



# Simtronics DSS-100 and VFO Quickstart software instructions

Version 1.11

Created By:	James T.	Date:	01.10.2018
Reviewed By:	Kim L	Date:	16.04.2020

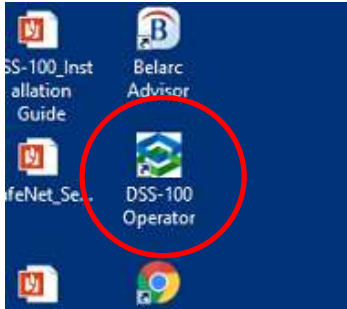
## DSS-100:

### Accessing the software

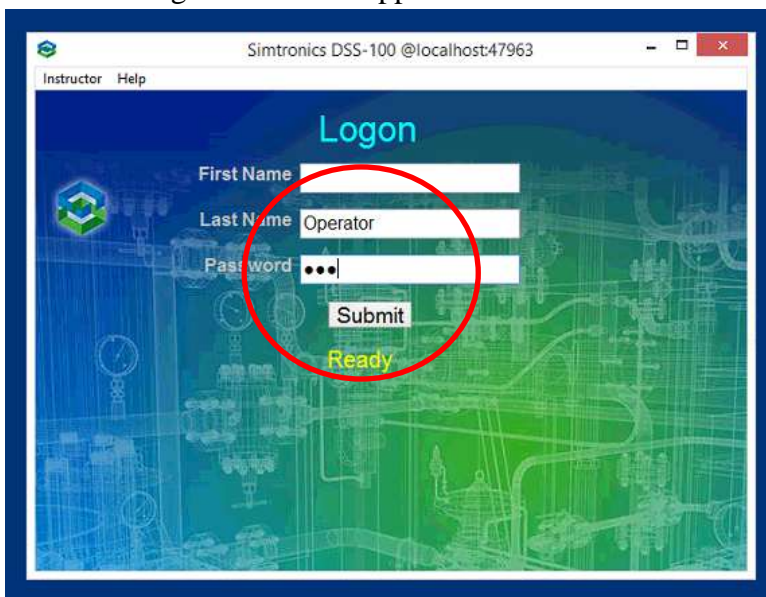
The simulation software for this practical assignment is “**DSS-100 Operator**”. This is available on Remote Lab 13.

You can access this program using our remote labs via Electromet software (HTML5) to complete the practical. Electromet HTML5 instructions are available in Moodle

Once connected to the Lab via TeamViewer, double-click on the ‘DSS-100 Operator’ icon:



The following window will appear:



In the fields ‘Last Name’ and ‘Password’ enter the following:

Last Name: ‘**Operator**’

Password: ‘**004**’

Then, click ‘Submit’.

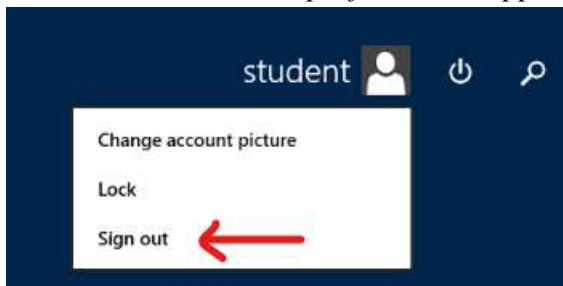
**NOTE:** *If you are encountering any errors when opening DSS-100 Operator, log out of the Windows account, then reconnect to Remote lab 13 and it should fix it.*

*To do so:*

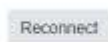
1. *In remote lab 13, click on the Windows Logo button*



