
Bayliss Building		
Bayliss Building	ICP facility	
Bayliss Building	ICP facility	ICP Agilent
Bayliss Building	ICP facility	ICP LCDOD
Bayliss Building	NMR	
Bayliss Building	XRF Facility	

15 Appendix H – ACLS Modification for NIF-WA

15.1 NIF-WA: Modification Overview

The ACLS modifications specifically tailored for the NIF MRI facility requirements are implemented to deliver customized solutions for MRI and PET/CT facilities, with particular attention to medical record data handling.

The integrated service offers:

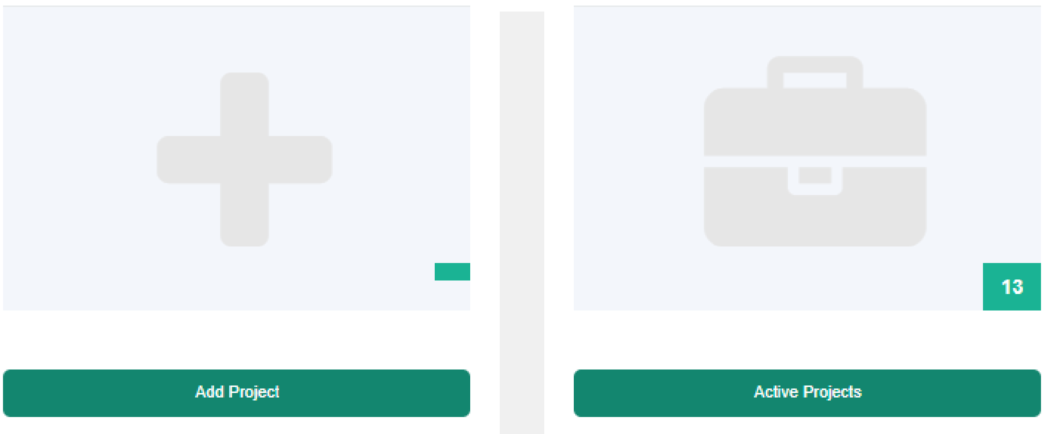
- **Web-based calendar management**
- **Project management**
- **User and participant management**
- **DICOM agent services**
- **Email notifications**
- **Mobile messaging**

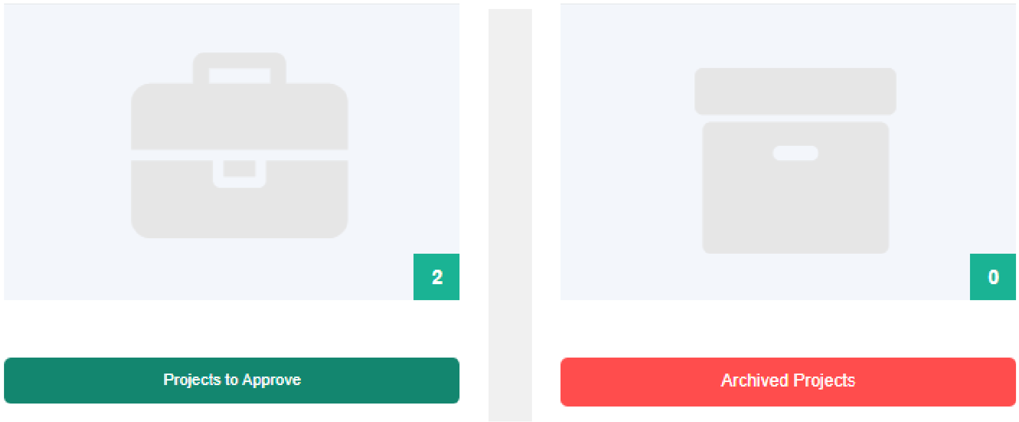
15.2 NIF-WA: Project manager

The Project Manager module enables administrative staff to create and manage research projects with associated properties. Access is restricted to administrative users only via the path: **NIF Utility Tab ➔ Project Manager**.

Key functionalities include:

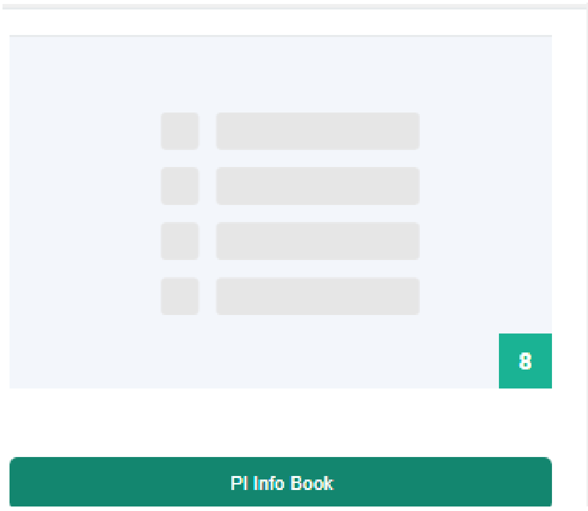
- Defining research project details
- Associating project-specific metadata
- Managing project lifecycle and updates
- Ensuring compliance with NIF-WA guidelines





15.3 NIF-WA: Project manager: PI Info Book

This feature allows administrative users to access all Principal Investigator (PI) data separately. When creating a new project, entering PI data is the first and mandatory step in the project setup process.



15.4 NIF-WA: Project manager: Projects to approve

If research projects are created by researchers, final approval is required by administrative staff.

Admins will validate the project data and approve the project draft submitted by researchers.

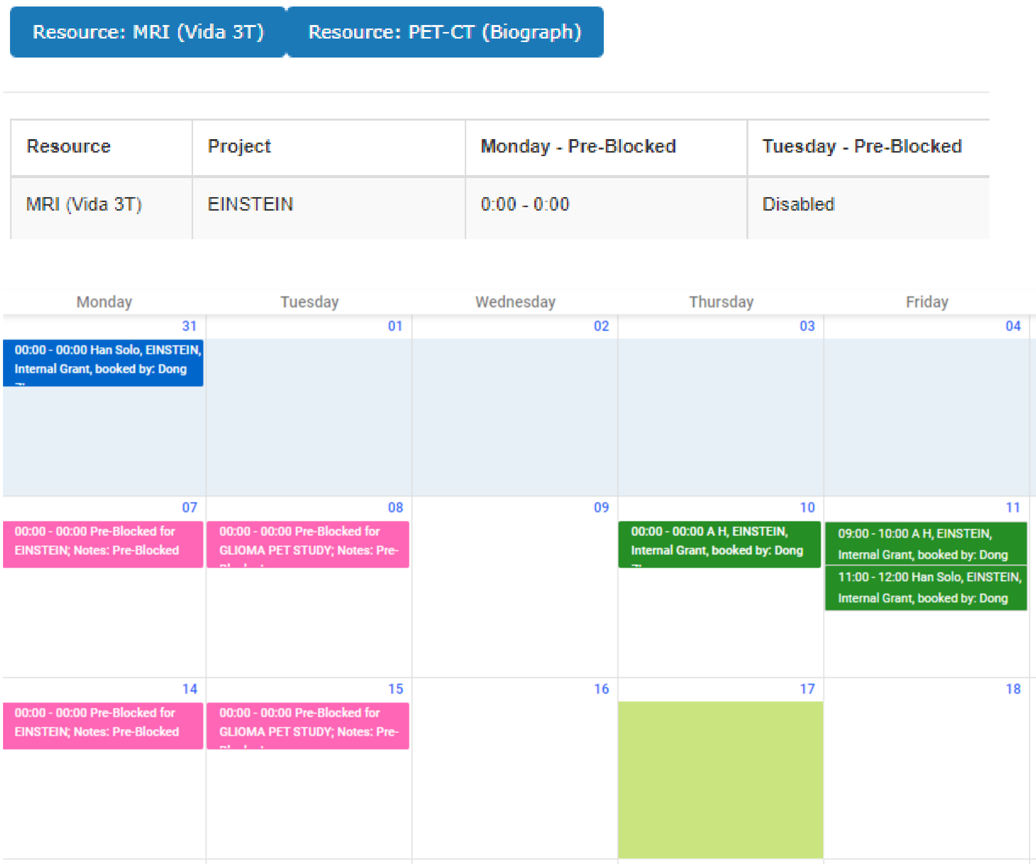
Project Manager: Transfer Project Ownership

This feature is for administrative use only. It allows admins to transfer ownership of a project to another PI or designated user, ensuring proper project management and oversight.

15.5 NIF-WA: Project manager: Project pre-blocked calendar time

Admins can define pre-blocked calendar time for a specific project and resource, limited to one session per day. These pre-blocked sessions appear as pink slots on the calendar (refer to the calendar chapter for details).

For example, for any resource, the calendar time from 12:00 AM to 12:00 PM on Monday may be reserved exclusively for Project EINSTEN.



Resource	Project	Monday - Pre-Blocked	Tuesday - Pre-Blocked
MRI (Vida 3T)	EINSTEIN	0:00 - 0:00	Disabled

15.6 NIF-WA: Participant manager

The Participant Manager is accessible by administrative users only via: NIF Utility Tab → User Participant Manager. This module supports key functions proposed for participant data handling.

Admins can:

- Add new participants
- Edit participant details
- Archive participant records

Participant data includes the following associated properties:

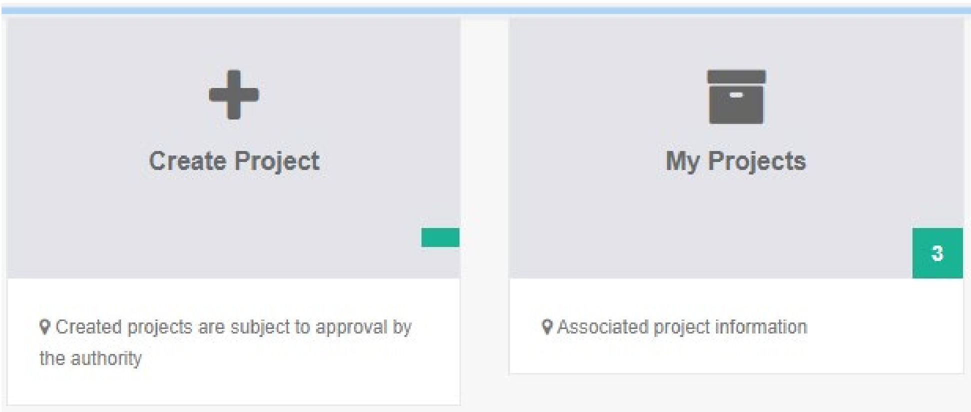
- Participant name and contact details
- Associated project(s)
- Medical record references
- Visit and session history
- Notes and custom metadata

15.7 NIF-WA: Dashboard for user/researcher

The dashboard for users and researchers includes two key features:

- Create a new project
- Manage submitted projects

These features are intended for researchers (not admins). Researchers can submit new project drafts and manage their approved projects with limited editing permissions.



15.8 NIF-WA: Booking calendar: participant booking

Under the Resource tab, both admins and researchers can make bookings by selecting the appropriate project, billing option, and participant.

Today's Booking:

A convenient feature available on the Resource Tab landing page, displaying bookings for the current day. Display formats vary depending on the type of resource:

For MRI bookings, display the following per booking:

- Project
- Modality
- Participant
- Anatomy
- Whether researcher will be present (from Project's "Scanning: MRI" tab)

For PET-CT bookings, display the following per booking:

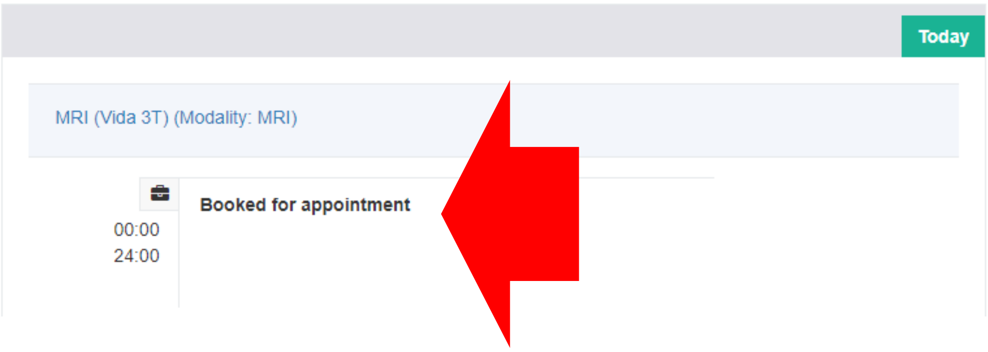
- Project
- Modality
- Participant
- Anatomy
- Tracer (if PET)
- Whether researcher will be present (from Project's "Scanning: [modality]" tab)

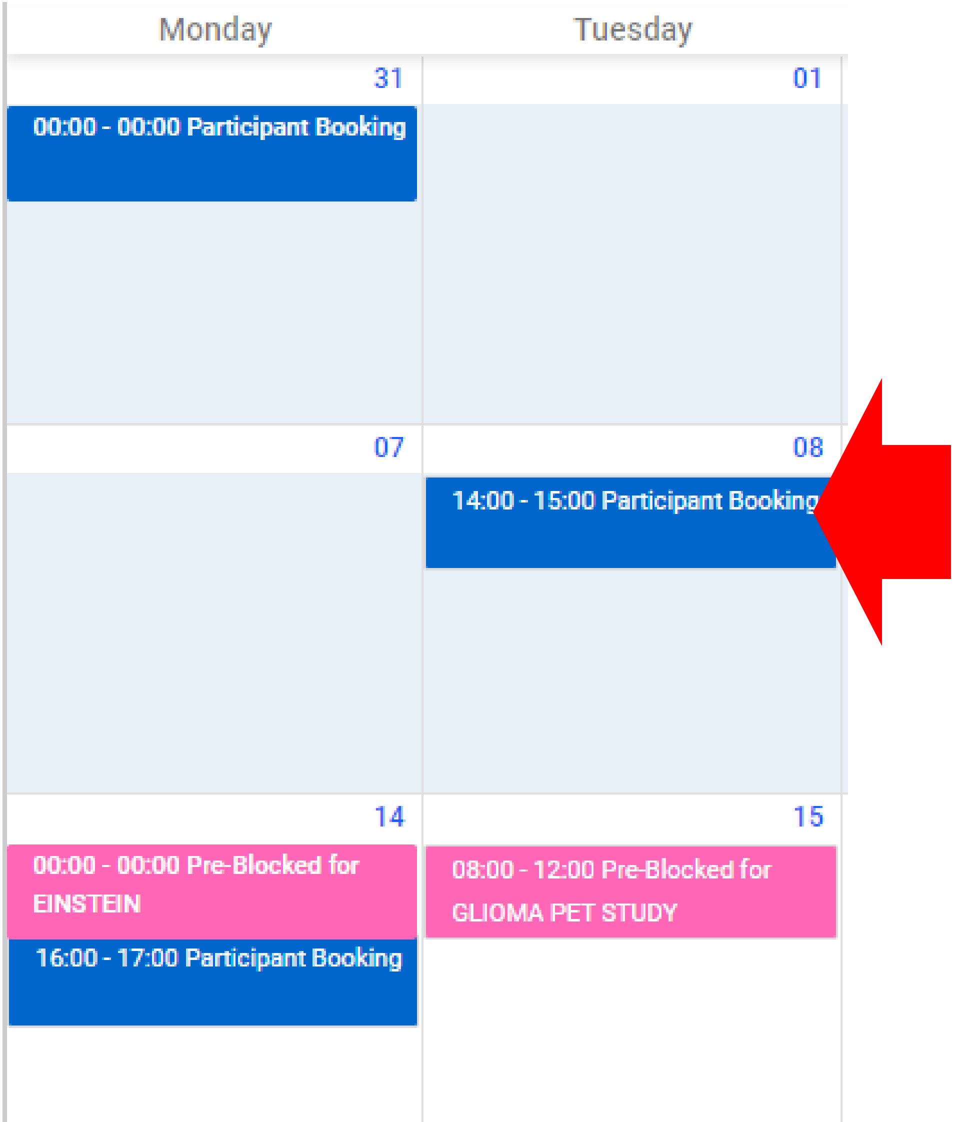
Additionally, the **resource name** on the Today page is hyperlinked for quick access to its calendar.

15.9 NIF-WA: Booking calendar: privacy enabled

The calendar privacy setting **EnableUserPrivacyCalendar** can be activated in **System Settings → Configure System**.

This privacy setting is applicable only to users/researchers. When enabled, researchers can view the details of bookings they have made themselves but cannot view booking details made by others.

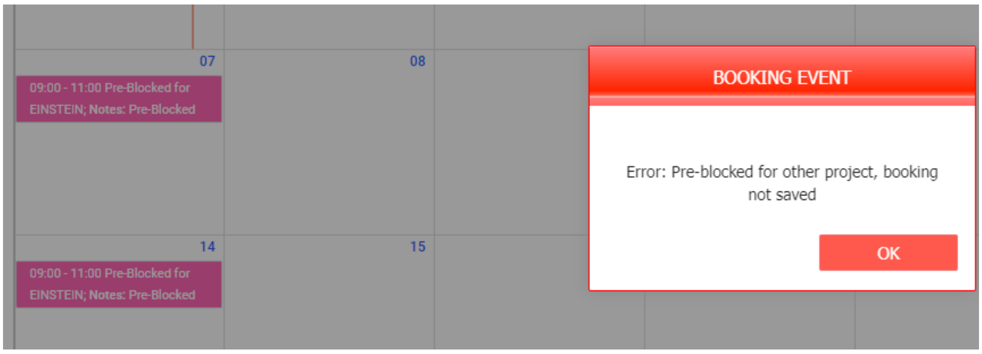




15.10 NIF-WA: Booking calendar: pre-blocked calendar time

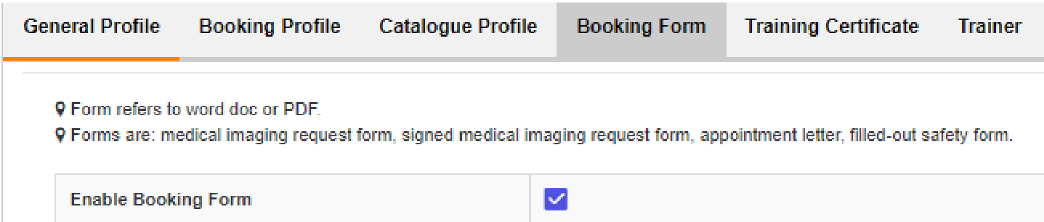
Admins can set up project-based pre-blocked calendar time, limited to one session per day, using the Project Manager.

