

Facility Online Manager (FOM)

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What you can do with FOM?

Resource Calendar

- Unlimited number of calendars
- Responsive UI

Safety Certificate Tracking

- Integrate with 3rd party system
- Define requirements for each tool

Consumable Sales

- Link to resource use
- Separate point of sales

Access Control

- Hardware relay
- Software screen lock

Social Distancing

- Max users in a room
- Buddy requirements

Lending Library

- Who borrowed what and when
- Charge hourly, daily, or monthly

Door Entry Control

- Hardware relay
- Software screen lock

Collaboration Tracking

- Share files and data
- Charge per sample, instrument, or staff time

Billing & Reporting

- Manual download or auto submit
- Customizable templates

Multiple types of services

★ Time-based

- Self-serve time-exclusive instrument use
- Staff-assisted services

★ Project-based

- Tracking of project progress at each step

★ Sample-based

- Charge per sample instead of time

★ Cleanroom or dedicated lab space

- Entrance control with ID card reader and charge for time in a room

★ Stockroom, electronic store, or lending library

- Inventory management and POS support with barcode/RFID/QR scanner

Tools with calendars: Time-exclusive instrument use

★ Easy to schedule

- for training, service, maintenance, down time
- day-time access vs any-time access
- internal rates vs external rates

★ Easy to apply reservation rules

- max time per session, max time per day, max time per X days
- with or without night/weekend limitations
- no sooner than, no later than, late cancellations, forgot logoffs...

★ Charge rates

- charge per use, charge per actual used time, charge per combined reserved-actual time
- charge per sample, charge per day
- service rates, training rates, minimum/base charges

★ Email notifications and options to switch on/off

★ Handle what-if's

★ Cleanrooms

- Entry/exit tracking
- Buddy system
- Charge per hour or per entry

★ Shared lab spaces

- Max number of users (Social Distancing!)
- Scan QR code to enter

★ Chem and bio labs

- Tracking of chemical usage
- Chemical waste control
- Online MSDS

★ Consumables tracking

- Link with instrument logon/logoff
- Self-checkout or manager sales
- Re-stock reminders

★ Stockroom

- Barcode readers
- Dedicated sales console

★ Lending library

- Small tools tracking
- Automatic reminders
- Charge per day or per month

- ★ Fully customizable Service Request Form
 - Drop-downs, checkboxes, radio buttons, free text fields
 - Pre-populated field values with user information in FOM
 - Statistic reports on any field values
- ★ Keep track of services
 - Organize all submitted requests in one place
 - Add or remove collaborators at any time
 - Charge service fee with or without use of lab instrument
- ★ Shared literature papers and lab results within FOM
 - Share among collaborators only
 - Unlimited uploads and downloads
 - Automated email notifications

Four User Roles

★ System Admin

- Add new laboratories/facilities into the system

★ Facility Admin

- Set up instruments
- Assign instrument managers
- Billing and reporting

★ Instrument manager

- Manage instruments and users
- Train users and grant user access
- Do service experiment for users

★ Student user

- Book time after being granted access

What if

- ★ No-show?
- ★ Come late?
- ★ Come early?
- ★ Continue using after reserved time?
- ★ Forgot logoff?

- ★ Fair use of busy tools
- ★ Encourage users on rarely used tools
- ★ Auto logon/logoff
- ★ Maintenance every Friday afternoon?
- ★ Walk-up use only on Thursday mornings?
- ★ Hardware and software interlocks

Flexible hosting solutions

★ Dedicated on-cloud server managed by FOM Networks (\$1600/year)

or

★ Shared hosting at <https://InstrumentSchedule.com> (\$300/year)

or

★ Set up local server at customer site (No additional charge)

Options to Try FOM

- ★ <https://trial.fomnetworks.com/>, FacAdmin / fomtest
Test of Enterprise License functions. Cannot test email or access control functions. Free and available at any time.
- ★ Purchase a calendar-only license at <https://instrumentSchedule.com>
Test with your own lab and resource info, and all the data can be migrated to the production server after trial period. \$100 one-time fee.
- ★ Dedicated trial server
Test with your own lab and resource info, and all the data can be migrated to the production server after trial period. Non-refundable \$300/month, up to two months.


Cleanroom and Lab Space Management: Example 1

Welcome to the UNC Charlotte Optics Cleanroom

Current users in the lab	Last 10 users of the lab

Please swipe your ID card to enter or exit the room.

