

# **PLCNext**

**User Login** 

Version: 1.0



# **Table of Contents**

1.	Overview	. 3
2.	Change Notes	. 4
3.	Login/Logout	. 5
4.	Create User	. 6
5.	Delete User	. 7
6.	Change Defaults	. 8



#### 1. Overview

This program provides user login control from the program/eHMI. The functions include login, logout, create user and delete user. The program is capped at 50 users with user 1 reserved for administration login. There is a cap for 10 security levels.



# 2. Change Notes

Library	Library Build	PLCnext Engineer	Change Notes	Supported
Version		Version		PLC
1	2023.0.0	>= 2022.0	Initial Release	AXC F 1152
				AXC F 2152
				AXC F 3152



## 3. Login/Logout

You can login or logout from the Home screen. The program references the ArrayOfStruct to check if the Username and Password match the array then move the username and security level to the currentuser and currentsecuritylevel variables.

You know if you are correctly logged in because it will display the currentuser and currentsecurity level on the top right of each screen. The opposite will be true for a logout, the current user and current security level will be blank.



#### 4. Create User

There are two eHMI pages included in the program one is the Home/Login screen and the second is the EditUser screen used to create and delete users. You will need to login on the Home screen as Admin the Edit User button will become visible allowing you to go to the EditUser screen.

To create a user populate the Username, Password and Security level inputs. If a user already exists with that name, the Create User button will remain red. You will not be able to create a new user with that name. If a user doesn't exist with that name the Create User button will turn green and you can then click it to create your new user. You know if the user is created properly because the Create User button will switch back to red.

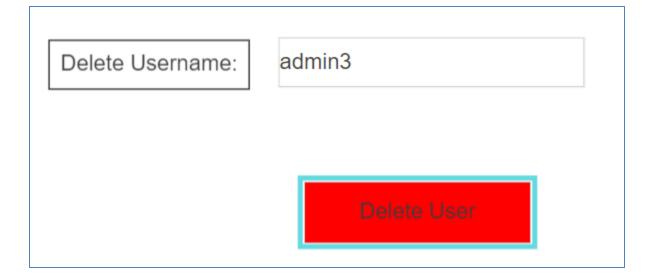
Username:	test
Password:	admin
Security Level:	0
	Create User



#### 5. Delete User

There are two eHMI pages included in the program one is the Home/Login screen and the second is the EditUser screen used to create and delete users. You will need to login on the Home screen as Admin the Edit User button will become visible allowing you to go to the EditUser screen.

Once on the EditUser screen you simply populate the Delete Username with the user that you would like to delete. After populating the Delete Username the Delete User button will turn green confirming that user exists. After deleting the User the Delete User button will return to red confirming that user no longer exists.





### 6. Change Defaults

The number of users can be changed in the program under the set limits section of the program, on line 8 of the code. The size of the Array will also need to be increased in the DataTypes sheet.

```
6  myuserarray[1].Password := 'admin';
7  myuserarray[1].Securitylevel := 10;
8  usermax := 50;
9  R_TRIG1(CLK := TRUE, Q => curusr);
10
```

```
DataTypes
                                                     DataTypes
  1
    ■ TYPE
     MyArrayOfStruct : ARRAY[0..50] OF MyStruct2;
  3
    ☐ MyStruct2 : STRUCT
  5
          UserName : STRING;
  6
          Password : STRING;
  7
          Securitylevel: INT;
  8
     -END STRUCT
    LEND TYPE
```

The admin login information can be changed. To do so it needs to change the myuserarray login information in lines 5, 6 and 7 in the program.

```
myuserarray[1].UserName := 'admin';
myuserarray[1].Password := 'admin';
myuserarray[1].Securitylevel := 10;
usermay := 50:
```

It also needs to be changed on line 59 to match the login information in myuserarray.

```
//deleteuser

R_TRIG4(CLK := deleteuserbit, Q => trig4);

FIF trig4 = TRUE and currentuser = 'admin' and password = 'admin' THEN
```