The system automatically verifies whether a booking aligns with the project assigned to the pre-blocked time. Only bookings made under the same project will be accepted during the pre-blocked session.



15.11 NIF-WA: Booking calendar: uploaded forms

To enable form uploads for bookings, admins must first activate the booking form option for the selected resource in Resource Manager.



Once enabled, the following four types of forms are required:

- Medical imaging request form
- Signed medical imaging request form
- Appointment letter (a PDF print-out of the HTML letter)
- Filled-out safety form

On the calendar, both admins and researchers can create appointment bookings and upload the required forms either during the booking process or at a later stage.

Users can click the Upload Form button to attach the necessary documents.

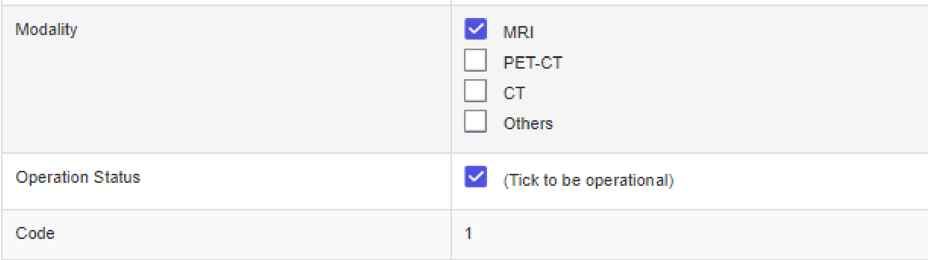
15.12 NIF-WA: Service booking calendar

The service booking feature is used for reserving equipment for servicing purposes. When a service booking is created, the system automatically cancels any existing bookings that overlap with the service time.

Cancellation emails are automatically sent to all affected participants and researchers to notify them of the cancellation.

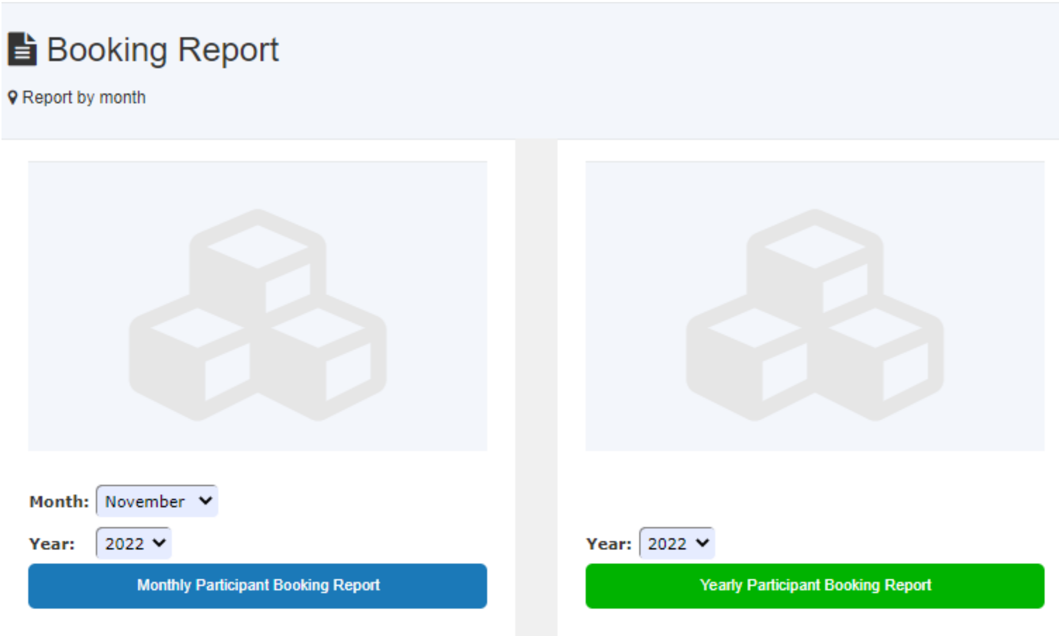
15.13 NIF-WA: Resource manager: set up modality of resource

Within the **General Profile** section of Resource Manager, admins can configure the modality assigned to each resource. Once set, the modality will be displayed alongside the resource name on the calendar page for quick identification.



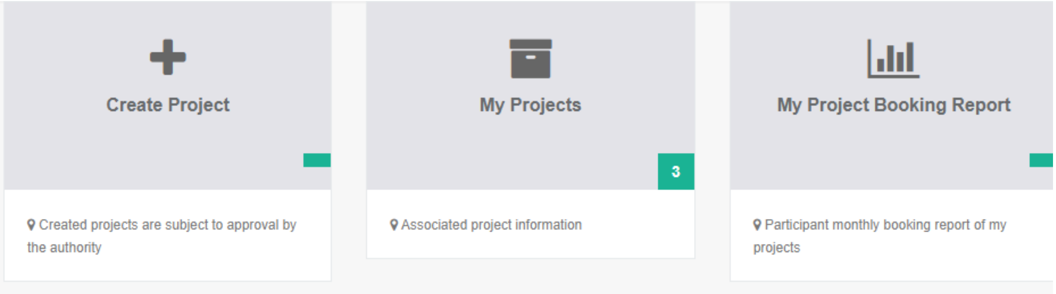
15.14 NIF-WA: Report - Admin: participant booking report

This report is accessible only to administrators. To view the monthly participant booking report, navigate to: **Staff tab ➔ Reports**.



15.15 NIF-WA: Report – User/Researcher: my project booking report

Users and researchers can access a booking report filtered to their associated projects, as listed in their **My Projects** section.



While the admin report includes all bookings, the user-level report is limited to those where the user is either the project owner or is nominated as a researcher on the project.

15.16 NIF-WA: Institute

Admins can add or modify organizational listings via **Staff tab → Utility → School Manager**.

If an organization needs to be removed from the dropdown list on the registration form, please notify the ACLS team for assistance.

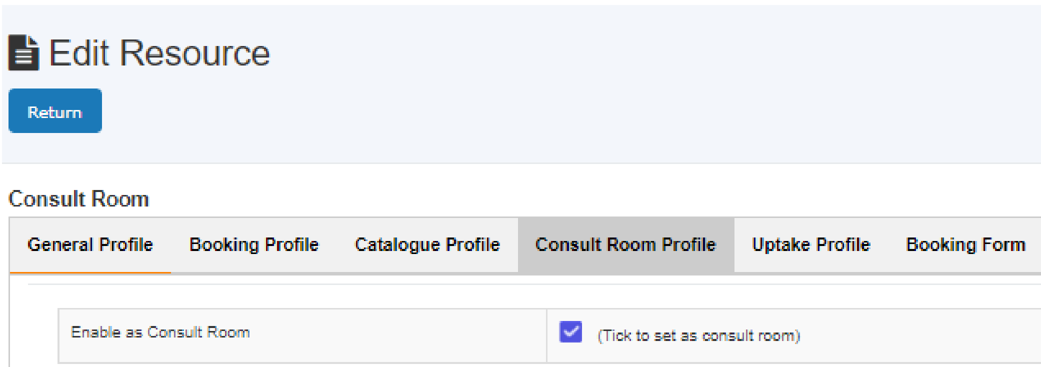
15.17 NIF-WA: WA NIF node staff

Please notify the ACLS team if you wish to remove any NIF staff from the staff dropdown list on the registration form.

15.18 NIF-WA: Consult room set up and calendars

A new concept of consult room is introduced for private conversations between researcher/doctor and participant/patient before or after scanning.

Admins can configure any resource as a consult room via **Staff Tab → Utility → Resource Manager → Edit → Consult Room Profile**.

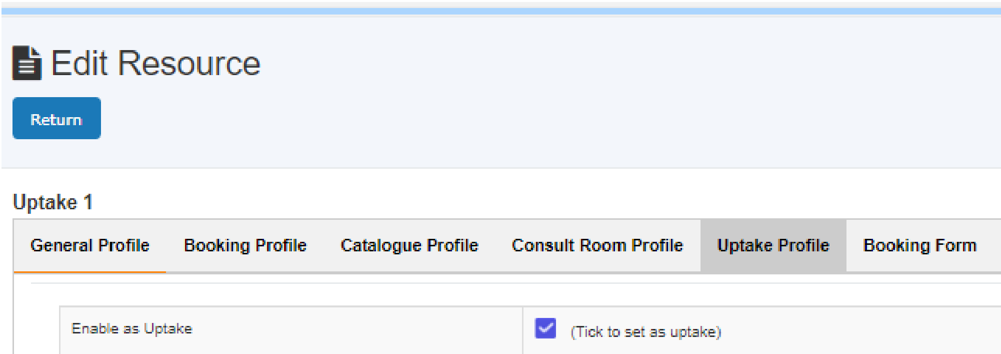


Consult Room Calendar Features:

- Open to all users and researchers
- Requires selection of both project and participant
- Upon saving the booking, the system sends out email notifications and mobile text messages to the participant

15.19 NIF-WA: Uptake room

A new concept of uptake room is introduced for providing a safe and radiation-shielded space for participants to wait after receiving their PET tracer injection.



Uptake rooms apply only to PET-CT bookings.

Admins can configure any resource as an uptake room via **Staff Tab → Utility → Resource Manager → Edit → Uptake Room Profile**.

Uptake Room Calendar:

- Accessible only by WA NIF node staff and superusers, not by researchers
- Manual bookings behave like consult rooms when made directly by admin

Automatic Booking Integration: Uptake rooms are typically booked automatically under the following project settings:

- Applies only to PET-CT bookings (e.g., resource: PET-CT (Biograph); modality: PET-CT)
- The project field "Does patient have to remain in uptake bay for uptake duration" in the Scanning: PET-CT tab must be set to "Yes"
- If so, the system will:
  - Automatically book an uptake bay immediately prior to the PET-CT booking
  - Duration is based on the field "Time between tracer injection and scan start (in minutes)" from the same tab
  - Confirm that an uptake room is available for the entire required duration prior to the PET-CT scan

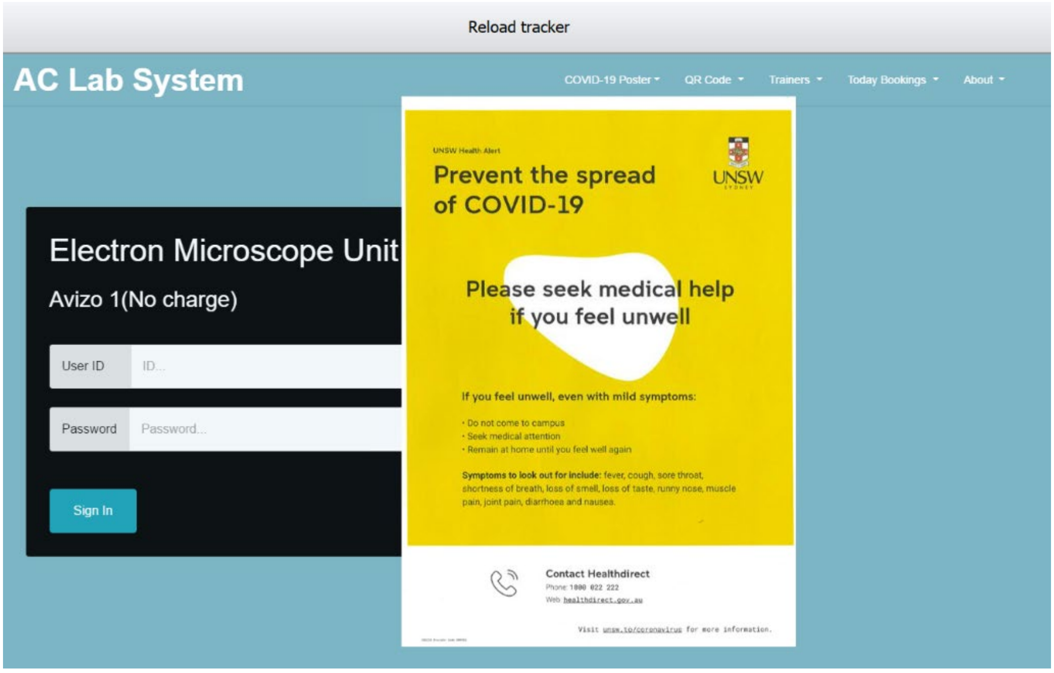
15.20 NIF-WA: PET-CT booking with uptake room

When a project is selected during a PET-CT booking, the information panel displays whether the field "Does patient have to remain in uptake bay for uptake duration" is set to **Yes** or **No**.

If this field is set to **Yes**, the system will automatically book an uptake room in accordance with the logic defined in section 15.19.

16 Appendix I – ACLS Desktop Tracker App

The ACLS Python Tracker is a cross-platform desktop application developed in Python. It integrates with the ACLS web server to provide secure, trackable, and interactive access to laboratory instruments. The tracker enforces login-based usage, records session details, provides safety alerts, and offers utility tools such as QR codes, contact posters, and note submission. It is especially useful for shared equipment management and lab safety monitoring.



16.1 Tracker Integration with ACLS Server

The tracker enforces the **"No Login, No Operation"** policy. Before a user can operate any instrument:

- The user must log in via the tracker.
- The tracker verifies the user's ACLS account credentials.
- It checks whether the user holds valid training certification.
- If supervision is required, it will restrict access until staff approval.

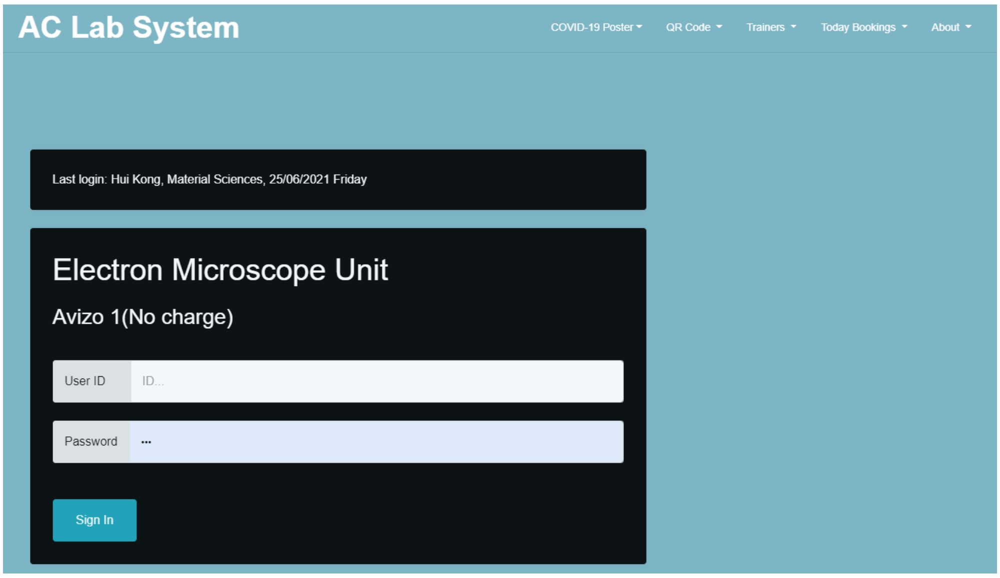
While logged in, users can:

- Record experimental notes
- View the next booking for the day
- Receive lab notifications from staff

16.2 Tracker Operation Guide

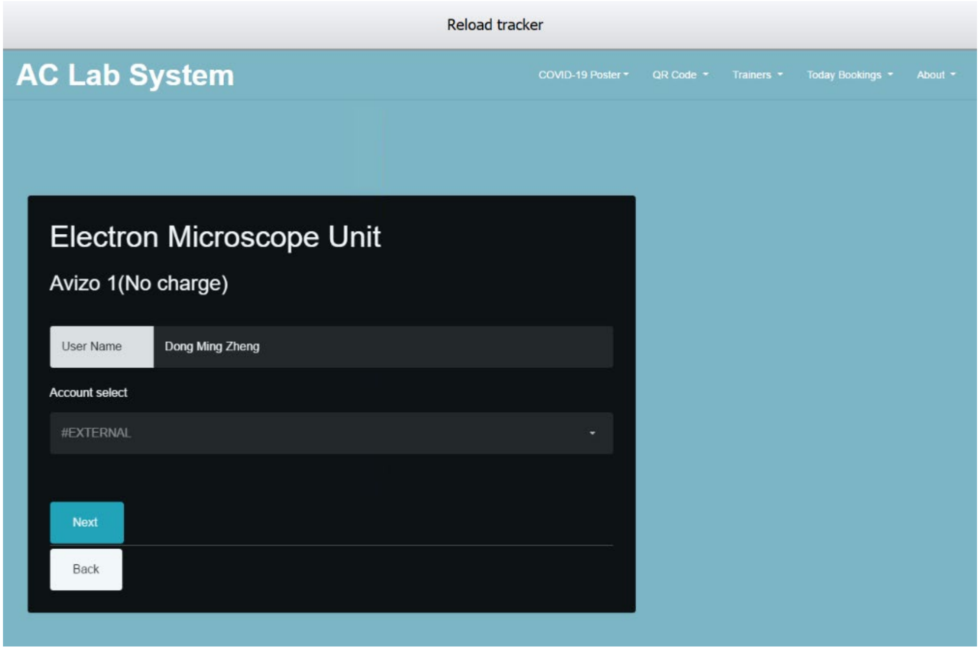
Login Interface:

- When the tracker launches, the home screen displays:
- Reload Tracker – Refresh the home screen
- COVID-19 Poster – Default poster (customizable via ACLS Resource Manager)
- QR Code – For mobile scanning to access the resource dashboard
- Trainer Contacts – Displayed for assistance
- About – Application version and name
- Lab and Resource Name
- Last Login – Shows previous user, school, and timestamp



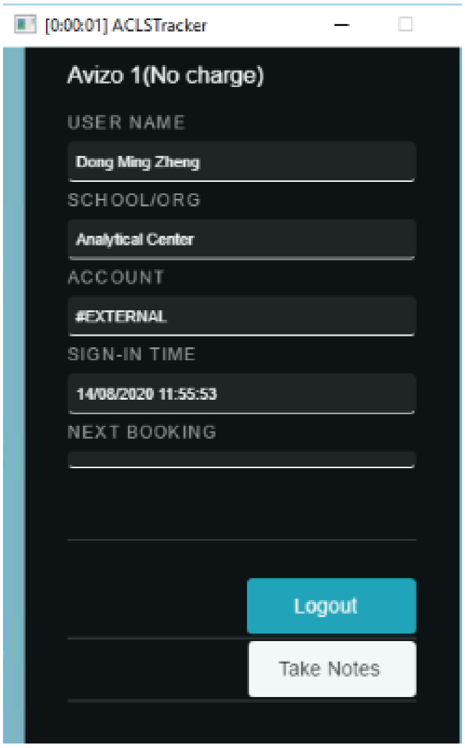
To proceed:

- Enter User ID and Password
- Depending on configuration, select Account or Project



Session Display

- The tracker app bar remains in the top-right corner.
- It shows elapsed session time.



