

Menu

Roles

This is to configure user priviledge levels.

View

Roles

This system page configures the possible role of the users

Add Role

ID	Name	Reserved	Maintenance?	Authorize All?	Action
1	admin	True	True	True	<div>EditDelete</div>
2	staff	False	True	False	<div>EditDelete</div>
3	fab users	False	False	False	<div>EditDelete</div>

Maintenance = The user can perform maintenance by tapping the card on machine board

Authorize all = User can use any machine in any state

Add new role

Add Role

Role Name:

☐ Can perform maintenance

☐ Authorize all

Add Role

Edit existing role

Edit Role

Role Name:

staff

- ☐ System reserved
- ☒ Can perform maintenance
- ☐ Super user

Update Role

Users

Users are identified by their RFID card ID. There is no strong authentication of RFID cards in the Arduino board, only chip ID.

View

FABLAB Users Machines Authorizations Maintenance Interventions Usage history Roles Machine types Logout

Users

List of machines and web interface users

Add User

ID	Name	Surname	Role	Card UUID	Action
1	Mario	Rossi	admin	1234567890	Edit Delete
2	Andrea	Bianchi	fab users	None	Edit Delete

Edit existing user

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Edit User

Name:

Mario

Surname:

Rossi

Role:

admin

Card UUID:

1234567890

Please enter either 8 hexadecimal characters or leave it empty.

Update User

Add new user

Add User

Name:

Surname:

Role:

admin



Card UUID:

Add User

The card UUID is displayed on the arduino LCD when tapping an unknown card.

Machines

View machines

Machines

Use this page to view and configure FabLab machines.

Add Machine

ID	Name	Machine type	Cumulated usage	Blocked for all?	Maintenance plan	Last seen	Actions
1	LASER 1	LASER	4 minutes	<input type="checkbox"/>	<ul style="list-style-type: none">replace engine (10.0 h.)	May 28, 2023 10:55 AM	<div><div>View history</div><div>Edit</div><div>Delete</div></div>
2	PRINTER 1	3D PRINTER	2 minutes	<input type="checkbox"/>	<ul style="list-style-type: none">replace brushes (10.0 h.)	May 28, 2023 10:55 AM	<div><div>View history</div><div>Edit</div><div>Delete</div></div>

Edit machine

Edit Machine

Machine Name:

LASER 1

Machine Type:

LASER

Cumulated hours:

0,07

☐ Blocked for all?

Update Machine

Add machine

Add Machine

Machine Name:

Machine Type:

LASER

Machine Hours:

☐ Blocked:

Add Machine

Authorizations

Authorizations maps users to machines. If a user belongs to a rôle with «Authorize all », the authorizations list is ignored. This can be useful if the FabLab does not want to implement authorization for fab users.

[View authorizations](#)

FABLAB

[Users](#)[Machines](#)[Authorizations](#)[Maintenance](#)[Interventions](#)[Usage history](#)[Roles](#)[Machine types](#)[Logout](#)

Authorizations

Add Authorization

ID	User	Machine	Action	
1	Mario	LASER 1	Edit	Delete
2	Andrea	LASER 1	Edit	Delete
3	Andrea	PRINTER 1	Edit	Delete

[Add authorization](#)

Add Authorization

User

Mario Rossi

Machine

LASER 1

Add Authorization

Edit authorization

FABLAB

Edit Authorization

User

Mario

Machine

LASER 1

Update Authorization

Maintenance

This is for regular maintenance which shall be triggered every X hours of use.

[View](#)

Maintenances

This system page configures the possible maintenances actions of the machines

[Add Maintenance](#)

Hours Between: 10.0

Description: replace engine

Machine : LASER 1

Edit

Delete

Hours Between: 10.0

Description: replace brushes

Machine : PRINTER 1

Edit

Delete

[Edit](#)

Edit Maintenance

Hours Between:

10,0

Description:

replace engine

Machine:

LASER 1

[Update Maintenance](#)

[Add new maintenance](#)

Add Maintenance

Description of maintenance:

Machine to maintain:

LASER 1

Number of use hours to trigger:

Attachment: Nessun file scelto

[Add Maintenance](#)

Interventions

View

Interventions

This is the list of performed maintenance actions on the machines.

Add Intervention

Intervention ID	Maintenance	Machine	User	Timestamp	Action
1	replace engine	LASER 1	Mario	May 28, 2023 10:39 AM	<div>Edit</div> <div>Delete</div>
2	replace brushes	PRINTER 1	Andrea	May 28, 2023 10:39 AM	<div>Edit</div> <div>Delete</div>

Add manually

Interventions will be created automatically by tapping the card on the machine board, but can be added manually if the maintenance was done offline.

Add Intervention

Maintenance:

replace engine

Machine:

LASER 1

User:

Mario

Add Intervention

Edit interventions

FABLAB

Edit Intervention

Maintenance:

replace engine

Machine:

LASER 1

User:

Mario


Update Intervention

Usage History

Search page for machine usage history

User:

Machine:

Start Time: 

Use ID	User	Machine	Start Time	End Time	Duration (minutes)	Action
1	Mario	LASER 1	May 28, 2023 10:55 AM	May 28, 2023 10:57 AM	2.0	<input type="button" value="Delete"/>
2	Mario	PRINTER 1	May 28, 2023 10:55 AM	May 28, 2023 10:57 AM	2.0	<input type="button" value="Delete"/>
3	Mario	LASER 1	May 28, 2023 10:55 AM	May 28, 2023 10:57 AM	2.0	<input type="button" value="Delete"/>

If a machine is in use, row is highlighted :

Usage History

Search page for machine usage history

User:

Machine:

Start Time: 

Use ID	User	Machine	Start Time	End Time	Duration (minutes)	Action
1	Mario	LASER 1	Dec 24, 2023 11:03 AM	Still in use	In use	<input type="button" value="Delete"/>

Machine types

View

Machine Types

This page defines the categories of machines in the LAB.

[Add Machine Type](#)

ID	Machine type	Auto-logout	Action	
1	LASER	1000 min	Edit	Delete
2	3D PRINTER	<i>disabled</i>	Edit	Delete
3	DRILL	1440 min	Edit	Delete

[Add/Edit](#)

Auto logout delay : if a user remains active more than X minutes on the machine, the arduino board will log him off. When set to 0, there is no log-off.

Edit Machine Type

Type Name

LASER

Auto-logout delay

(minutes)

1000

[Submit](#)

Technical details

- <https://github.com/fablab-bergamo/rfid-backend>
- Flask python application + MQTT client

TODO/MISSING

- Web authentication
- PDF upload for maintenance procedures