2. *Click on the “Student” profile on the upper right, then select “Sign out”*



3. *Click on “Close Remote Desktop”*

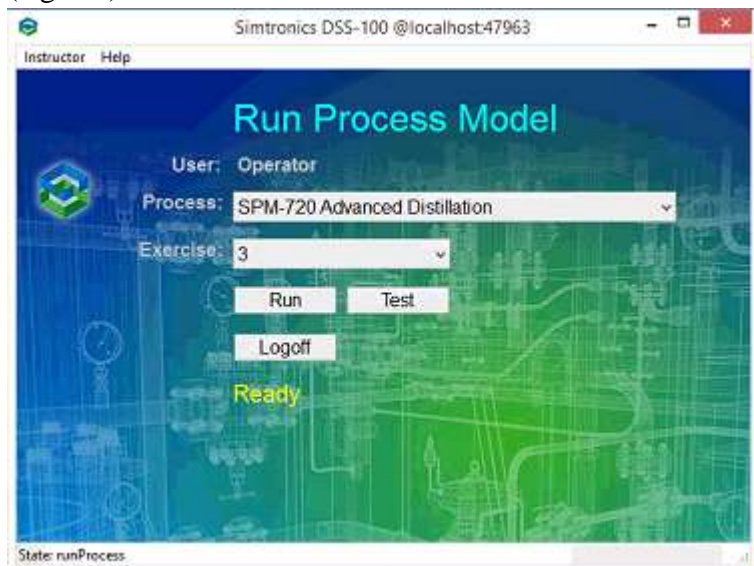


4. *Reconnect to the lab, wait for a minute or 2 for all the starting applications to load, and you will be able to logon to DSS-100 now.*



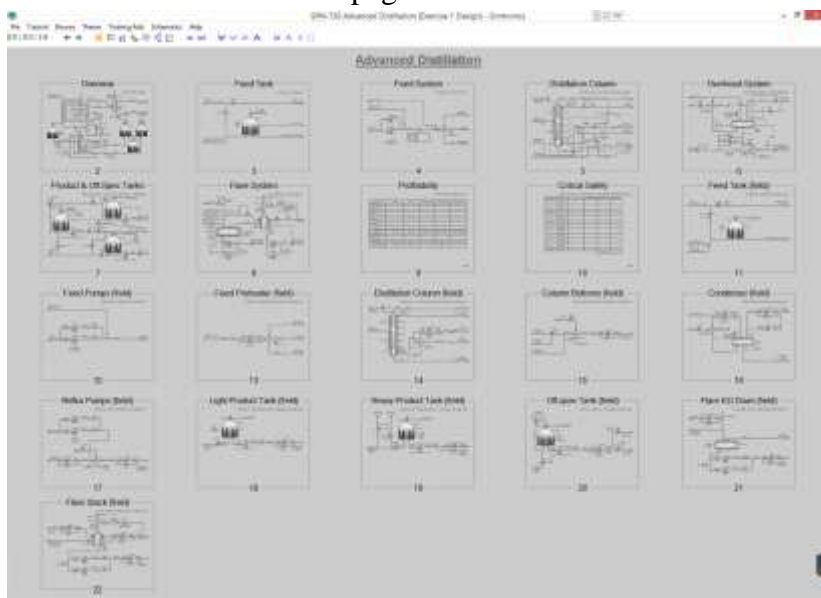
In the following screen, click the drop down button next to 'Process' and select 'SPM-720 Advanced Distillation':

Click the drop down button next to 'Exercise:' and select the exercise specified in your assessment (e.g. '3'):

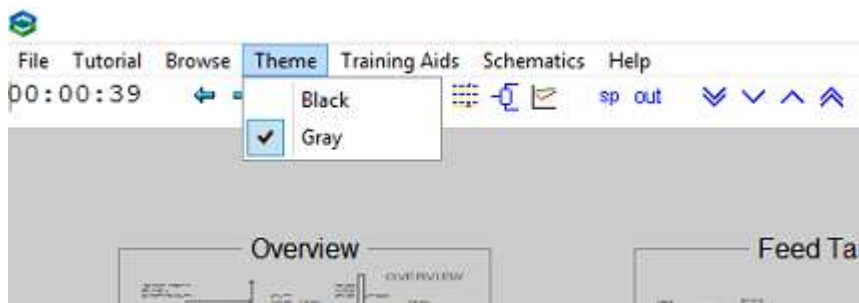


Then, click 'Run'.