Auto Logout Timer (Optional):

Used to enforce session limits or automatic sign-out:

- Select the desired duration.
- Click Start Timer.
- Tracker will auto-logout when time expires.

To cancel, click Stop Timer.

Lock Screen (Optional):

Used for short breaks:

- Click Lock Screen to enter lock mode.
- The screen becomes semi-transparent.
- Any staff member can unlock.

Record Notes:

To document experiment details:

- Click Note.
- Enter text in the field.
- Click Submit Notes.

Notes are saved to the ACLS server and viewable in ACLS Web Tracker Notes.

Logout:

- Click the **Logout** button to terminate the session securely.

16.3 Tracker Configuration in ACLS Web Portal

Configuration is done by lab or system administrators.

Access Path: **Staff → Utilities → Resource Manager → Edit Resource**

The new Python tracker settings replace the legacy Java tracker (still visible for reference).

Configuration Fields and Descriptions:

Field	Description
Resource	Resource to which the tracker is linked
Host ID	Automatically generated ID upon installation

ID Type	Host ID used as the resource ID
Block hot-keys	Prevents bypass via Windows shortcuts
Block task manager	Prevents users from ending tracker process
Enable account/project selection	Option to enable/disable if resource is charge-free
Enable locking screen	Allows short-term locking for breaks
Enable Show Last Login User	Displays the last user info
Enable auto-logout	Forces logout after a set time
Auto-logout hours	Defines auto-logout interval
Enable full-screen mode	Enforces login before usage
Enable booking first policy	Ensures bookings are made before usage
Enable data drive mapping	(UNSW only)
Enable email for sign in/out	Sends email notifications to users and trainers
Enable sensor app execution	Integrates ACLS Sensor to scan system info
Enable Windows account logoff	Logs out Windows user on tracker logout
Enable logoff Windows button	Adds Windows logout button on tracker login screen
Connection Allowed	Controls whether the tracker can connect
Note	Free text note for reference

If the previous user did not log out, the tracker will retroactively assign their logout time to the current login timestamp. Use **Connection Logs** to verify true session durations.

16.4 ACLS Tracker Status

View key information including:

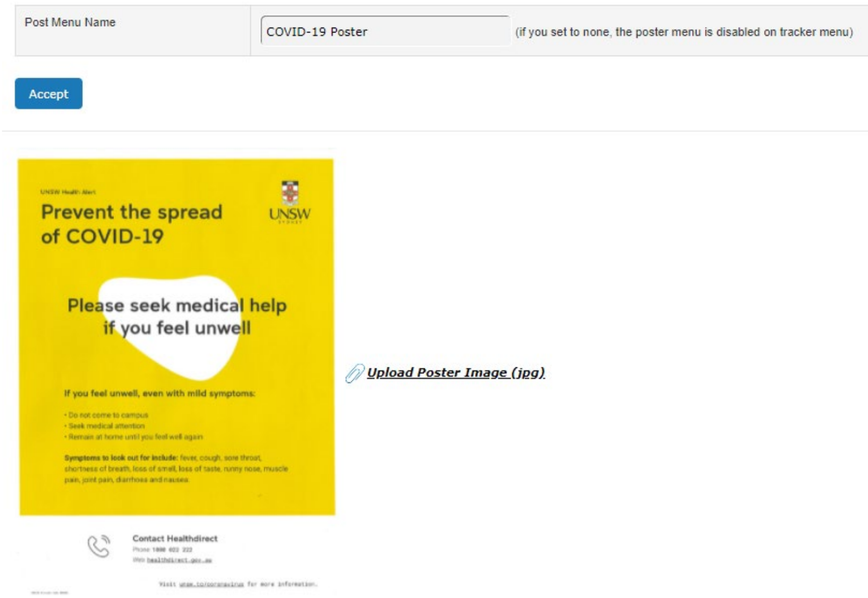
- Installation status
- Connection status
- IP address
- Tracker version

Resource	IP Address	Tracker Installation	Tracker Connection	Tracker Version
Avizo 1(No charge)	129.94.164.57	Installed	Connected	0.7
Avizo 2(No charge)	129.94.164.77	Installed	Connected	0.7
EPMA 8500	129.94.165.3	Installed	Connected	0.7
FIB Auriga	129.94.164.105	Installed	Connected	0.7
FIB Auriga - Oxford	129.94.165.77	Installed	Connected	0.7
FIB NanoLab	129.94.164.64	Installed	Connected	0.7
Leica Lift-Out	129.94.165.181	Installed	Connected	0.7

16.5 ACLS Poster

- Accessible via the **Tracker Status Page**

- Allows updating poster images and menus (e.g., COVID-19 alerts, lab notices)



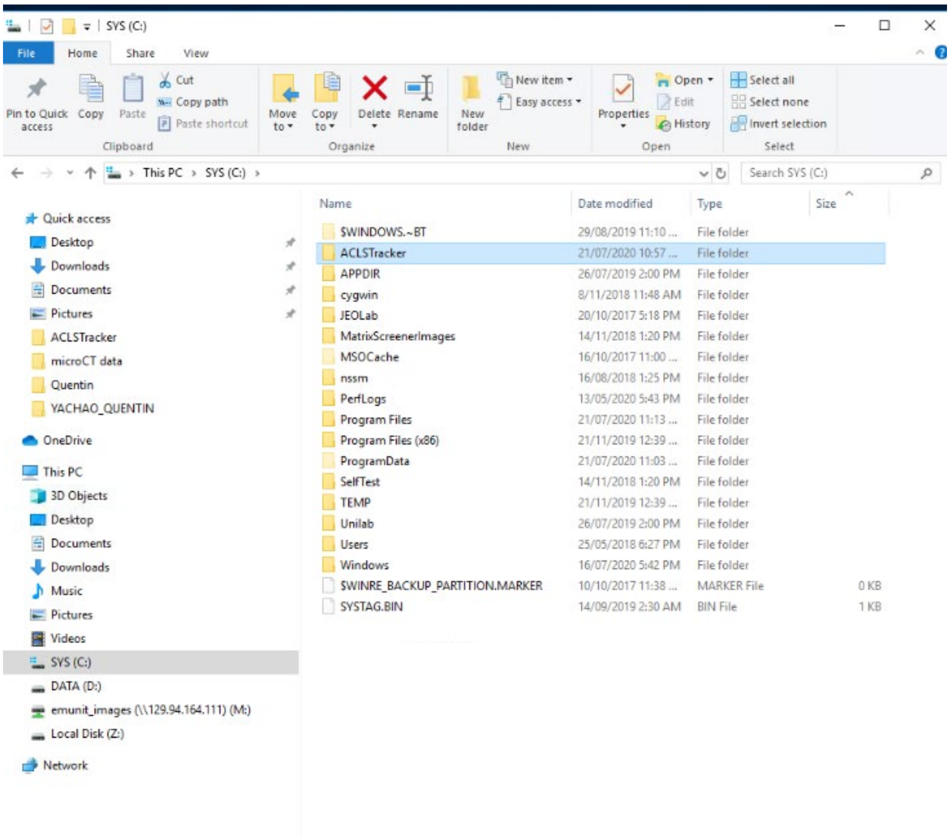
16.6 ACLS Tracker Server

The Python tracker requires:

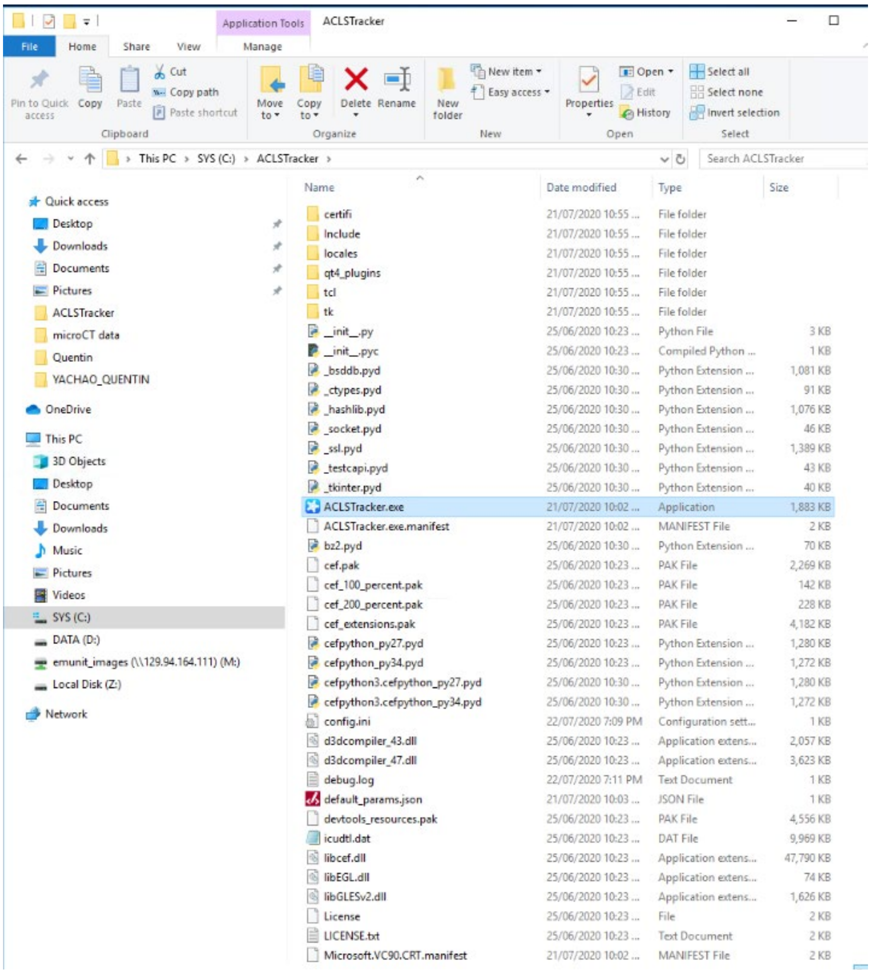
- Abyss Web Server X2 with HTTPS and a separate port
- ACLS team support for server setup and secure web deployment

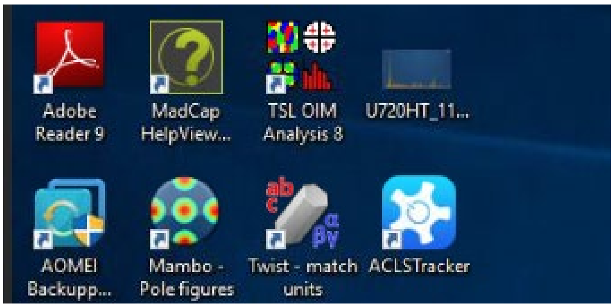
16.7 ACLS Tracker Installation: Windows XP/7/8/10

- Request tracker package from ACLS team
- Unzip and copy ACLSTracker folder to C:\
- Double-click the executable (no install needed)



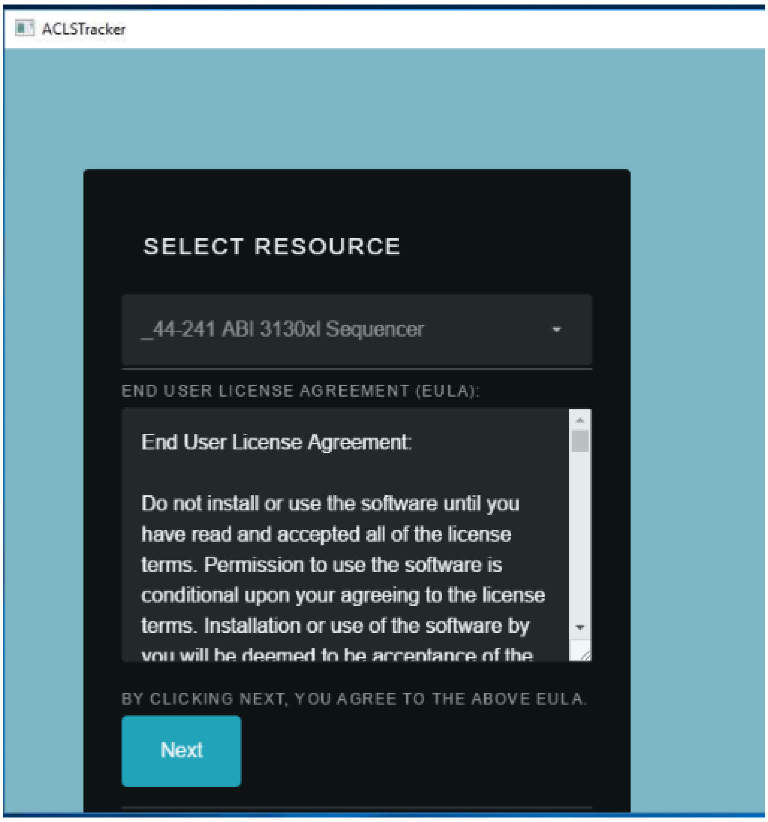
- Create desktop shortcut





- Auto-start setup:
  - Press WIN + R → Type shell: startup
  - Paste shortcut into startup folder

- On first launch:
  - Select and save resource
  - If not listed, configure it in ACLS Web Portal



16.8 Disable Task Manager for Windows 7 and Windows 10

For Windows 7/10:

- Press WIN + R → type regedit.exe
- Navigate to:
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Policies\System
- If DisableTaskMgr does not exist: Right-click → New > DWORD → Name it DisableTaskMgr
- Double-click → Set value to 1 to disable, 0 to re-enable

16.9 Linux Installation (e.g., CentOS 7)

Contact ACLS team for download.

Steps:

- Place tracker folder in /home/[user]
- Open Terminal
- Create launcher file:

swift
CopyEdit

sudo nano /home/[user]/Desktop/ACLSTracker.desktop

- Paste:

ini
CopyEdit
[Desktop Entry]
Type=Application
Name=ACLS Tracker
Icon=/home/[user]/ACLSTracker-0.8.3-CentOS7/icon.png
Exec=/home/[user]/ACLSTracker-0.8.3-CentOS7/ACLSTracker

- Save and trust launcher
- To auto-start:

swift
CopyEdit
sudo nano /etc/xdg/autostart/ACLSTracker.desktop
(Use same content as above with X-GNOME-Autostart-enabled=true)

Limitations on Linux:

- No hotkey blocking
- No automated drive mount or folder creation
- No ACLS Sensor support

Linux Troubleshooting:

If not launching:

- Run manually: /home/[user]/ACLSTracker-0.8.3-CentOS7/ACLSTracker
- Check .desktop file formatting
- Install required packages:

nginx
CopyEdit
sudo yum install -y libXScrnSaver

16.10 Tracker Troubleshooting

Tracker fails to connect? Check for:

- Network issues
- Tracker server downtime
- Incorrect Host ID in configuration

- Firewall blocking traffic

17 Appendix O – ACLS Desktop Sensor App

17.1 Overview

ACLS Sensor is a standalone desktop application that collects system information from lab resources. The scan data is uploaded to the ACLS web platform for lab staff to review hardware, storage, and software configurations.

Collected data includes:

- Operating system details
- CPU and RAM specs
- Disk and storage info
- Installed software list

ACLS Sensor:

- Can be run independently
- Comes pre-integrated with ACLS Tracker (v0.10 and above) for automated scans

This documentation applies to **ACLS Sensor version 2.0 and later**. If your version is below 2.0 or unnumbered, this information may not apply.