**For access to the Optics Cleanroom,
please contact: Scott Williams, scotwill@uncc.edu**



Cleanroom and Lab Space Management: Example 2

Ongoing chemical processes			Users currently in cleanroom		
User name	Date in	Process	User name	Date in	Time in
John Smith	2/18/2015	Nickel Etch Type II	John Smith	2/18/2015	9:05:20 AM
John Smith	2/18/2015	Methanol	Stephanie Campbell	2/18/2015	9:26:30 AM
Stephanie Campbell	2/18/2015	Osmium Tetroxide			

Cleanroom log station

Scan barcode

Recent changes	
Date	Changes
2/18/2015	The new Cleanroom log station has been launched!
10/1/2014	Hood #4 has been reconfigured.

Users who forgot to END chemical processes			Users who MUST see a staff member		
User name	Date in	Process	User name	Failed date	Cause
Juan Alvarado Orozco	1/16/2015	Acetone, Methanol, I	Alexandra Feodorovna	1/17/2015	Failed safety

Tip of the week: "Now that the weather is warming up, it is a good time to remind you that you must wear long pants and closed-toe shoes in all the labs in the CFN. No shorts or sandals are allowed."

Chem and Bio Lab management Example

SIGMA-ALDRICH SAFETY DATA SHEET
Version 4.7
Revision Date 01/02/2015
Print Date 02/19/2015

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers
Product name : Osmium tetroxide
Product Number : 201030
Brand : Sigma-Aldrich
Index-No. : 076-001-00-5
CAS-No. : 20816-12-0

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA
Telephone : +1 800-325-5832
Fax : +1 800-325-5052

1.4 Emergency telephone number
Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 1), H330
Acute toxicity, Dermal (Category 2), H310
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Respiratory sensitisation (Category 1), H334
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements
Pictogram :
Signal word : Danger
Hazard statement(s)
H300 + H310 + H330 : Fatal if swallowed, in contact with skin or if inhaled
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statement(s)
P260 : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262 : Do not get in eyes, on skin, or on clothing.
P264 : Wash skin thoroughly after handling.

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Cleanroom Chemical Process Log Station

Life number

[Help](#)

Selection chemical process

- Formaldehyde, 16%
- Formaldehyde, 37%
- Glutaraldehyde, 8%
- Glutaraldehyde, 25%
- Glutaraldehyde, 75%
- LR White Resin, Hard
- LR White Resin, Medium
- Osmium tetroxide (OsO4) 2% aqueous**
- Osmium tetroxide (OsO4) 4% aqueous
- Uranyl Acetate

Description/Precautions

Great care must be taken with osmium tetroxide. The crystals melt at 40°C and are extremely slow to dissolve in water. Both the crystals and diluted aqueous solutions give off fumes of osmium tetroxide, even at 0°C. It has an extremely low TLV (0.0002ppm). Osmium fixatives must therefore always be handled in a fume hood (cupboard), and because they act so rapidly, skin contact must be avoided at all times.