You will see the overview page 1:

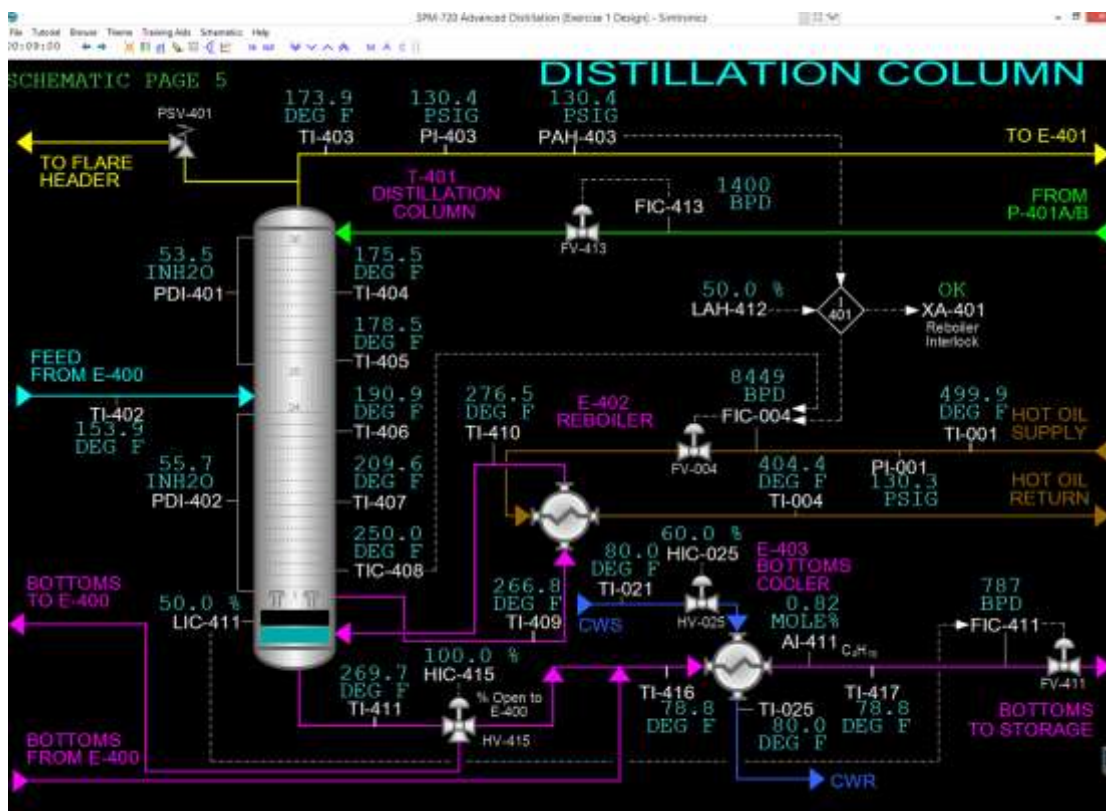
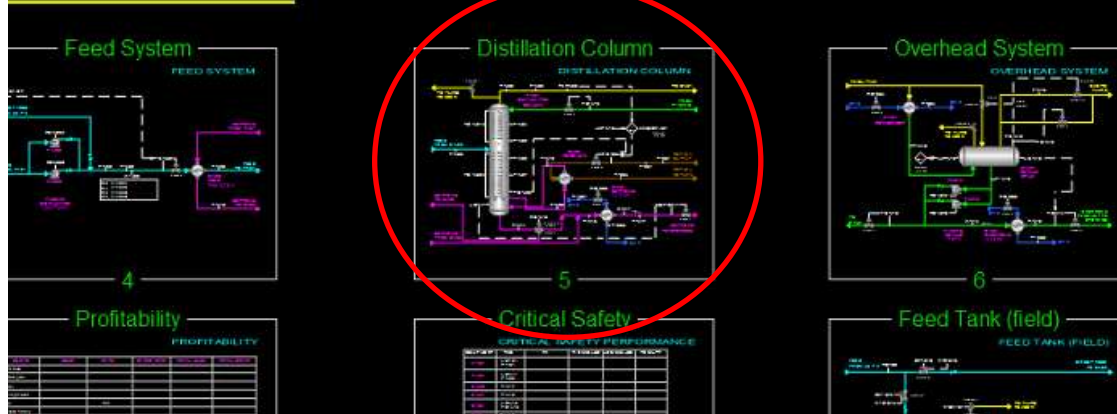