17.2 Scanned Data Fields

Acquired Information	Description
Device Name	The computer name
Windows Edition	OS version (e.g., Windows 10, 11, XP)
RAM	Installed memory (in GB)
CPU	Processor model and details
GPU	List of graphics adapters
Physical Disks	Installed storage devices and total capacity
Logical Disks	Usable available storage capacity
Users	Registered system users and their permissions
Software	Installed application list

17.3 Operation Using ACLS Sensor App

17.3.1 Online Mode:

- **Download Sensor App:**
  - ACLS Web Portal → Staff → Utility → Resource Tracker & Sensor Manager → Download Sensor

- **Run ACLSSensor.exe (after extracting to C:\ACLSSensor)**
- **Login:**
    - Enter ACLS login name
    - Input one-time login code sent via email
- **Provide Resource Name:**
    - Staff can select from a list
    - Other users must manually enter resource name
    - Previously entered info will autofill on next run (can be re-entered if needed)
- **Run Scan:**

- Click **Start Scan**
    - Results uploaded to ACLS
    - Local report saved to Documents folder
    - Review available within app

17.3.2 Offline Mode:

Used for restricted network environments.

- Download and extract ACLS Sensor.
- Open app → Click Use in Offline Mode.
- Enter the name of the associated lab resource.
- Click Start Scan.
- Locate results using Open Output Folder.
- Transfer file to a computer with internet access.
- Upload manually via: **ACLS Web Portal → Staff → Utility → Resource Tracker & Sensor Management → Sensor Scan Result Upload**

17.4 ACLS Sensor via ACLS Tracker

Available from **ACLS Tracker v0.10+**.

How to Enable Sensor Scanning via Tracker:

- Log into ACLS
- Navigate to: **Staff → Utility → Resource Tracker & Sensor Management → Installed Resource Tracker Status**
- Click Edit Tracker Status next to the target resource
- Tick Enable sensor app execution with tracker
- Click Accept
- Restart the resource PC to activate the change

The system will:

- Run ACLS Sensor daily at midnight
- Upload scan data automatically

To check your tracker version, use the Tracker Home Page or ACLS dashboard.

17.5 Viewing Sensor Results

Sensor scan results are accessible via the ACLS Web Portal:

Navigate to: **Staff → Utility → Resource Tracker & Sensor Management → Installed Resource Tracker Status → Resource Sensor Scan Report**

Features:

- View most recent scan per resource
- Access full scan history: View Scan History
- Analyse OS breakdown: Resource Windows Chart
- List devices by OS: Resource Details

18 Appendix K – About LDAP Implementation

18.1 Introduction to LDAP

Lightweight Directory Access Protocol (LDAP) is an application protocol used to access and manage distributed directory information over an IP network.

In ACLS, LDAP integration allows users to authenticate using their institution's central login credentials, providing seamless, secure access across multiple ACLS installations within an organization.

18.2 Benefits of LDAP Integration with ACLS

Implementing LDAP in ACLS offers the following advantages:

- Single Sign-On (SSO) across multiple ACLS instances (e.g., across labs and faculties)
- Centralized authentication control managed by the university IT department
- Access to organizational file systems (e.g., home drive access through ACLS interface – note: not part of the LDAP module itself)

Example: At UNSW, 11 ACLS copies are running across different labs. With LDAP, researchers use their single UNSW zID/zPass to access any of them.

18.3 Configuration Requirements

LDAP integration must be coordinated with your institutional IT department.

LDAP Configuration Fields in ACLS:

To configure LDAP in ACLS:

- Log in as admin
- Navigate to: **System Settings → Configure System → LDAP Setting**
- Populate the following fields:

Field	Description
Active Directory Domain Name	LDAP server's domain or IP
LDAP Enable	Tick to activate LDAP
LDAP Login Prefix	Prefix (e.g., adunsw) for logins like adunsw\z0000000, depending on institution format

Connection Test:

Before enabling LDAP:

- Click LDAP Connection Test
- If successful, the system will return: "SUCCESS"

18.4 Managing LDAP Users

- Use the LDAP User Status page to view whether users are authenticated via LDAP.
- For transitioning to LDAP: Use LDAP Pre-Configure to link existing ACLS users to LDAP-based authentication.

18.5 Enforcing LDAP-Only Access

To restrict users from logging in using local ACLS credentials (i.e., enforce institutional login):

- Go to: System Settings → Configure System
- Enter the keyword used in institutional email addresses (e.g., unsw)
- ACLS will then:
  - Identify all users with email addresses containing this keyword
  - Lock their accounts to LDAP-only login

Example:

If unsw is set as the keyword, then all users with @unsw.edu.au email addresses must log in through the university's SSO system using zID/zPass.

19 Appendix L – About Microsoft Azure AD Authentication

The Azure Active Directory (Azure AD) enterprise identity service provides single sign-on, multifactor authentication, and conditional access to guard against 99.9 percent of cybersecurity attacks.

19.1 Overview of Azure AD and SAML

Microsoft Azure Active Directory (Azure AD) is an enterprise identity service providing:

- **Single Sign-On (SSO)**
- **Multifactor authentication**
- **Conditional access**

These features are designed to safeguard organizations against up to **99.9% of cybersecurity attacks**.

ACLS supports **SAML 2.0 (Security Assertion Markup Language)** as the primary authentication protocol for integration with Azure AD.

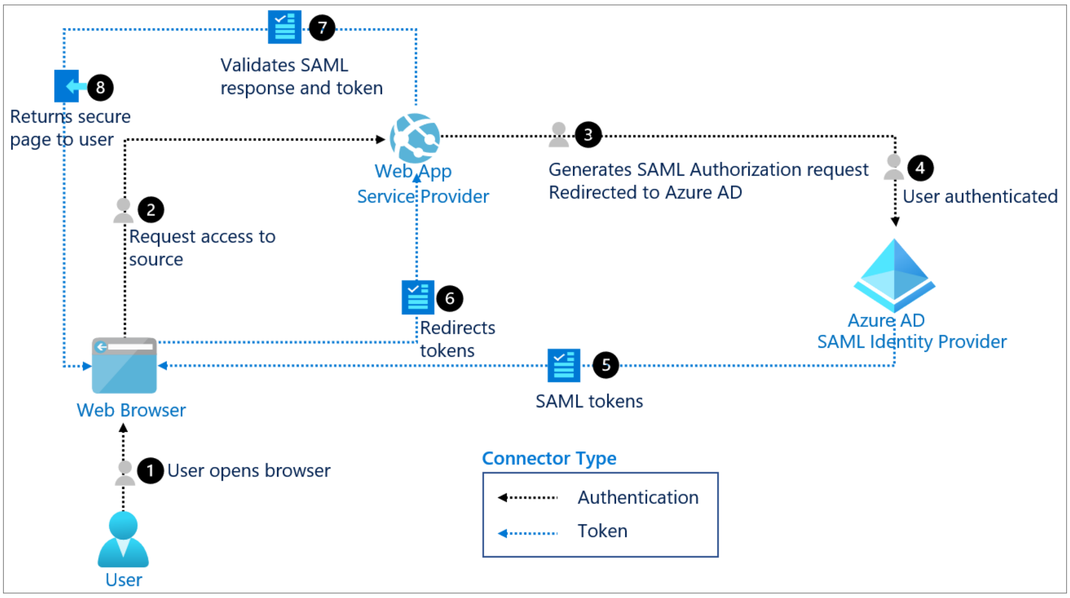
What is SAML?

SAML is an XML-based open standard that allows identity providers (IdP) to securely pass authentication and authorization information to service providers (SP) like ACLS.

SAML Architecture Roles:

- **Principal – The user requesting access**
- **Identity Provider (IdP) – e.g., Microsoft Azure AD**
- **Service Provider (SP) – e.g., ACLS**

SAML provides a **federated SSO experience**, allowing users to authenticate once with the IdP and access multiple services securely.



19.2 SAML vs LDAP

19.2.1 The Origins of LDAP and SAML SSO

- **LDAP (Lightweight Directory Access Protocol):**

  Developed in the early 1990s, designed for direct directory-level authentication, mainly for on-prem systems.

- **SAML (Security Assertion Markup Language):**

  Developed in the early 2000s for web-based federated authentication via trusted assertions from identity providers.

19.2.2 Similarities

LDAP is often the **source of truth** for identities, while SAML acts as a **secure intermediary** for web applications.

- Both support user authentication
- Both are used in identity and access management
- Often used together in enterprise environments

19.2.3 Key Differences

LDAP	SAML
On-premises, server-focused	Web-based, cloud-ready
Acts as the identity provider	Acts as the protocol for identity federation

Common in system-level apps (Linux, AD)	Common in SaaS and web platforms (Salesforce, GitHub)
Manual, complex setup	Easier web integration via SAML connectors
Stores credentials in directories	Credentials are stored by the IdP, not the service provider

19.2.4 Use Cases

LDAP:

Ideal for Linux apps, server-level authentication (e.g., OpenLDAP, Jenkins, Kubernetes)

SAML:

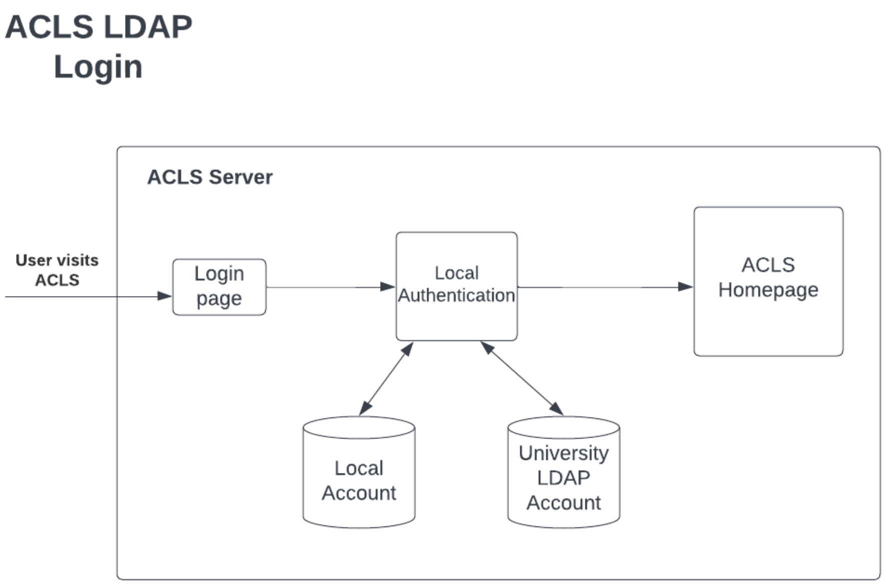
Ideal for web apps and cloud platforms (e.g., Microsoft 365, Slack, Trello, Atlassian tools)

SAML enables **IDaaS (Identity as a Service)** by extending Active Directory identities to cloud services, offering seamless SSO experiences.

19.3 Authentication Methods in ACLS

19.3.1 LDAP Login

- Users authenticate using their **university-issued ID and password**
- ACLS also supports **local account creation** for external users and contractors



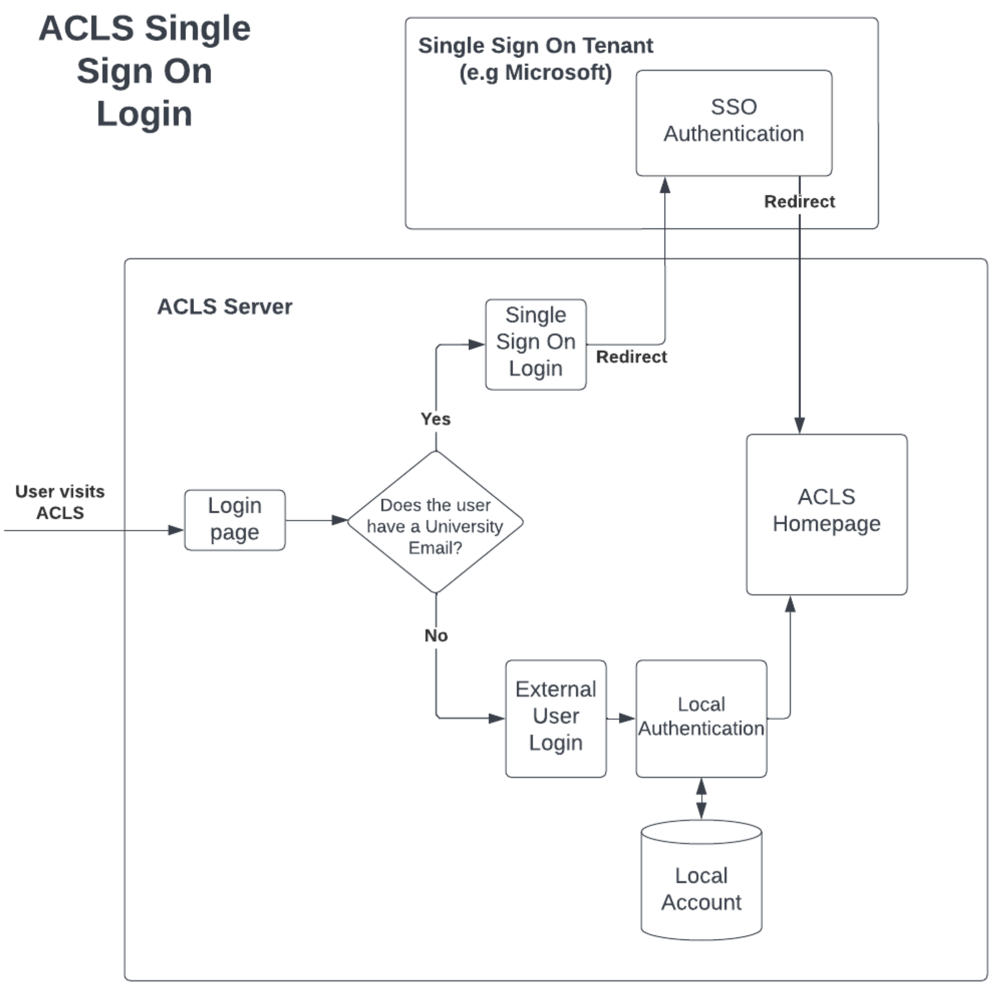
19.3.2 SAML Single Sign-On (SSO)

- For users with a university email, ACLS supports SAML 2.0 SSO
- Compatible with Microsoft Azure AD and other SAML-compliant IdPs
- Mandatory for institutions requiring federated authentication
- Local accounts still supported for users without university credentials

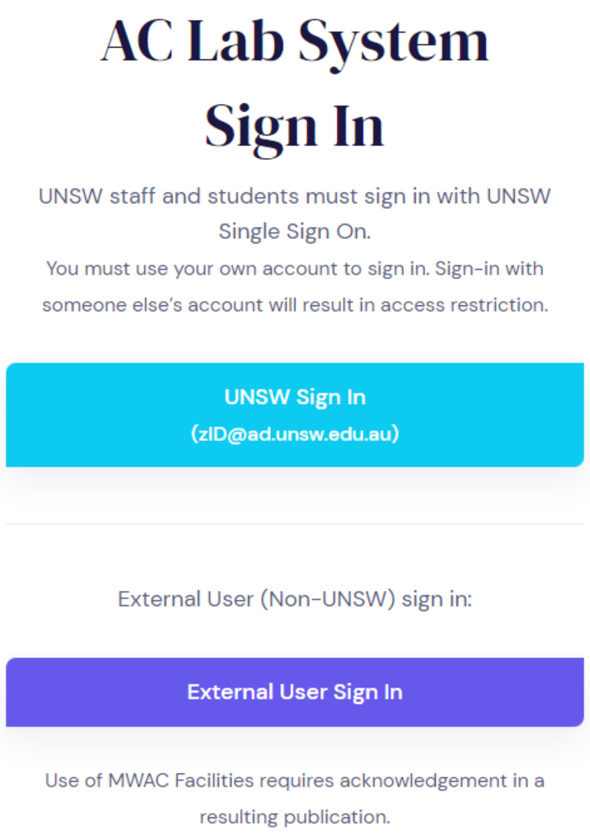
SSO Login Flow Example (Microsoft Azure AD)

- User visits ACLS login page and clicks Sign In
- Browser redirects to Microsoft's login page
- User signs in with Outlook email and password
- Browser redirects back to ACLS
- ACLS authenticates and grants access

This process ensures a **secure, centralized login** experience without storing passwords in ACLS.



19.3.3 Screenshots of SAML SSO Integration



20 Appendix M – ACLS Enterprise Deployment

20.1 Overview

ACLS Enterprise Deployment enables **Single Sign-On (SSO)** to provide a **centralized authentication gateway** across multiple ACLS nodes within a university or organization.

This allows researchers and staff to access multiple ACLS instances using a single login credential.

SSO integration eliminates the need for managing multiple ACLS logins and supports secure, federated identity management.

