# Adding Student Credentials, Endorsements and Flags in Mobius

Date:           March 14th, 2016
Author:         Rob Klein
Version:        3.0
Revised by:     Martin Culpepper (03/15/2016)

## Synopsis

This document provides guidelines for adding information/notes about user knowledge, skill and behavior.  This information, once entered by one supervisor, may be seen by all other supervisors on campus.  This 'sharing' of information will aid facility managers in deciding how/if to plan training and permit access to specific users.  Herein we discuss guidelines for:

- Credentials     Training credentials, including location, equipment type and date
- Endorsements    Acknowledging 'superstars' with commendable knowledge, skills or behavior
- Flags           Recording unsafe or problematic behavior.

## Introduction

The Mobius system was created to help manage and share information about resources that the MIT community may use to make, measure and manipulate.  Mobius consists of 3 main elements:

1. Mobius database - Project Manus (http://project-manus.mit.edu) catalogues and maintains information on facilities and equipment.

2. Mobius app: Main access to the database content.  MIT community members use Mobius - itunes.apple.com/us/app/mit-mobile-mobius/id979584837?ls=1&mt=8 - to access all data in the database.  Facility managers may use the app to modify some information pertaining to their facility, policies, equipment and users.

3. Mobius management: Web-based management (mobius-api.mit.edu/) that facility managers may use to modify information pertaining to their facility, policies, equipment and user behavior.



Mobius app
*Search results*          *Specifications*



Mobius management portal
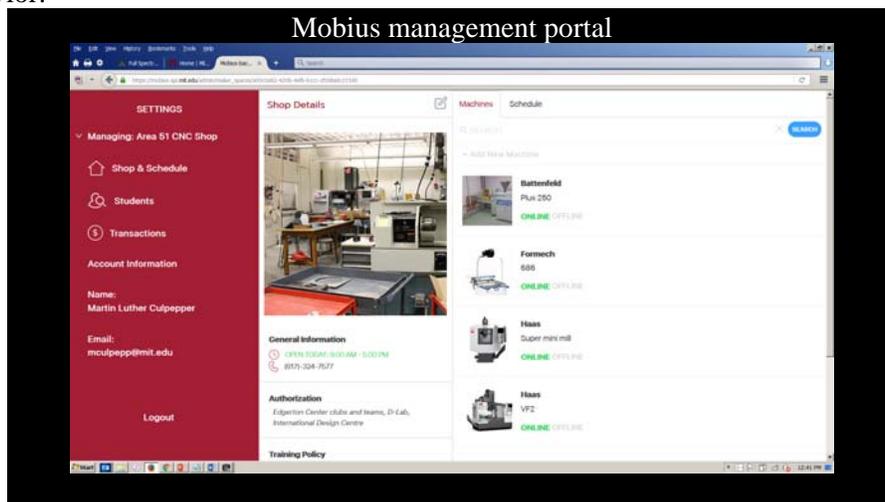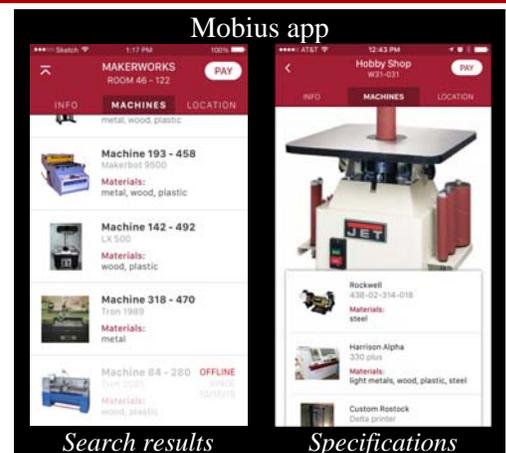
## Credentials

The Credentials section enables facility managers to document training and other approvals for their users.  A credential assigned by a facility manager only applies to equipment and training within their facility.  Once assigned to a specific user, a credential is only viewable to (i) the specific user and (ii) all other facility managers on campus.  Credentials may be viewed via the Mobius app or the Mobius management portal.

Project Manus

mobius

Other facility managers may decide, at their discretion, how to use credentials assigned in other facilities. For example, they may use this information to better understand how to train a new user based upon their documented experience. Facility managers *do not* have to accept training from other facilities; Mobius simply provides a means to have reliable information about a student's knowledge and skill as assessed and assigned by a professional colleague.

At the request of facility managers, the first version of Mobius will use credentials in free-form text format. Pending 'how this goes' we may modify this to pull down or quick-pick menus in the future. In the meantime, to help ensure data standardization to the extent practical, we are suggesting phrasing for specific credentials.
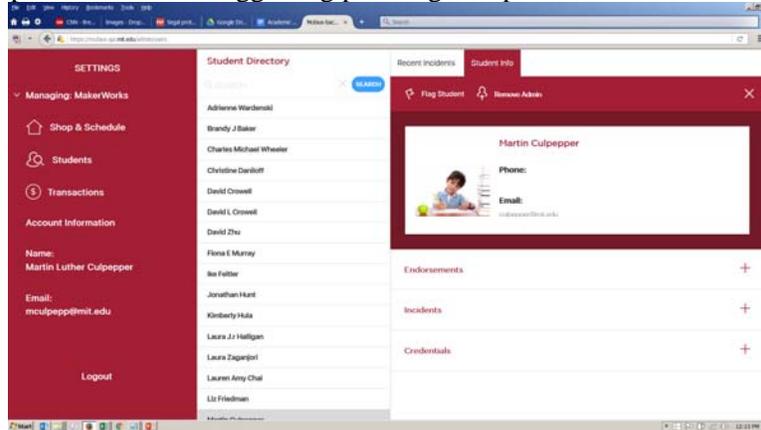