At the top of this window, click 'Theme', then click 'Black':



You can click on any of the pages to view them in detail:

### Advanced Distillation



If a component is controllable, you can click on coloured icon (changing values) to bring up the manual controller:



On the menu, you can click on 'schematics' then quick select the schematic you want to view in real time:



The icons on the menu take you to other operator pages, including alarms:



Hint: It is good to first try and identify the values drifting out of range from any faults using the alarms page, then locate them on the schematic and identify the cause of the fault.

The arrows can also be used to scroll between schematics or the various other pages:



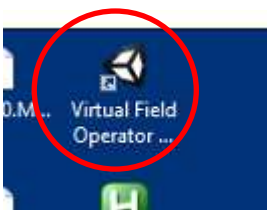
## **VFO:**

You can virtually walk around the plant using the Virtual Field Operator (VFO).

Ensure the DSS100 simulation is running — the virtual plant will take the values from your running simulation exercise in real time.

### **Get the VFO controller part to run on Lab 13:**

On the desktop, double-click on the ‘Virtual Field Operator ...’ icon:



You should see the following window appear:



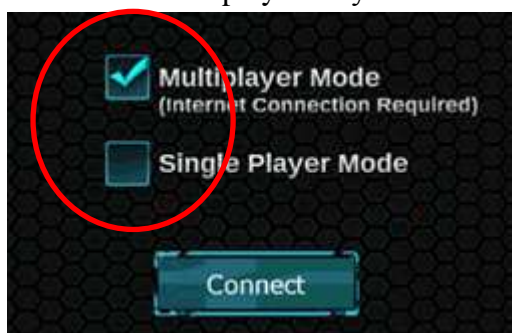
Click ‘Play!’.

The ‘Virtual Field Operator’ window will load:



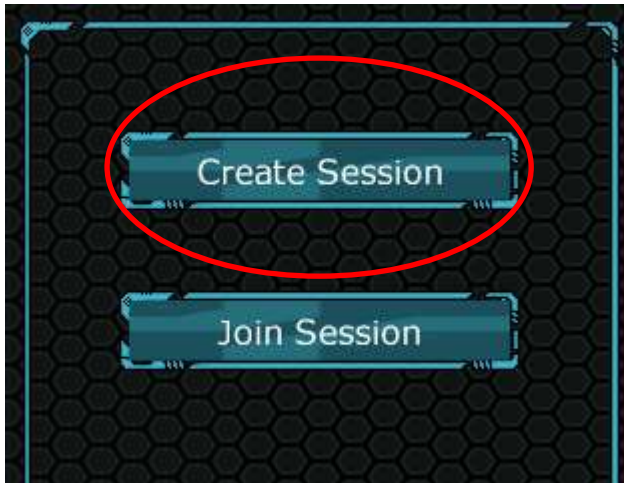
Enter your name in the 'Please Enter Your Name' field.

Select the 'Multiplayer Player Mode' check box:



Click the 'Connect' button.

Then click on "Create session:



And choose “Controller”:



This is a game/simulation where you control a virtual operator (engineer) and can walk around and inspect the virtual equipment of a virtual process plant.