Supported Authentication Methods:

ACLS SSO (via Single Sign-In, or SSI) supports the following:

- **ACLS Local Authentication**
- **LDAP Authentication**
- **AAF Authentication (Australian Access Federation)**
- **SAML (e.g., Microsoft Azure AD)**

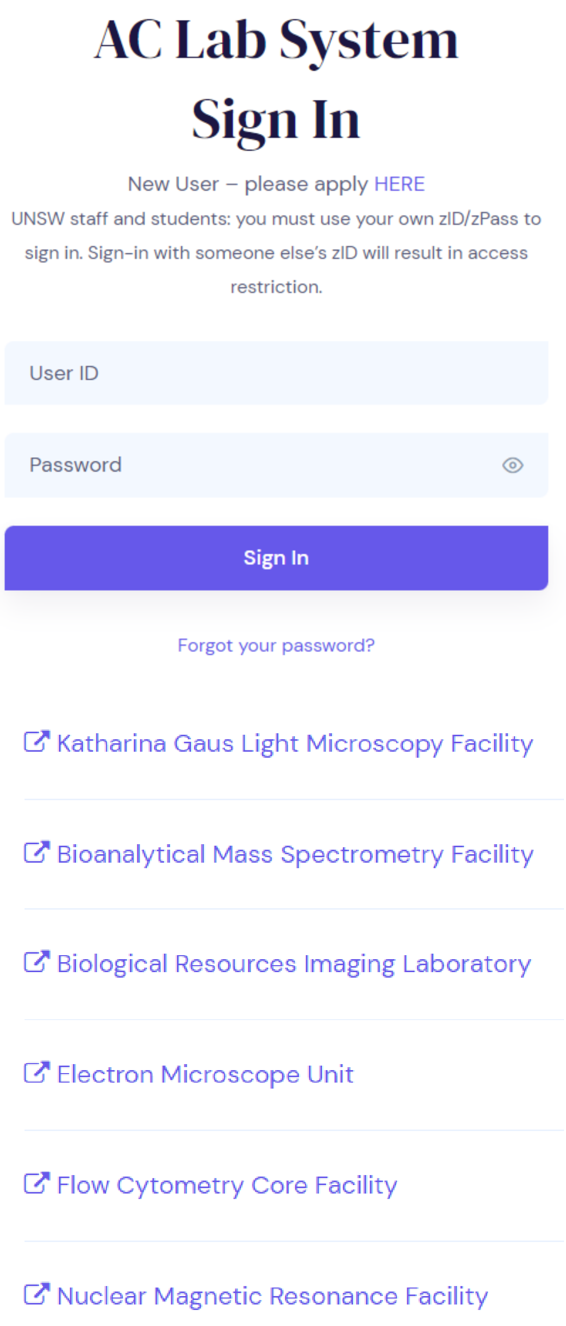
Note on AAF:

The Australian Access Federation offers a unified authentication mechanism for researchers and staff across Australian universities and government bodies. AAF allows users to sign into ACLS using their UniKey and UniPass, provided they are registered in ACLS.

Institutes offering services to multiple universities benefit greatly from AAF support.

20.2 SSO Working Example

The diagram illustrates the unified SSO login flow through ACLS SSI, authenticating users via one of the supported identity providers and providing access to multiple ACLS nodes seamlessly.



20.3 How to Enable SSO for an ACLS Node

To configure an ACLS node for SSO via SSI:

- Log in as an ACLS admin
- Navigate to: **System Settings → Configure System**
- Set the Access Portal URL
- Tick the box for Enable Single Sign In

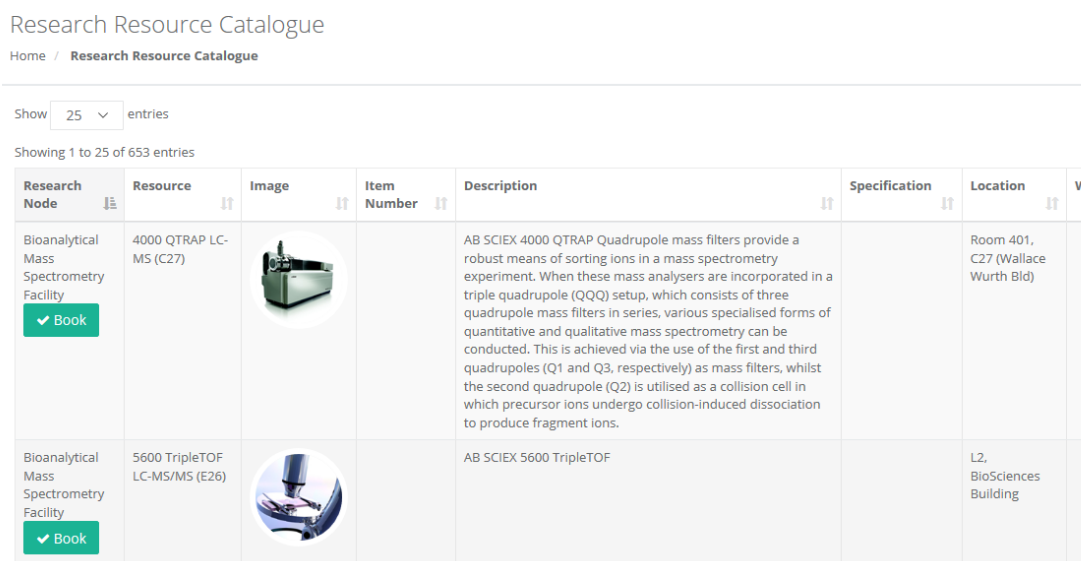
Once enabled, the native ACLS login page is disabled. All users must authenticate through the SSO portal.

20.4 Uni-Wide Catalogue of Research Resources

After enabling enterprise SSO:

- Researchers and students can browse and access a centralised catalogue of research resources
- The catalogue spans all ACLS nodes deployed across the institution

This simplifies discovery and access across faculties, centres, and core labs.


Research Resource Catalogue

Home / Research Resource Catalogue

Show 25 entries

Showing 1 to 25 of 653 entries

Research Node	Resource	Image	Item Number	Description	Specification	Location	V
Bioanalytical Mass Spectrometry Facility ✔ Book	4000 QTRAP LC-MS (C27)			AB SCIEX 4000 QTRAP Quadrupole mass filters provide a robust means of sorting ions in a mass spectrometry experiment. When these mass analysers are incorporated in a triple quadrupole (QQQ) setup, which consists of three quadrupole mass filters in series, various specialised forms of quantitative and qualitative mass spectrometry can be conducted. This is achieved via the use of the first and third quadrupoles (Q1 and Q3, respectively) as mass filters, whilst the second quadrupole (Q2) is utilised as a collision cell in which precursor ions undergo collision-induced dissociation to produce fragment ions.		Room 401, C27 (Wallace Wurth Bld)	
Bioanalytical Mass Spectrometry Facility ✔ Book	5600 TripleTOF LC-MS/MS (E26)			AB SCIEX 5600 TripleTOF		L2, BioSciences Building	

20.5 Uni-wide Organisation Charts

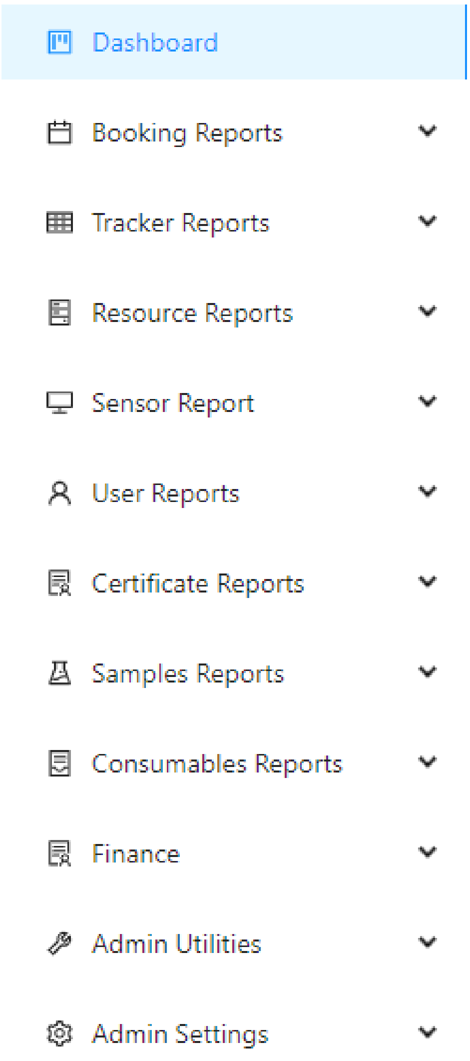
The enterprise deployment includes:

- Snapshot organizational charts of all ACLS nodes connected via SSO
- Helps visualize and manage lab networks across the institution

20.6 Node BI (Business Intelligence)

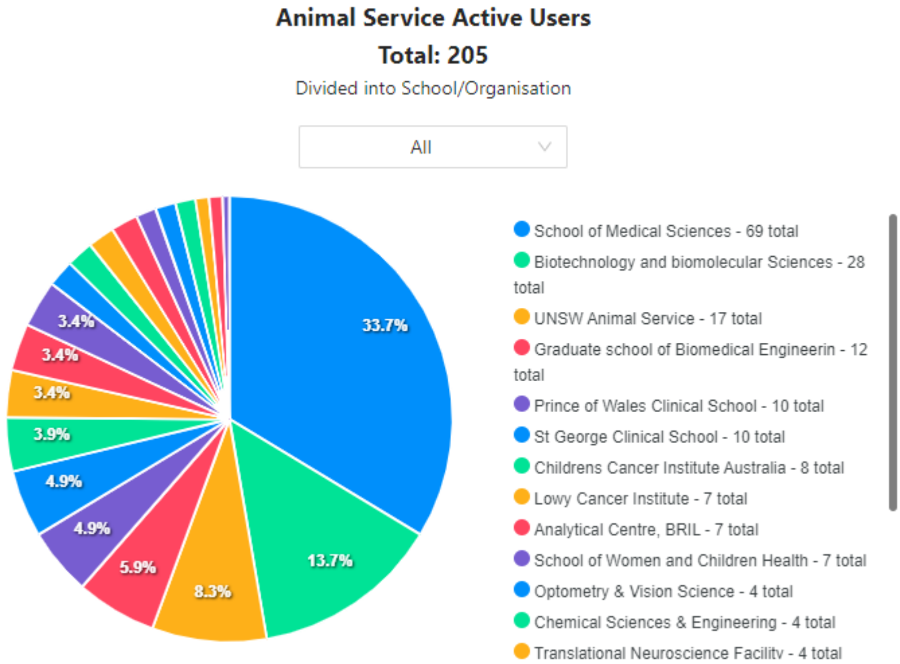
ACLS Enterprise Deployment includes a **centralized BI dashboard**, offering:

- Unified reporting across all nodes
- Consolidated invoicing data
- Finance system integration options



Features of ACLS BI:

- Custom dashboards per institution or node
- Real-time data on usage, bookings, charges, and operational KPIs
- Export-ready reports for administrators and finance teams


Animal Service Active Users
Total: 205
Divided into School/Organisation
All
33.7%
13.7%
8.3%
5.9%
4.9%
4.9%
3.9%
3.4%
3.4%
3.4%
School of Medical Sciences - 69 total
Biotechnology and biomolecular Sciences - 28 total
UNSW Animal Service - 17 total
Graduate school of Biomedical Engineerin - 12 total
Prince of Wales Clinical School - 10 total
St George Clinical School - 10 total
Childrens Cancer Institute Australia - 8 total
Lowy Cancer Institute - 7 total
Analytical Centre, BRIL - 7 total
School of Women and Children Health - 7 total
Optometry & Vision Science - 4 total
Chemical Sciences & Engineering - 4 total
Translational Neuroscience Facility - 4 total

21 Appendix N – WHS Document Declaration Manager

21.1 Overview

The **ACLS WHS Document Declaration Manager** provides a streamlined interface for managing workplace health and safety (WHS) documentation, including document creation, multi-level approval, user declaration tracking, and revision control.

This module enables research facilities to move from paper-based WHS processes to a fully digital and auditable workflow.

21.2 Key Features and Benefits

Electronic WHS Document Library:

Centralized storage of WHS documents accessible to staff and researchers.

Document Revision Tracking:

System logs version changes and tracks all document updates.

Multi-Level Approval Workflow:

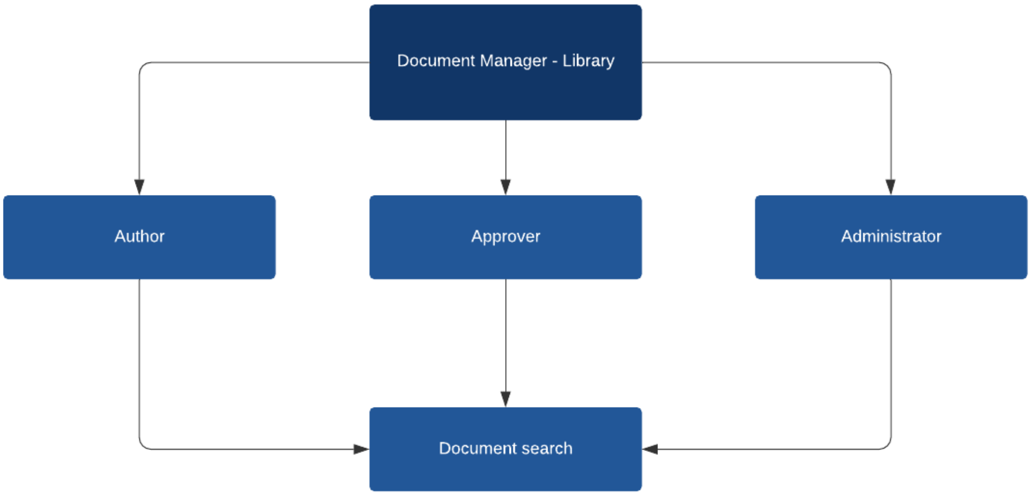
Supports two-level approval process for WHS documents:

- Author
- Level 1 Approver
- Level 2 Approver
- Administrator

Researcher Declarations:

System automatically records when users acknowledge or accept WHS documents.

21.3 Process Workflow



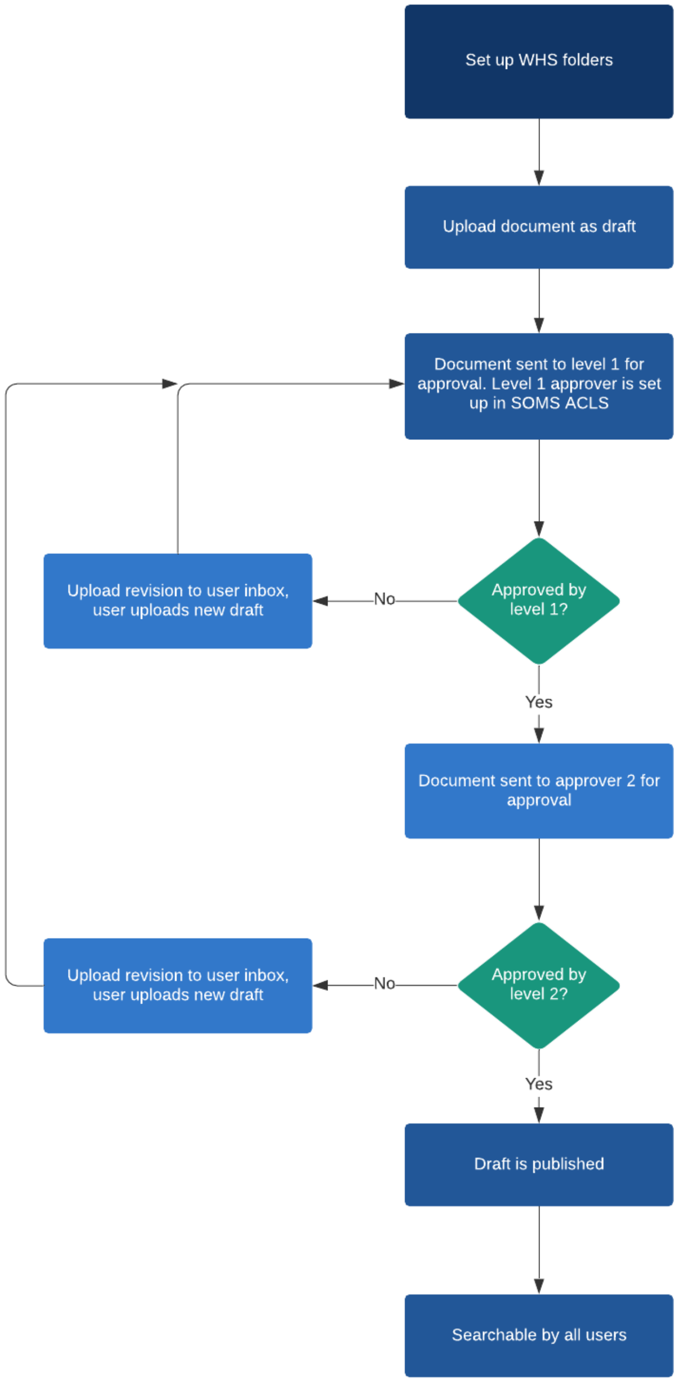
Author = Able to search library, create drafts, review existing documents and edit.

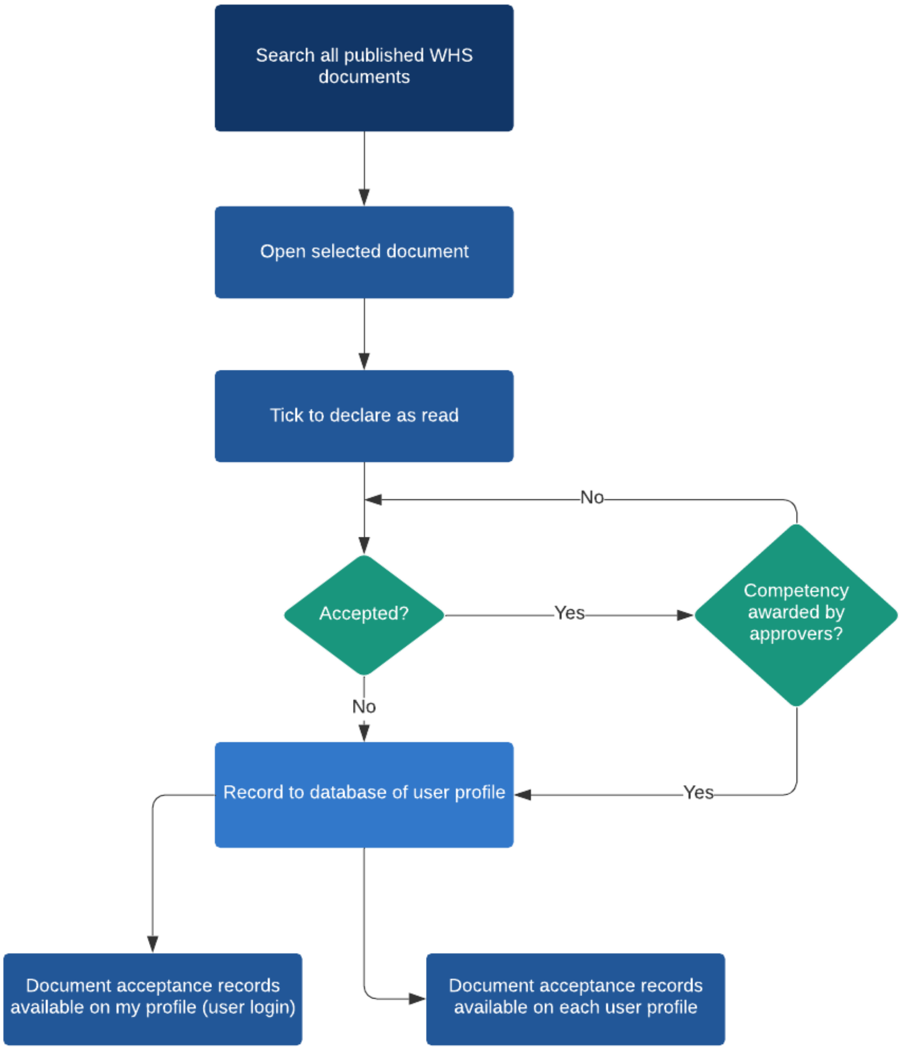
Approver = access of an author + be able to approve documents for publishing in the library.