Comments

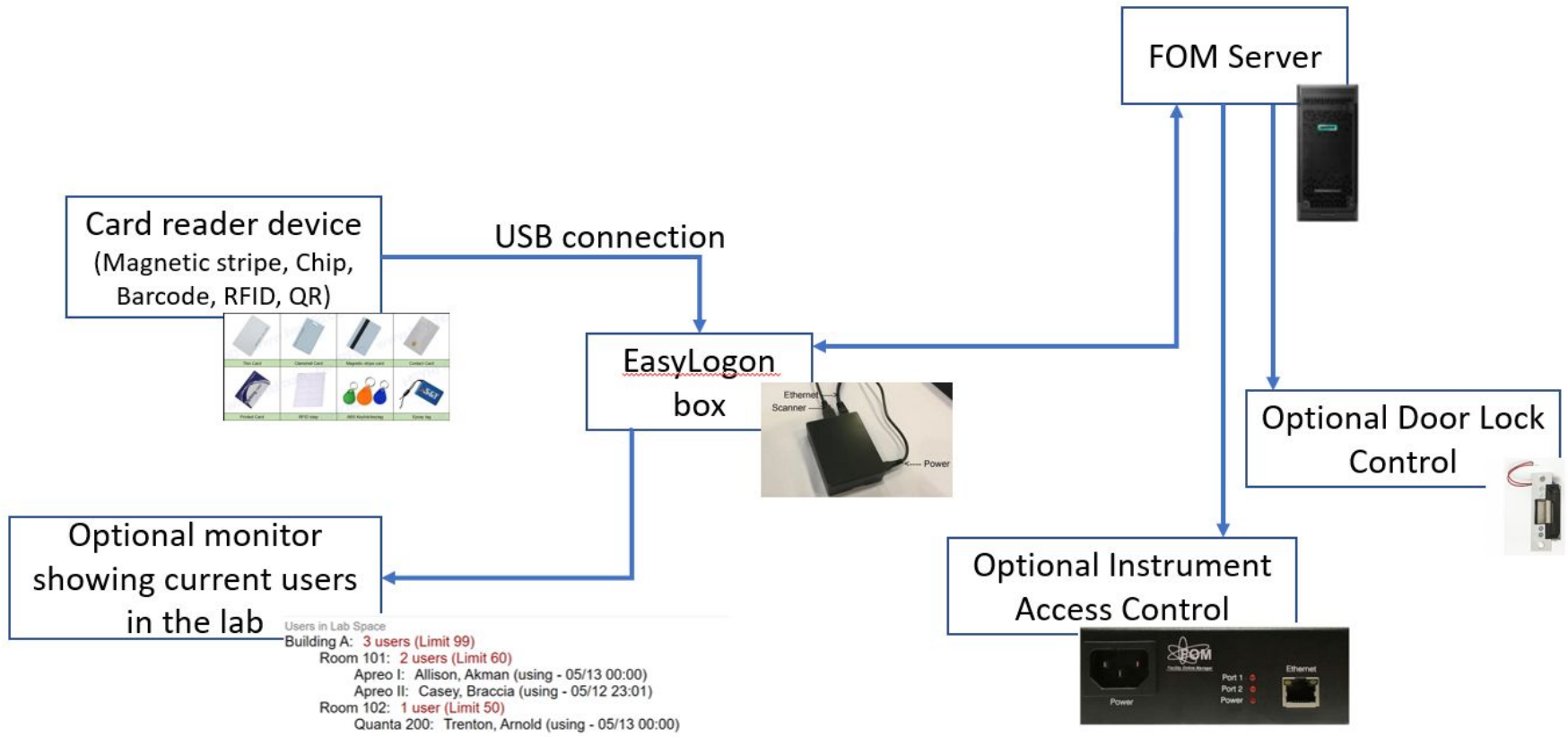
Waste bottle code **C-01-02**

MAP OF WASTE LOCATIONS | SOP | MSDS

START PROCESS | Approx. amount (ml) 0 | END PROCESS

CANCEL / RESET

EasyLogon Connection Example



Customizations!

Fast Turnaround Time!

So far nearly all the customization proposals have been delivered within 5 business days.

More things to talk about

- ★ Interlocks
- ★ Reporting with MSSQL native reporting services
- ★ Safety certificates tracking
- ★ Inventory management
- ★ Recent add-on: COVID-19 and Social Distancing
- ★ Cost of Implementation

Possible Customizations

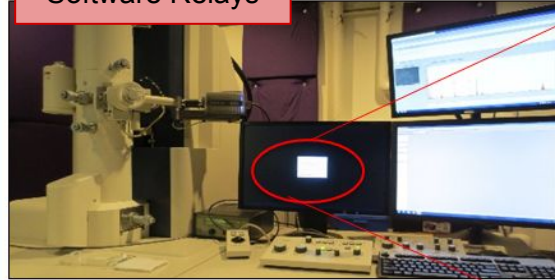
- ★ Single Sign On
- ★ Financial account validation
- ★ Billing and invoice templates
- ★ Monthly fee in addition to hourly charge
- ★ Service request forms
- ★ Custom logo and UI re-design

Type of Interlocks we provide

Hardware Relays



Software Relays



Model	Description	Unit Price
FLOB-01	1-port power control and 1-port dry contact	\$200/ea
NP-02	2-port power control with US type plugs	\$200/ea
NP-04D	4-port signal control with dry contacts	\$450/ea
NP-08	8-port power control with US type plugs	\$450/ea
NP-02H	2-port power control with UK type plugs	\$230/ea
NP-08H	8-port power control with UK type plugs	\$520/ea
S&H	Shipping and handling is 5% of total order price, minimum charge \$50. International shipping charge is 10% of total order price, minimum charge \$300.	
FOMLock	Software access control. FOM Lock can be installed on unlimited number of instrument PCs once license is paid.	\$800/license

Examples of hardware relay connection

1. **Direct Power Control**
2. **Control DC power**
3. **Control Signal line**