**Please make note of the session ID at the bottom right for the next part.**



### Get the VFO Operator part to run on your computer/laptop:

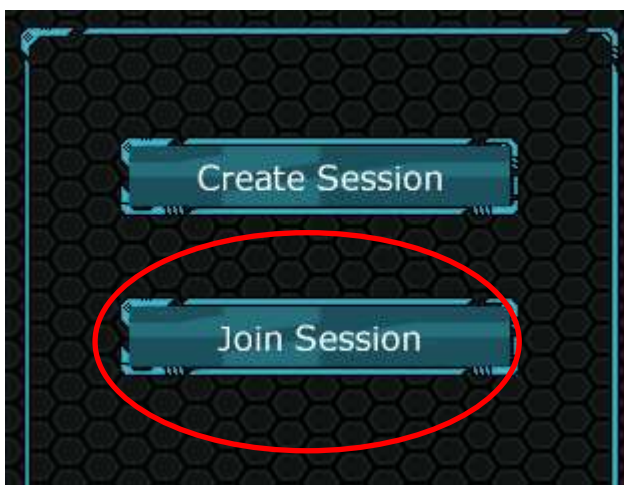
Download VFO and install it on your own computer from this link (200MB file):

[https://eitcdn.eit.edu.au/files/eit/Simtronics\\_SPM720\\_and\\_VFO/VFO720Setup.exe](https://eitcdn.eit.edu.au/files/eit/Simtronics_SPM720_and_VFO/VFO720Setup.exe)

Run “Virtual Field Operator” and click “Play” as previously done.

Type in your name and select “Multiplayer Mode” as previously done.

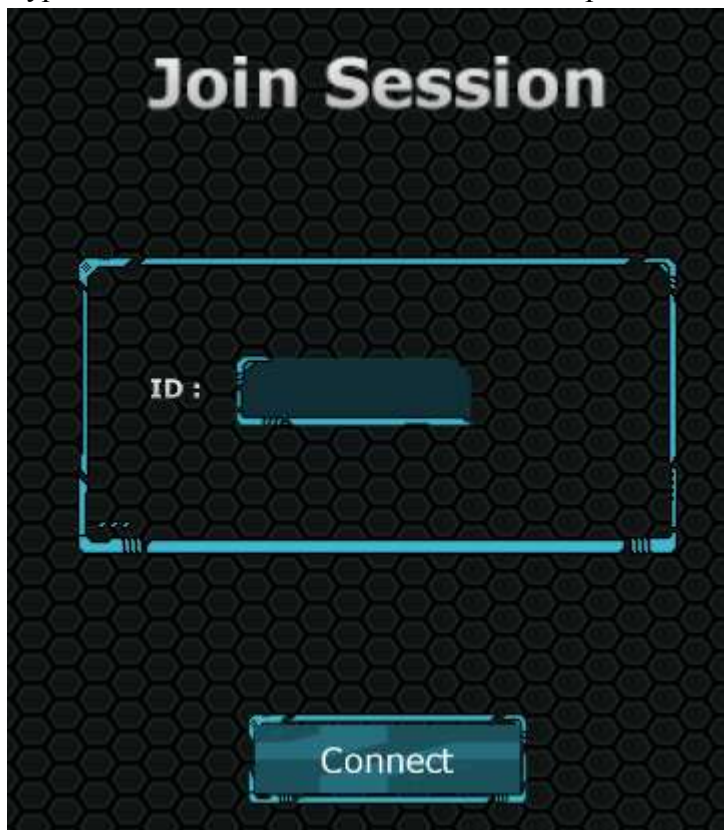
Click on “Join Session”