Administrator = access of an author + approver + be able to create authors and send documents to authors for review.

Roles Involved:

- Author: Uploads and submits draft documents
- Level 1 Approver: Reviews and provides first-level approval
- Level 2 Approver: Final approval authority
- Administrator: Manages access, folder structure, and audit trails

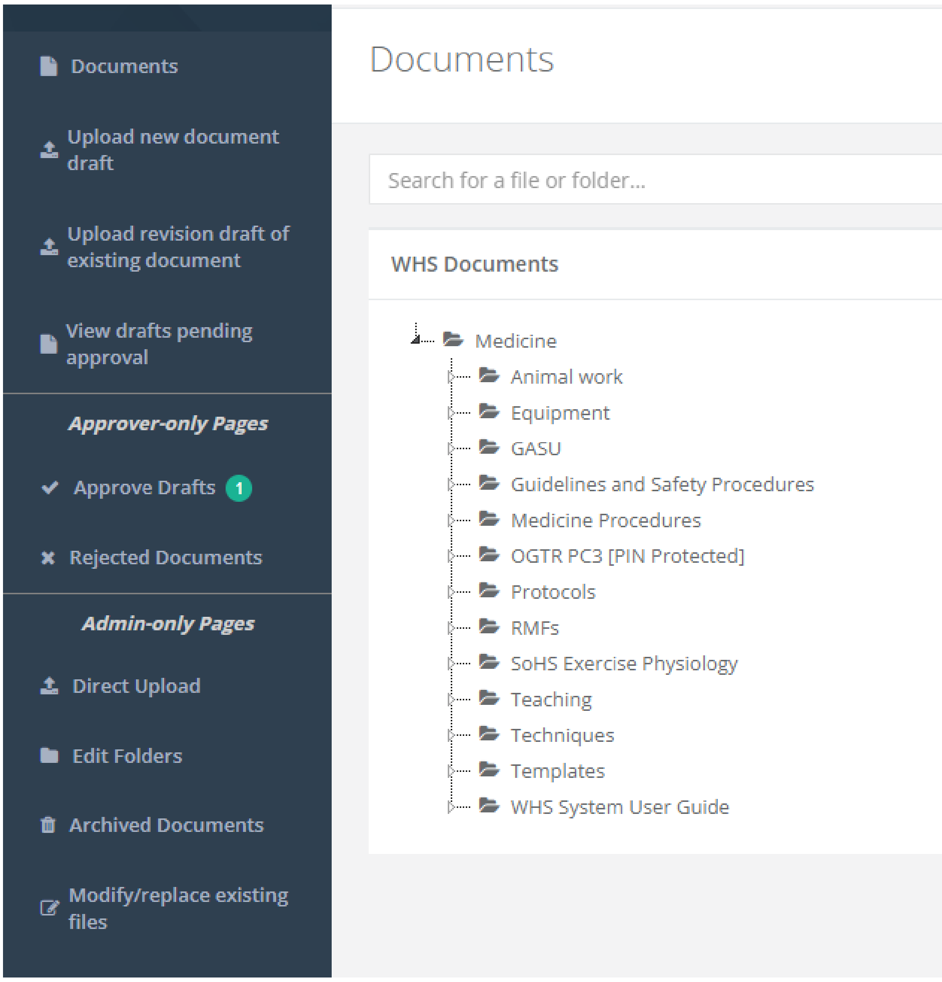

Set up WHS folders
Upload document as draft
Document sent to level 1 for approval. Level 1 approver is set up in SOMS ACLS
Approved by level 1?
No
Upload revision to user inbox, user uploads new draft
Yes
Document sent to approver 2 for approval
Approved by level 2?
No
Upload revision to user inbox, user uploads new draft
Yes
Draft is published
Searchable by all users



21.4 User Interface Snapshots

Includes functionality for:

- Viewing and uploading documents
- Approving or rejecting drafts
- Editing document folders
- Viewing rejected document logs



21.5 Documentation and Support

A comprehensive User Guide and Admin Guide for WHS Document Service is available upon request.

Contact the ACLS team for training or customized workflows based on institutional requirements.

22 Appendix O – ACLS Modification for WSU-APPN

22.1 WSU-APPN: Modification Overview

WSU-APPN requested the following modifications to the ACLS system:

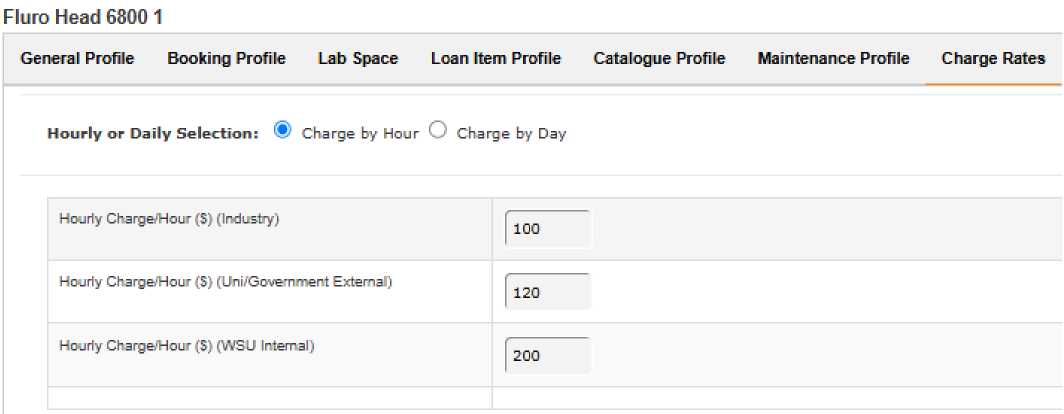
- Support for daily based charging instead of hourly rates.
- Ability to differentiate between weekday rates (Monday–Friday) and weekend rates (Saturday–Sunday).
- Hourly rates are not applicable as all instruments are booked by the day.

22.2 WSU-APPN: Set up category charge by hour or by day

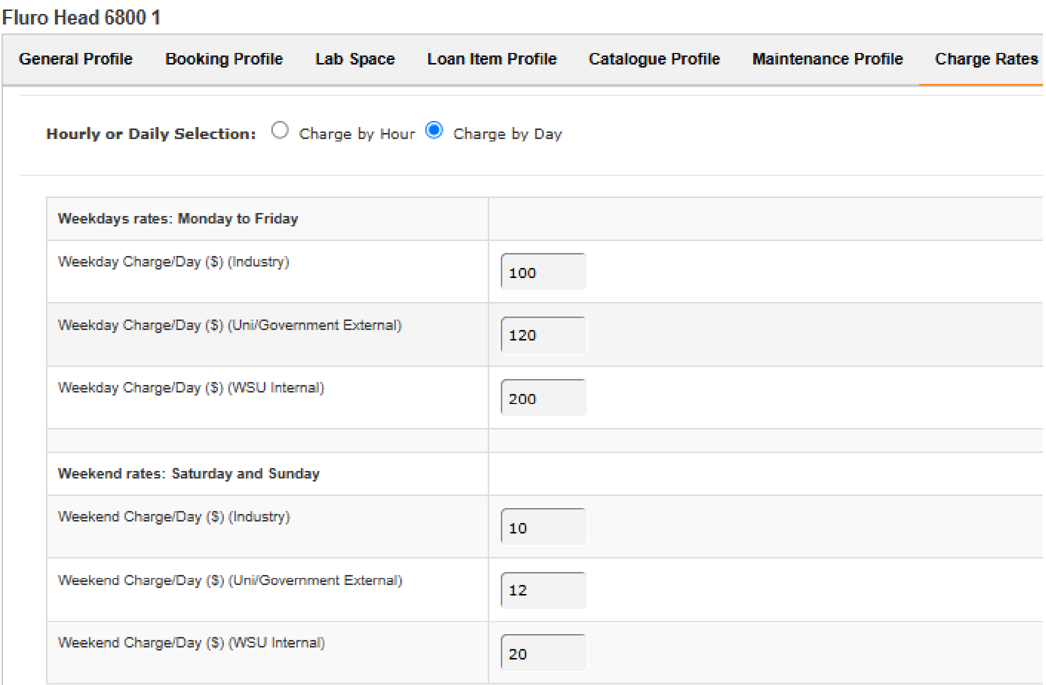
To configure charge rates:

- Go to Resource Manager.
- Access the Booking Resource Editor.
- By default, all resources are set to charge by hour.
- To enable daily charging:
  - Tick the **"Charge by Day"** radio button.
  - Enter the **weekday rate** (Mon–Fri).
  - Enter the **weekend rate** (Sat–Sun).

This setup allows the system to calculate usage fees based on the day of booking.



By ticking the radio for charge by day, admin can set up charge rate for week days and weekend.



Fluro Head 6800 1

General Profile | Booking Profile | Lab Space | Loan Item Profile | Catalogue Profile | Maintenance Profile | Charge Rates

Hourly or Daily Selection: ○ Charge by Hour ◉ Charge by Day

Weekdays rates: Monday to Friday	
Weekday Charge/Day ($) (Industry)	100
Weekday Charge/Day ($) (Uni/Government External)	120
Weekday Charge/Day ($) (WSU Internal)	200
Weekend rates: Saturday and Sunday	
Weekend Charge/Day ($) (Industry)	10
Weekend Charge/Day ($) (Uni/Government External)	12
Weekend Charge/Day ($) (WSU Internal)	20

22.3 WSU-APPN: Cost Report

To generate daily-rate-based usage reports:

- Go to Report Manager.
- Select Resource Batch Report.

The report includes the following columns:

- Resource
- Resource Group
- User
- Email
- School
- School/Org
- Account
- Charge Category
- Resource Charge/Hour
- Booked Hours
- Resource Charge/Weekday
- Booked Weekdays
- Resource Charge/Weekend
- Booked Weekends
- Total Charges

This report supports reconciliation and financial tracking for both weekday and weekend daily-rate usage.

23 Appendix P – ACLS Modification for UOW-AIIM

23.1 UOW-AIIM-Stage-I: Modification Overview

- Item 1:

Searchable fields for accounts in user profiles. We have a number of staff who have multiple accounts assigned to them, because they do service support and book their time against those accounts. At the moment, drop down menu is a problem when trying to find an account in a list of 20+. Something similar to what happens when assigning certificates would work.

- Item 2:

An option to apply "desktop wallpaper" for the computers with ACLS client installed on them. This would help us with showcasing branding and advertisement of our units. Single colour login screens don't look very good really; the wallpaper has an option for institute wide or per resource.

- Item 3:

As discussed, introduce and option to roll out posters either across entire suite of ACLS clients OR have an option to upload individual posters on individual machines. This could be done as part of setting up ACLS tracker.

- Item 4:

For batch reporting – we would like to have booking notes reported in the batch report.

- Item 5:

For cross referencing and better in-depth analysis, we would also like to have User type (e.g. PhD student, Research Associate, etc) to be part of batch reporting.

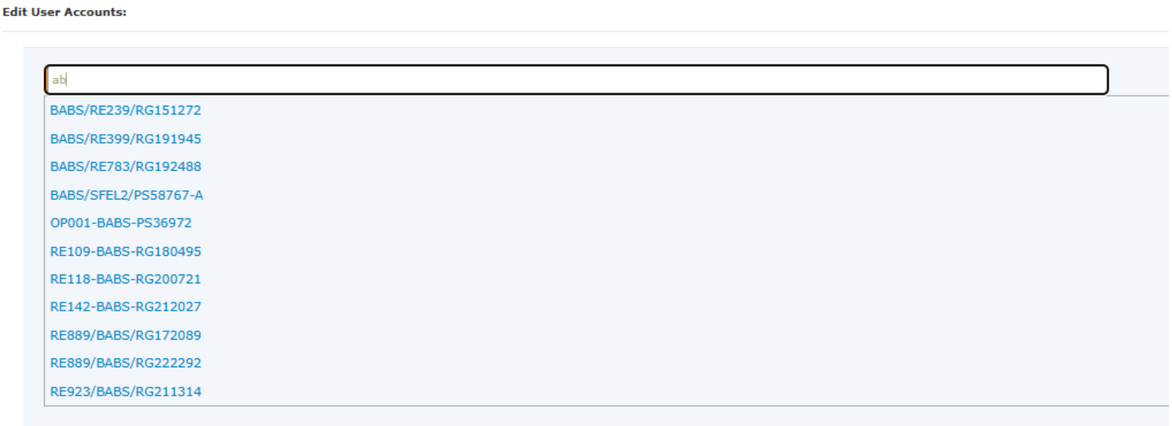
- Item 6:

We would also like for account details (e.g. description of account) to be part of batch and other reporting.

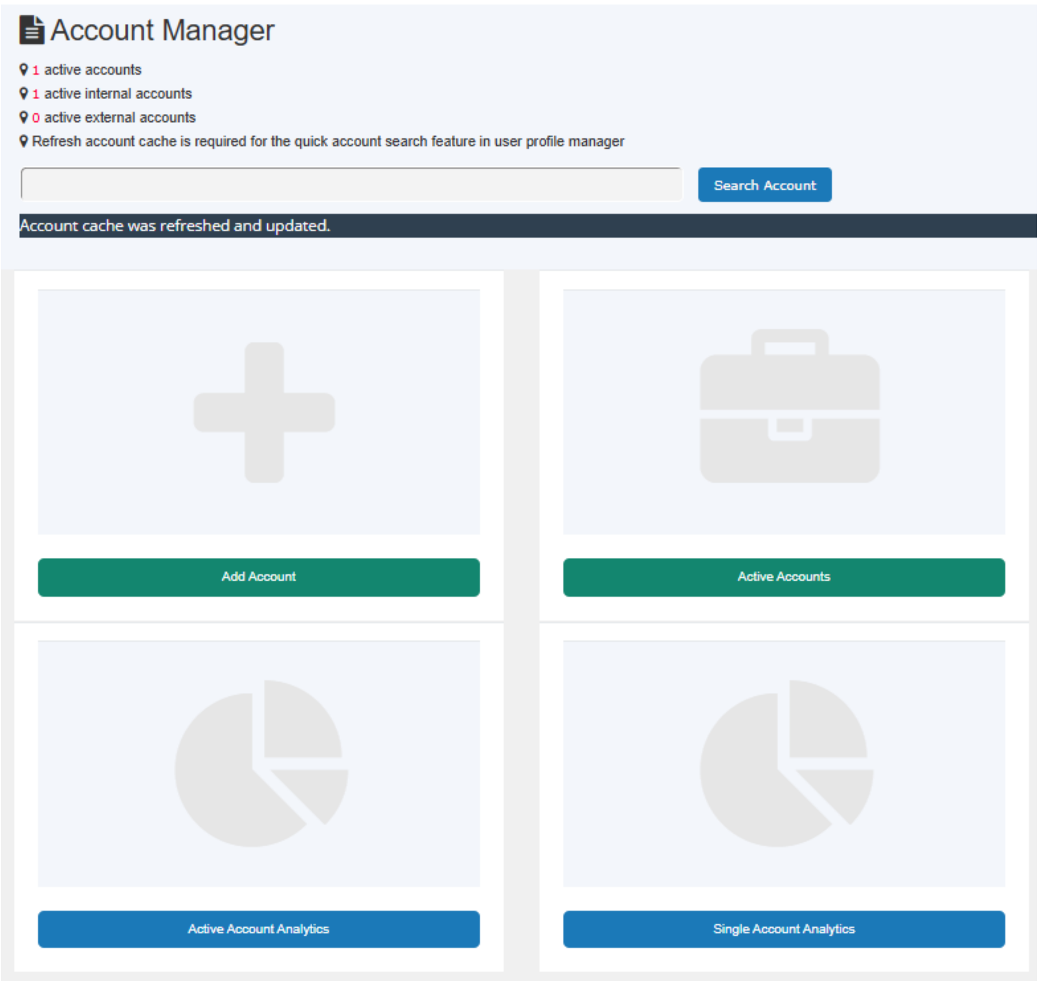
23.2 UOW-AIIM: Searchable account feature

Account tab in user profile editor is modified and added a new feature to search and add account to user profile.

Example of screen print as shown here.