**Information that Mobius automatically records**
When you sign into Mobius app or the Mobius management portal, you use your MIT Kerberos. Mobius therefore 'knows' who you are. When you create credentials, endorsements and flags, Mobius will automatically stamp the credential with:

- Your name and contact information
- Date and time

**Machines and Technology**
For each machine, tool, device, or technology for which you have qualified a user, please list at least the general type of equipment (mill, lathe, drill press, microscope, etc…). A list of general types is located here: https://project-manus.mit.edu/mobius-machine-types . It may also be useful to add notes on the following:

- Equipment make and model
- If the training involved CNC or other special skills

**Safety Certifications**
Each facility has specific training requirements, for example training that usually covers basic machine shop/facility safety and facility policies. At a minimum, please include a brief title of the type of training. For example:

- Your facility-specific machine shop safety
- MIT EHS shop safety course [480c: Machine Shop Safety]
- Hazardous chemicals use, including hazardous waste generation
- Fire extinguisher
- First aid
- Hot work (activities with open flame or generating sparks and hot particles)

**Oversight**
If you trust the user to supervise, mentor, or train / teach others to use machines in your space, you can add this information to their profile. Please provide a brief description of the oversight role and any equipment this applies to. Examples include:

- Permitted to provide basic training on *name of tool(s)*
- Permitted to provide advanced training on *name of tool(s)*
- Permitted to oversee students using *name of tool(s)*

## Endorsements

Facility managers may provide feedback on specific 'super star' students to their colleagues using endorsements. Users who have demonstrated strong skills, mastery of tools, mentorship and/or safety-minded behaviors may be recognized through an affirmative Endorsement. Please use any language you wish, but limit it to your direct experience with the user as it pertains to performance in your specific facility, equipment, and activities. Endorsements should be kept brief. To facilitate sorting and use, we recommend that you start each with a phrase in all caps on a specific tool or activity (e.g. MILL, WELDING, MENTORING, etc…), followed by a brief 1-2 sentence description. For example:

- MILL – I trained Rebecca on the mill and she is skilled enough to run the machine manually and I am comfortable with her running it in CNC mode.

- WATER JET – Evelyn knows this machine in and out. She has over 100 hours on the machine in our facility and is especially skilled at fixturing and calibrating the machine for precision cuts.

- LASER CUTTER –Jonathan has been using our laser cutter for over 2 years. He is very skilled and helps to maintain the machine. Other students seek his advice.

## Flags

Flags are visual alerts about (i) repeated low-risk behaviors and (ii) single egregious incidents. Flags are not meant to cover 'every little infraction' or serve as punishment. Instead, they are meant to provide facility managers with an immediate and on-going awareness of student behavior. Through the Mobius app or the Mobius administration portal, facility managers can flag students or view flags that have been assigned by colleagues; they are viewable by the specific flagged individual but not by other users. Flags are set to automatically expire after 6 months.

Three levels of Flags have been established, as described and suggested below. The should be reserved for serious events, incidents, or repeated behaviors.

### Yellow (Mild) - Minor repeated behavior
For repeat behavior - repeated failure to abide by policies, procedures, or rules where failure carries a risk of injury that is low in your judgement low, e.g.:
- *"Failed to clean up work area several times in last week."*
- *"Found using a screw driver as a pry bar, was warned, and then did this again the next week.*
- *"Student was belligerent on several occasions when asked to stop work at end of day."*

### Orange (Moderate) - Moderate repeated behavior
For repeat behavior - repeated failure to abide by policies, procedures, or rules where failure carries a moderate risk of injury or equipment damages in your judgement. This behavior requires serious intervention and discussion with the user, but may not necessarily warrant removal or a ban from a facility, e.g.:
- *"Several reminders to wear safety glasses in the last two weeks."*
- *"Repeatedly found texting while in the shop, this is not allowed in our shop."*
- *"Engaged in horseplay in assembly area several times."*

### Red (Severe) - Significant risks of injury to the user and/or others around them
For repeated behavior, or a single egregious incident, that required a temporary or permanent ban from your facility. This includes behaviors seen as purposefully malicious, willfully wrong, or repeated, e.g.:
- *"Disabled safety guard on machine without permission despite knowing this was expressly forbidden."*
- *"Snuck into shop after hours and used tools without permission"*
- *"Found working in a facility alone, without a 'buddy'."*

## Appeals process and questions

If a user feels they have been unfairly flagged, they should contact Prof. Martin Culpepper (culpepper@mit.edu) and he will act as mediator. Please contact Prof. Culpepper if you have any questions, wish to have guidance on specific wording, guidance of appropriate level of flagging, etc…