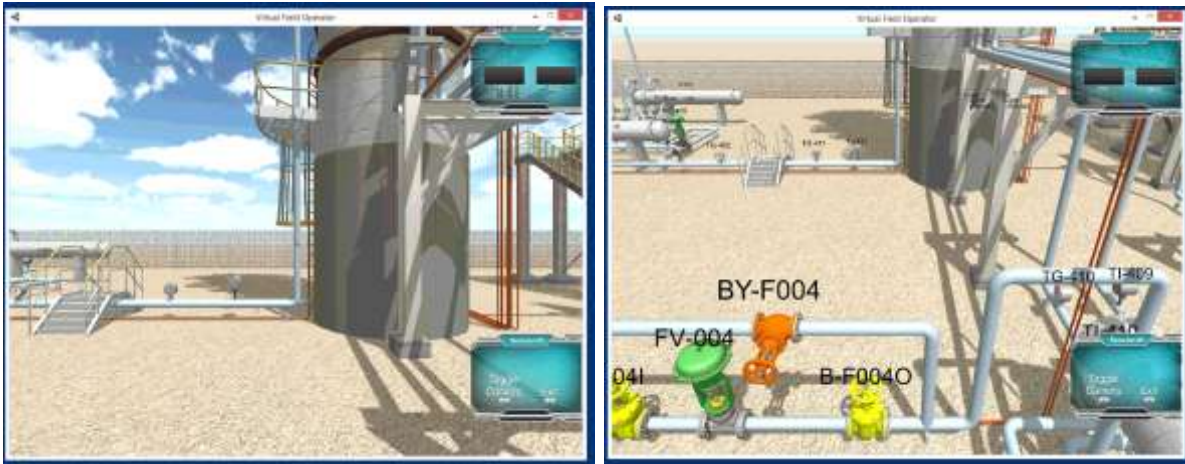
Click on “Operator”



Type in the “Session ID” from the controller part running on Lab 13, and click on Connect



Press the '1' key several times on your keyboard to change through the different perspectives:



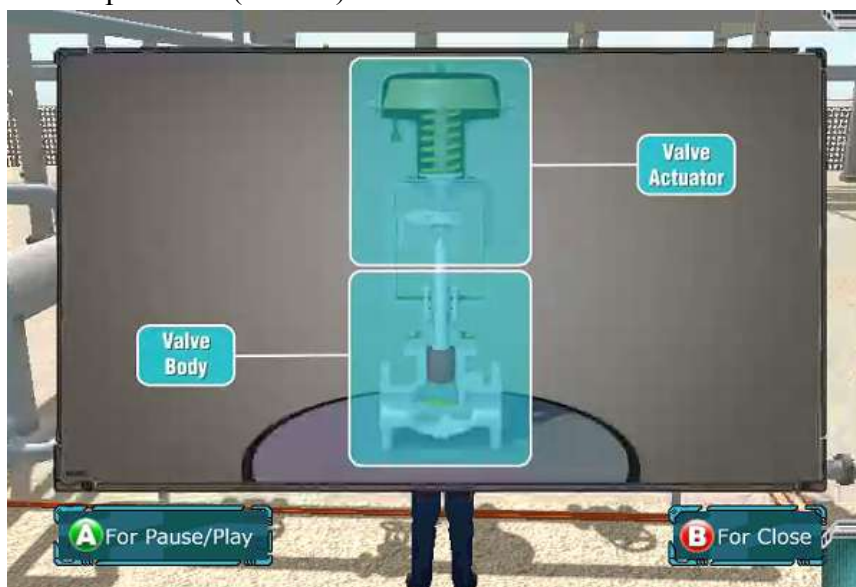
The keys you will use to control the character are as follows:

Controls:	Mouse
'up arrow' – move forward	look up
'down arrow' – move backwards	look down
'left arrow' – Slide left	turn left
'right arrow' – Slide right	turn right
'Space bar' — 'A' button prompt	
'x' — 'X' button prompt	

Using the keys and mouse move your character up to a piece of equipment (valve, pump, etc.) until the a contextual menu pops up (this is not for all equipment):



Press 'space bar' (not 'A') to activate 'For Video' button:



Press 'b' to close the pop up window.

Press 'x' to see the text:



Press 'b' to close the pop up window.

When you need to make any changes to DS-100, it will be done on Lab 13, then you can go back to VFO on your own computer to navigate through.

Once you are done, do not forget to close VFO and DS-100 on Lab 13.

**END OF INSTRUCTIONS**