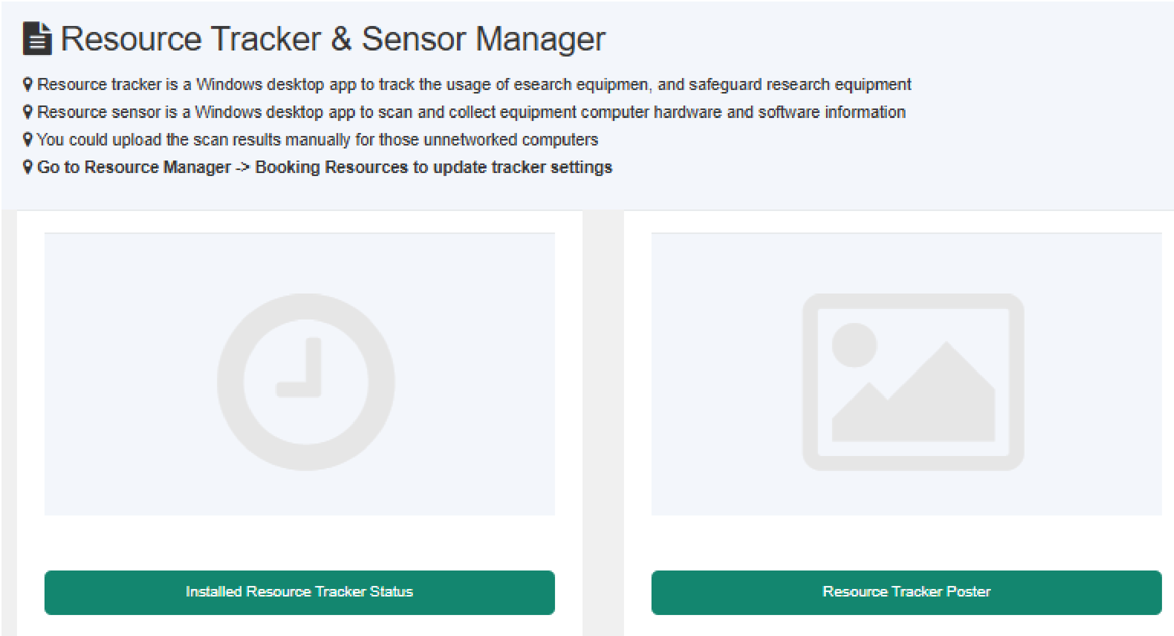


Account cache is required to make the new search feature working. Go to Account Manager and account cache is updated automatically.

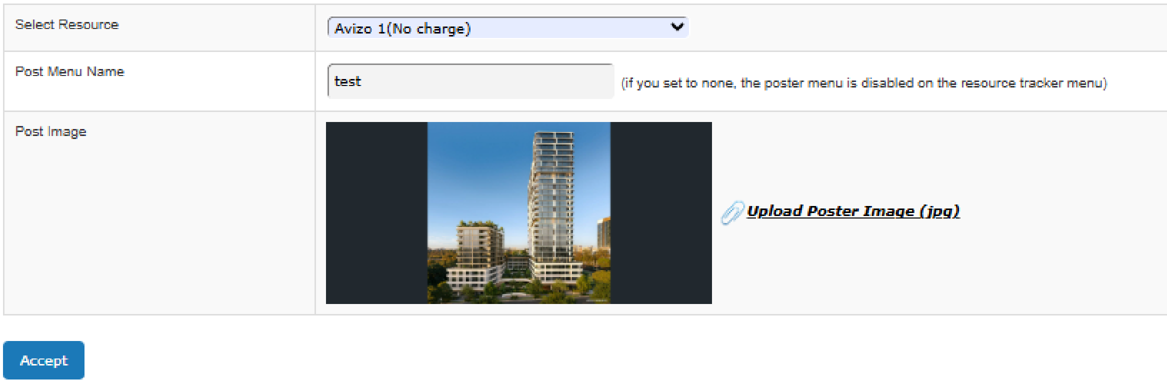


23.3 UOW-AIIM: Tracker poster image

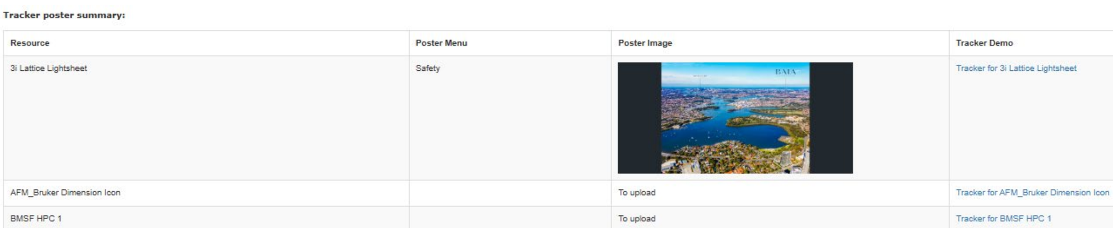
Admin can set up resource-based tracker poster in Resource Tracker and Sensor manager.



Select resource and upload poster image in jpg:



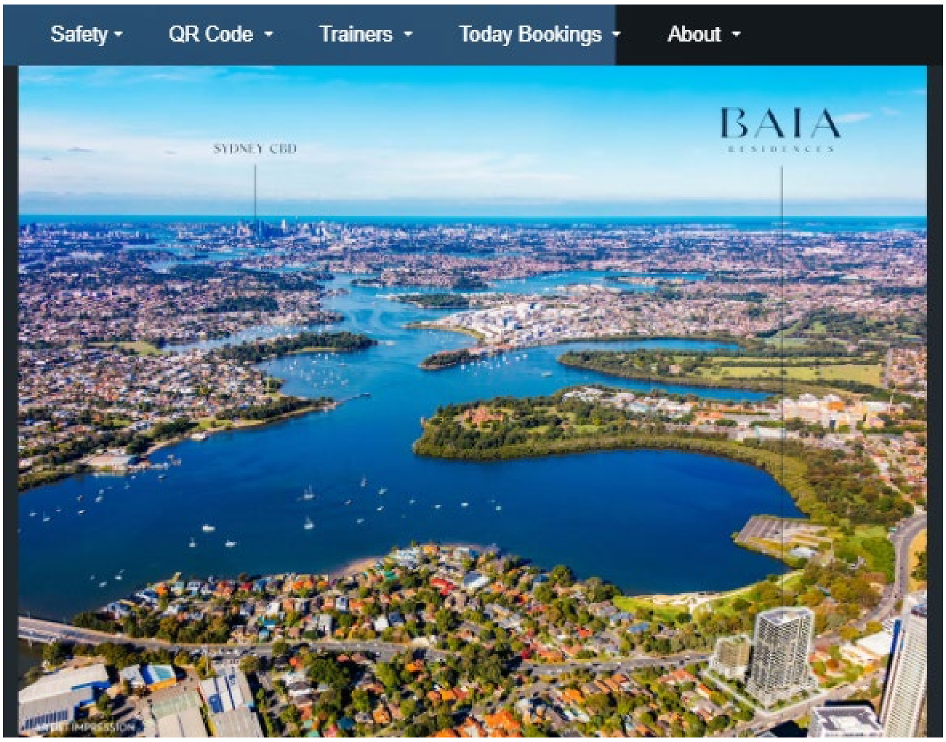
Resource tracker posters are summed up on the same page for ref.



Tracker poster summary:

Resource	Poster Menu	Poster Image	Tracker Demo
3i Lattice Lightsheet	Safety		Tracker for 3i Lattice Lightsheet
AFM_Bruker Dimension Icon		To upload	Tracker for AFM_Bruker Dimension Icon
BMSF HPC 1		To upload	Tracker for BMSF HPC 1

Click on tracker demo link to check the poster effect.



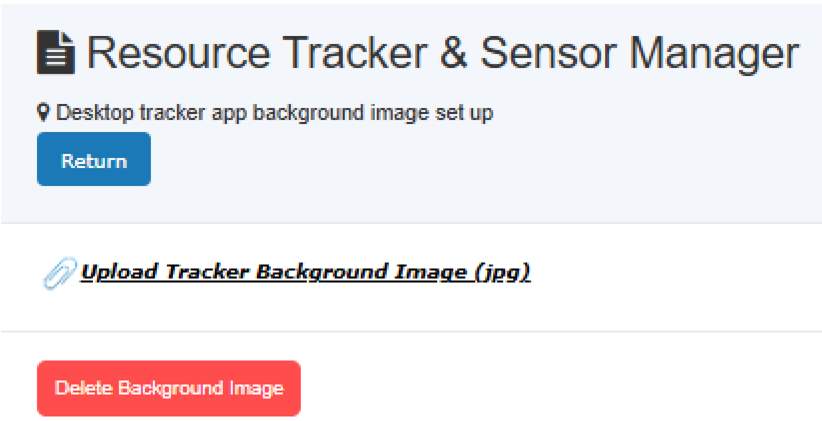
23.4 UOW-AIIM: Tracker background image

Subject to the following global settings, admin can enable institute wide tracker background image or enable the background image per resource tracker.

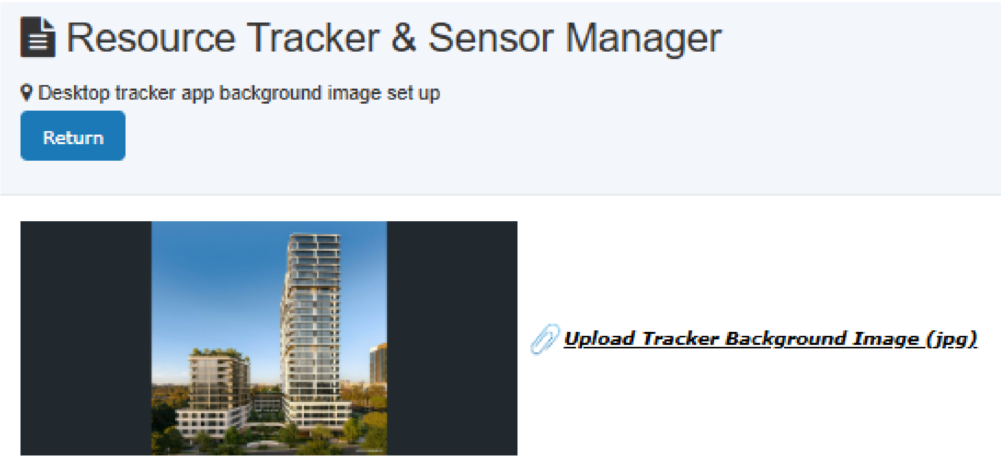
- EnableResourceTrackerBackgroundImage: enable institute wide tracker background image.
- EnableResourcePerTrackerBackgroundImage: enable per tracker background image.

Institute wide tracker background image feature:

Admin can set up institute wide tracker background image in Resource Tracker and Sensor manager.

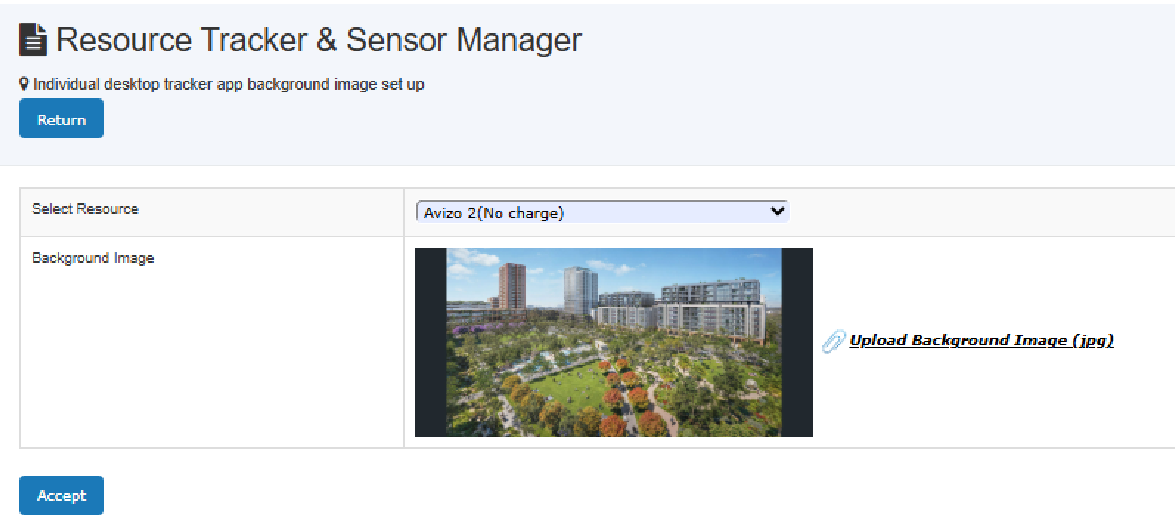


Upload the background image in jpg. You could check the background image effect with tracker demo link.

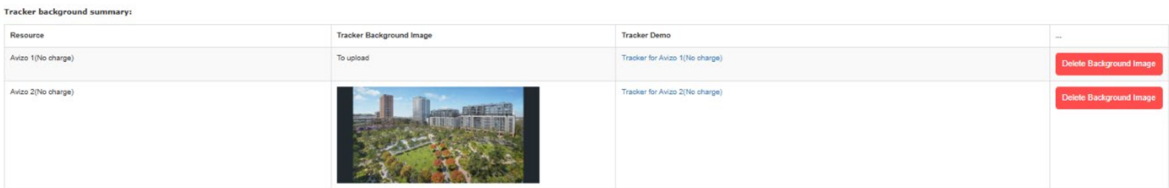


Per tracker background image feature:

Admin can set up per tracker background image in Resource Tracker and Sensor manager.



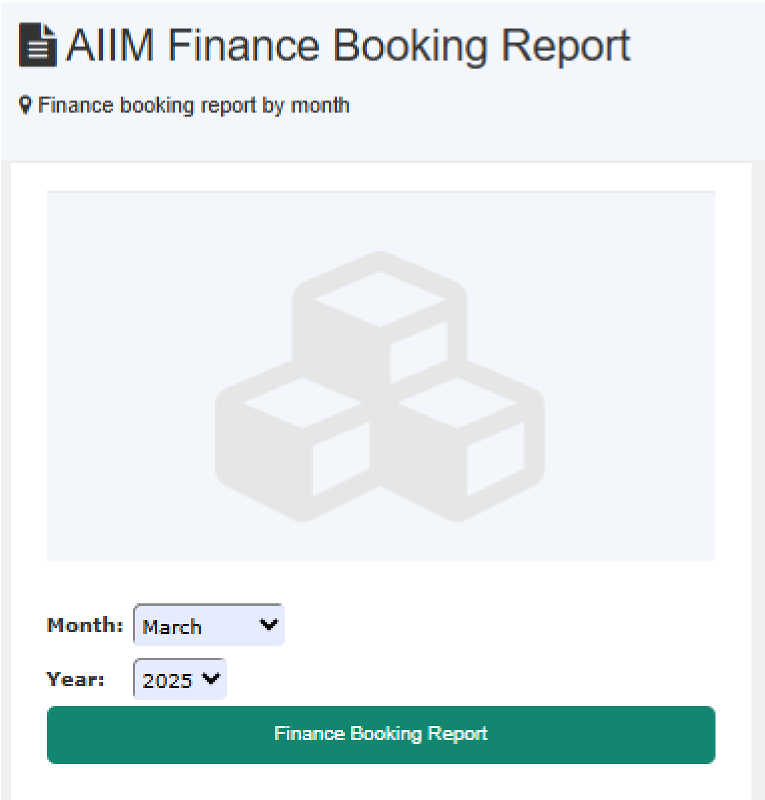
Tracker background images are summed up on the same page for ref.

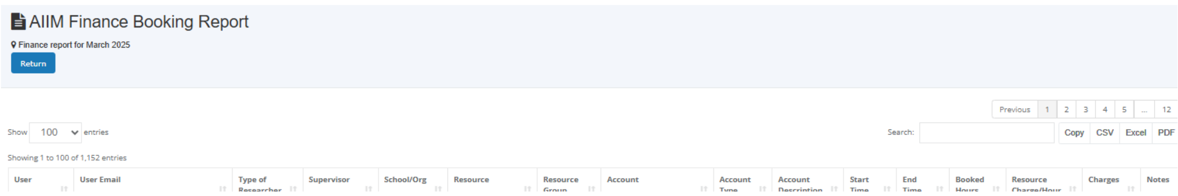


Admin can delete background image anytime.

23.5 UOW-AIIM: AIIM finance booking report

AIIM finance booking report is added to meet the report change requirements after discussion with AIIM.





The compiled finance booking report headers are:

- User
- User email
- Type of researcher
- Supervisor
- School/org
- Resource
- Resource group
- Account
- Account type
- Account description
- Start time
- End time
- Booking type
- Booked hours
- Resource charge/hour
- Charges
- Booked by
- Booking notes

23.6 UOW-AIIM-Stage-II: Modification Overview

- Item 1:

We want to add user account selection to the operation calendar instead of the current steps to select user account first and then enter the calendar. The account can be reselected when modifying booking by the user.

- Item 2:

We want to add staff and staff account selection to the commercial booking calendar like the user calendar feature.

