# FuelCell Addendum – Installing Multiple 850/890 Fuel Cell Test Systems on a Computer

Scribner Associates, Inc. Rev. D, 12/3/2020

### Introduction

This addendum describes the installation of two configurations of *FuelCell* software on a on a single computer. An example would be if single 850/890 will be used for H<sub>2</sub> or liquid (pump) fuel cell testing.

The installation of dual systems requires the standard *FuelCell*® software installer.

## **Description**

When fully installed, the multiple station configuration contains only one copy of the *FuelCell* program. The default location is c:\fuelcell\fuelcell.exe.

Multiple copies of the "FuelCell.ini", "FuelAux.ini", "Reform.ini" and "ReformC.ini" configuration files are created for each of the stations. All configuration files are located in the same directory as the main *FuelCell* program.

For example, the configuration files for the first station are named "FuelCell1.ini", "FuelAux1.ini", "Reform1.ini" and "ReformC1.ini"

The configuration files for the second station are named "FuelCell2.ini", "FuelAux2.ini", etc.

Startup icons for each of the stations are created on the desktop using the names "FuelCell-1" and "FuelCell-2" or "FuelCell-DMFC"

Each of the startup icons contains different information instructing the *FuelCell* program to use the specified configuration files. For example, right-click on the FuelCell-1 icon. The "Target" will be listed as

C:\FuelCell\Fuelcell.exe /station 1

The /station 1 option instructs the program to use the configuration files named "FuelCell1.ini" and "Reform1.ini", *etc*.

#### Installation

#### **First Configuration**

- 1. Connect the 850/890 Fuel Cell Test System to the computer. Use all components that are associated with the first configuration.
- 2. Install the *FuelCell* software as described in the *FuelCell* software manual. During installation you will select the instrument type, load size and serial number.
- 3. Test the system in the first configuration.
- 4. Close the *FuelCell* software.
- 5. Navigate to the directory where the FuelCell was installed, usually C:\FuelCell\. Rename the following files (FuelAux.ini and ReformC.ini may not be present on all systems):

FuelCell.ini	to	FuelCell1.ini
FuelAux.ini	to	FuelAux1.ini
Reform.ini	to	Reform1.ini
ReformC.ini	to	ReformC1.ini

6. Right-click on the *FuelCell* desktop icon and choose Rename. Rename to icon to "*FuelCell 1*".

Right-click on the *FuelCell 1* desktop icon and choose properties. Add "/station 1" to the end of the "Target" as shown.

Target:  $c:\FuelCell\Fuelcell.exe\/station\ 1$ 

7. Start the *FuelCell* program using the *FuelCell 1* desktop icon and test operation of the first test system.

### **Second Configuration**

- 8. Connect the 850/890 Fuel Cell Test System to the computer. Use all components that are associated with the second configuration (for example the DMFC pump).
- 9. Run the *FuelCell* installer program again. This will install a second set of configuration files. During installation you will select the same instrument type, load size and serial number as the first configuration.

10. Navigate to the directory where the FuelCell was installed, usually c:\FuelCell\. Rename the following files (FuelAux.ini and ReformC.ini may not be present on all systems):

FuelCell.ini	to	FuelCell2.ini
FuelAux.ini	to	FuelAux2.ini
Reform.ini	to	Reform2.ini
ReformC.ini	to	ReformC2.ini

11. Right-click on the new *FuelCell* desktop icon and choose Rename. Rename to icon to *FuelCell 2*. (NOTE: Do NOT rename the *FuelCell 1* icon created in step 6).

Right-click on the *FuelCell 2* desktop icon and choose properties. Add "/station 2" to the end of the "Target" as shown.

Target: c:\FuelCell\Fuelcell.exe /station 2

- 12. Start the second configuration by using the modified *FuelCell 2* desktop icon and test its operation.
- 13. Use the Instrument Configuration menus in *FuelCell* to modify the instrument configuration for the different shortcuts, e.g., H2 MFC vs. Pump. Changes made while using the two different startup icons will remain independent.