- Item 3:

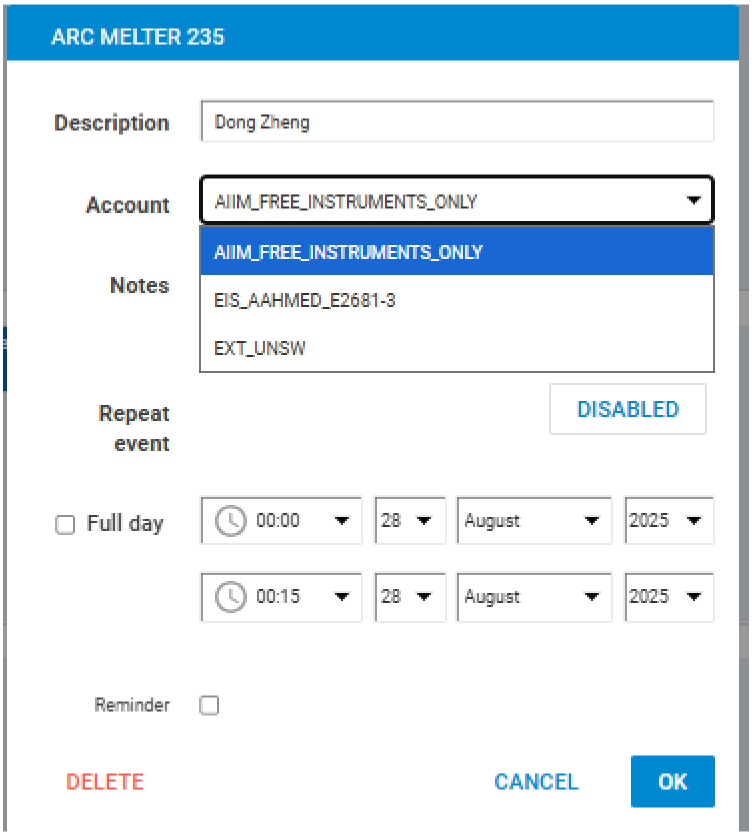
We want to add user and staff selection to the service booking calendar so we could record who performs the service.

- Item 4:

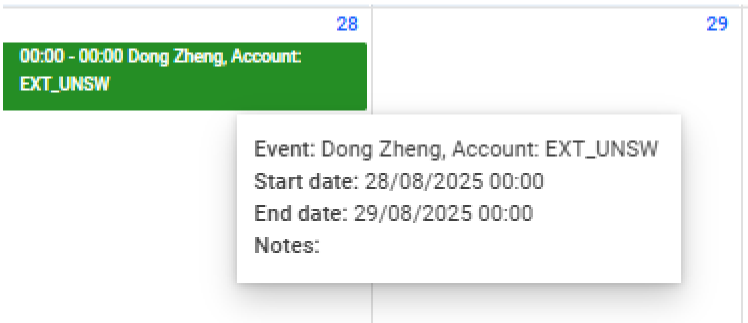
We want the AIIM finance report feature works like the current batch report to run the report at one time, then retrieve the early run report anytime without the need of running each time.

23.7 UOW-AIIM: Operation Calendar - Select User Account On-the-Fly

The operation calendar has been updated to allow users to **select an account directly within the calendar page**, instead of requiring pre-selection before accessing the page.



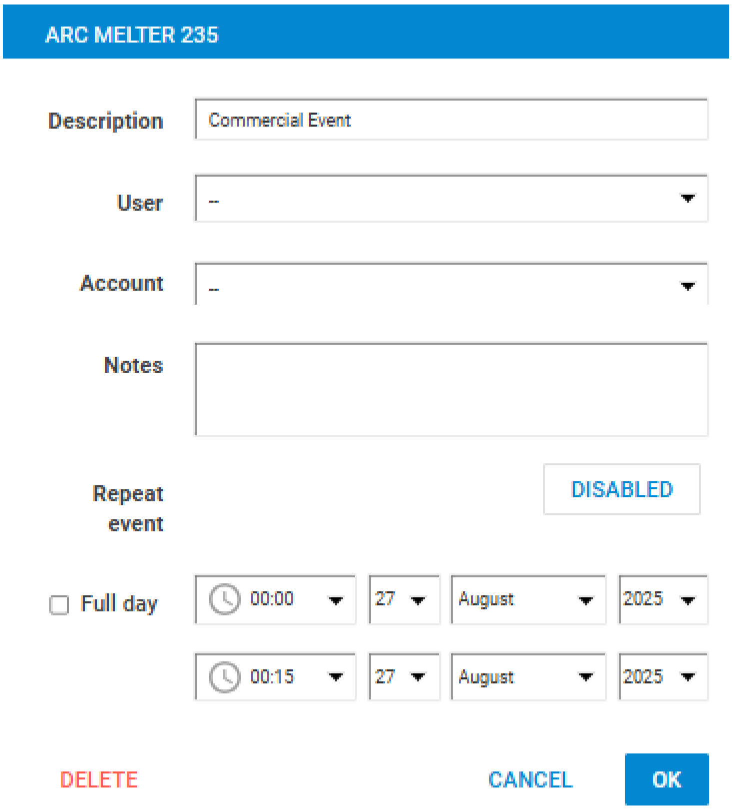
When saving a booking, the **chosen account is now displayed on the calendar page**, providing immediate confirmation of the account used.



23.8 UOW-AIIM: Commercial Calendar – Select User and Account On-the-Fly

The commercial calendar has been updated to allow **selection of both user/staff and account directly on the calendar page**, replacing the previous generic "commercial user" selection.

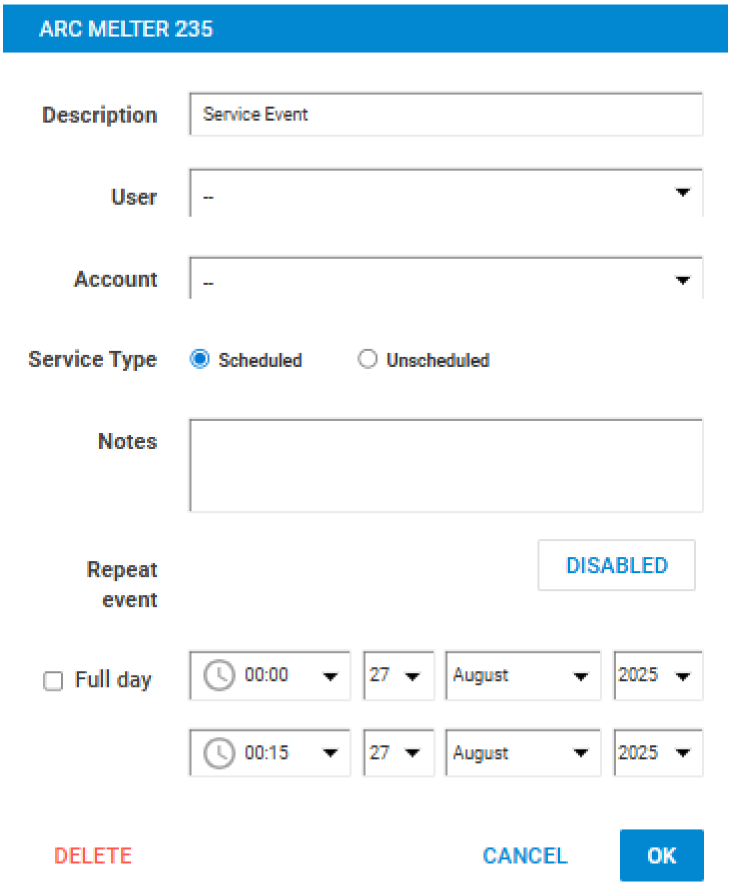
This change ensures bookings are saved against the correct user and account, improving accuracy and transparency in commercial scheduling.



23.9 UOW-AIIM: Service Calendar - Select User and Account On-the-Fly

The service calendar has been updated to allow **selection of both user/staff and account directly on the calendar page**, replacing the previous generic "commercial user" selection.

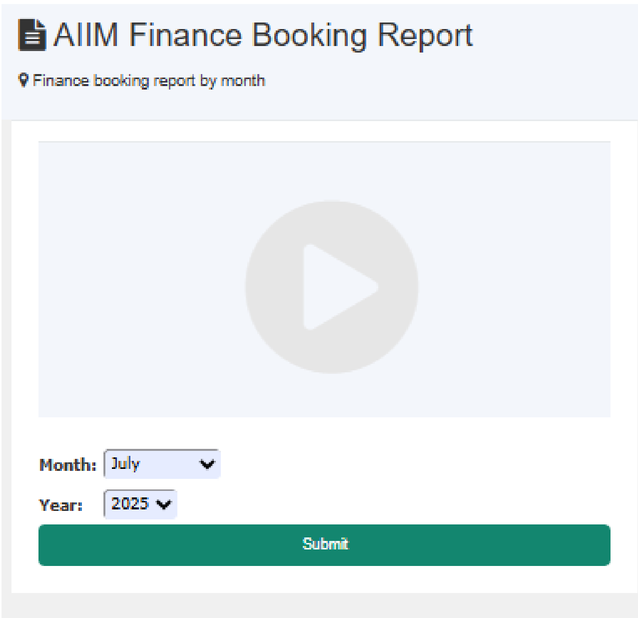
This improvement ensures service bookings are recorded against the correct user and account, increasing accuracy and accountability.



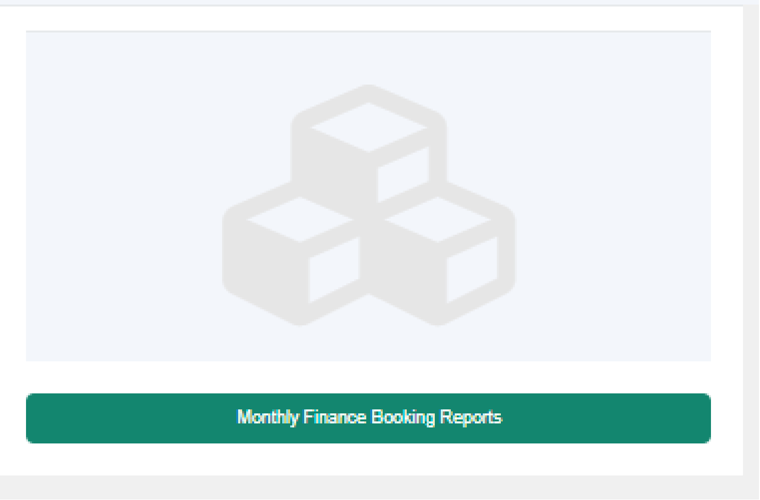
23.10 UOW-AIIM: AIIM Finance Booking Report – Batch Report Functionality

The AIIM finance booking report has been enhanced to operate like the **batch report feature**.

- **Run Report:** Users can generate reports on demand.



- **Access Reports:** Generated reports are stored and can be accessed at any time.



This update streamlines financial reporting by providing easier report generation and retrieval.

24 Appendix Q – ACLS (PLUS) STATS Consulting Service Time Tracking

This appendix supplements the ACLS Complete Guide 2027 and provides detailed guidance on the STATS consulting service module, including its configuration and integration with the ACLS-PLUS calendar module.

The objective of the ACLS (PLUS) STATS enhancement is to deliver a structured solution for consulting service tracking, covering:

- Time tracking
- Category of work
- Client type
- Consulting type
- Research type
- Partner association

24.1 System Access

- ACLS (Admin Portal): Accessible to administrators only via SSO authentication
- ACLS-PLUS Calendar: Accessible to consultant staff via SSO authentication

24.2 Staff Utility Configuration

Administrators can configure STATS-specific settings via the ACLS Staff Utility module. For standard ACLS features, refer to the ACLS Complete Guide or ACLS chatbot.

24.2.1 Appoint Staff as Consultants

To enable consulting functionality:

- Navigate to: **User Profile Manager → Access**
- Enable: **"Consulting Service" checkbox**

This assigns the selected staff member as a **consultant**, granting access to the consultant calendar.

24.2.2 Category of Work

- Navigate to: **Utility → Category of Work Manager**
- Create, edit, or archive categories

Category of Work: Admin
Category of Work: Consulting
Category of Work: Contract Teaching
Category of Work: Outreach
Category of Work: Paid Contract
Category of Work: Professional Development
Category of Work: Research Time
Category of Work: Teaching

24.2.3 Client Type

- Navigate to: **Utility ➔ Client Type Manager**
- Create, edit, or archive client types

Client Type: Conjoint
Client Type: HDR
Client Type: Honours
Client Type: N/A
Client Type: Staff

24.2.4 Consulting Type

- Navigate to: **Utility ➔ Consulting Type Manager**
- Create, edit, or archive consulting types

Consulting Type: Bioinfo
Consulting Type: N/A
Consulting Type: Stats

24.2.5 Research Type

- Navigate to: **Utility ➔ Research Manager**
- Create, edit, or archive research classifications

Consulting Type: Follow-Up
Consulting Type: N/A
Consulting Type: New Consult

24.2.6 Partner

- Navigate to: **Utility → Partner Manager**
- Create, edit, or archive partner entities

Consulting Type: Follow-Up
Consulting Type: N/A
Consulting Type: New Consult

24.3 Consultant calendar

The ACLS-PLUS Consultant Calendar is the core interface for recording and managing consulting activities.

24.3.1 Record Consulting Work

Principle:

Consultants can only create, edit, or cancel entries within their own calendar.

The interface behaves similarly to Microsoft Outlook calendar.

To create a booking:

- Double-click on the calendar to open the booking window (multi-tab interface)

Booking Tab:

- Select time
- Enter project code (optional)
- Add notes

Additional Tab:

- Select Category of Work
- Select Partner (default: N/A)
- Select Client Type
- Select Consulting Type
- Select Research Type

Display:

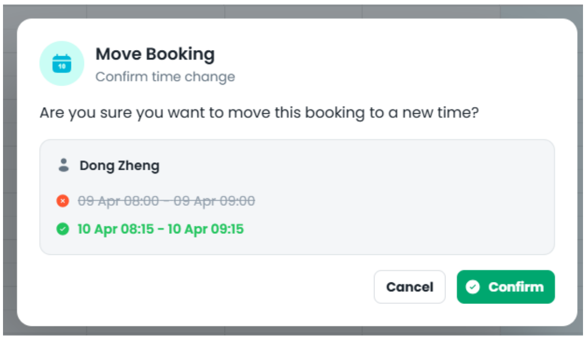
Saved entries display Consultant Name and Category of Work on the calendar.

24.3.2 Drag-and-Drop Scheduling

Consultants can adjust booking times using drag-and-drop.

- **STATS-specific enhancement:**

  Confirmation prompt has been removed to streamline workflow and improve usability.

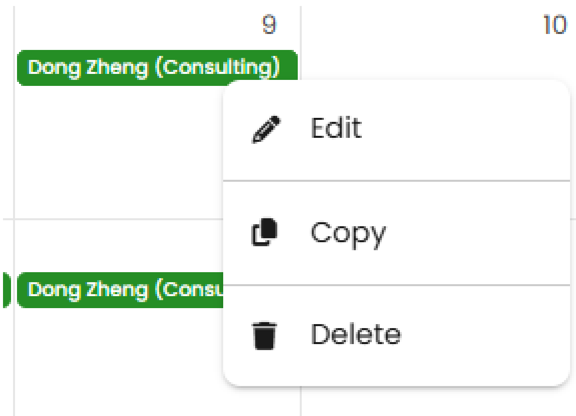


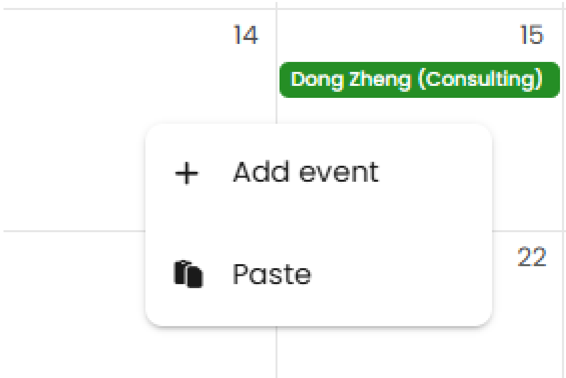
24.3.3 Copy and Paste Bookings

A productivity feature allowing consultants to:

- Copy an existing booking
- Paste it into another time slot

This avoids re-entering repetitive information.





24.3.4 *Calendar Personalisation*

Consultants can customise their calendar view via the Settings option:

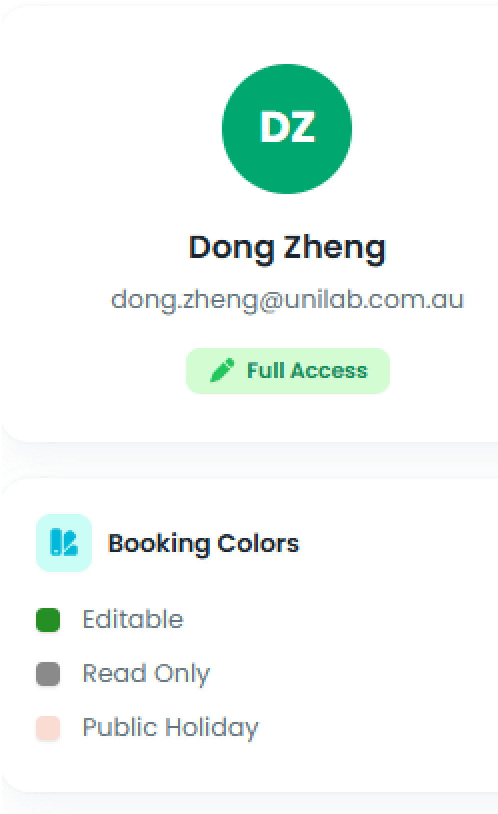
- **View mode:**
  - Month view
  - Week view
- **Display theme:**
  - Light mode (default)
  - Dark mode

24.3.5 *Calendar Information Panel*

The system provides a visual summary including:

- Consultant name
- Color-coded booking categories

This improves quick interpretation of workload distribution.



24.3.6 Consulting Service Reports

Each consultant calendar includes reporting capabilities:

- Filter by relevant parameters (e.g., time, category, client type)
- Generate detailed consulting activity reports
- Export reports in CSV format for further analysis

24.3.7 Summary

The ACLS (PLUS) STATS module extends ACLS into a structured consulting service management platform, enabling:

- Standardised data capture
- Efficient time tracking
- Flexible categorisation
- Exportable reporting for operational and strategic insights