

# FLIGHTDECK

SOLUTIONS



## FDS-PRO-Ethernet-CDU

## ProSim A320 Integration



New for **2021**, the FDS-Pro-Ethernet-CDU comes with HDMI compatibility. With most of the latest Graphics cards (GFX) providing DVI-D and HDMI and DisplayPort.

The newest version lets you use the latest GFX cards with HDMI and/or Display Port.

\*Minimum requirement for GFX cards and Avionics Suites is a 2 GIG card.

\*Requires ProSimA320 1.46b1 or higher.

\* Tested with 1.55b16



ProSim A320 shown on the screen



- Rubberized Keys
- Dome type switches providing millions of cycles
- Brightness switch is functional (screen dimming) from the ProSim software to dim the ProSim CDU screen brightness.  
*Note: **Not** the hardware screen brightness, software brightness*



Looking from the rear and left to right:

L Position – IBL constantly ON (set to maximum)

C Position – External IBL from PWM dimmer.

R Position - External IBL from DC voltage regulated dimmer.

- *The “C” position is most commonly used when connected to the FDS IBL Dist Boards.*
- ***Left/Center/Right***



REAR VIEW

- HDMI port
- Screen switches w/indicator LED
- Ethernet jack
- Reset switch
- Power jack
- Back lighting switch/remote IBL jack



Rear View



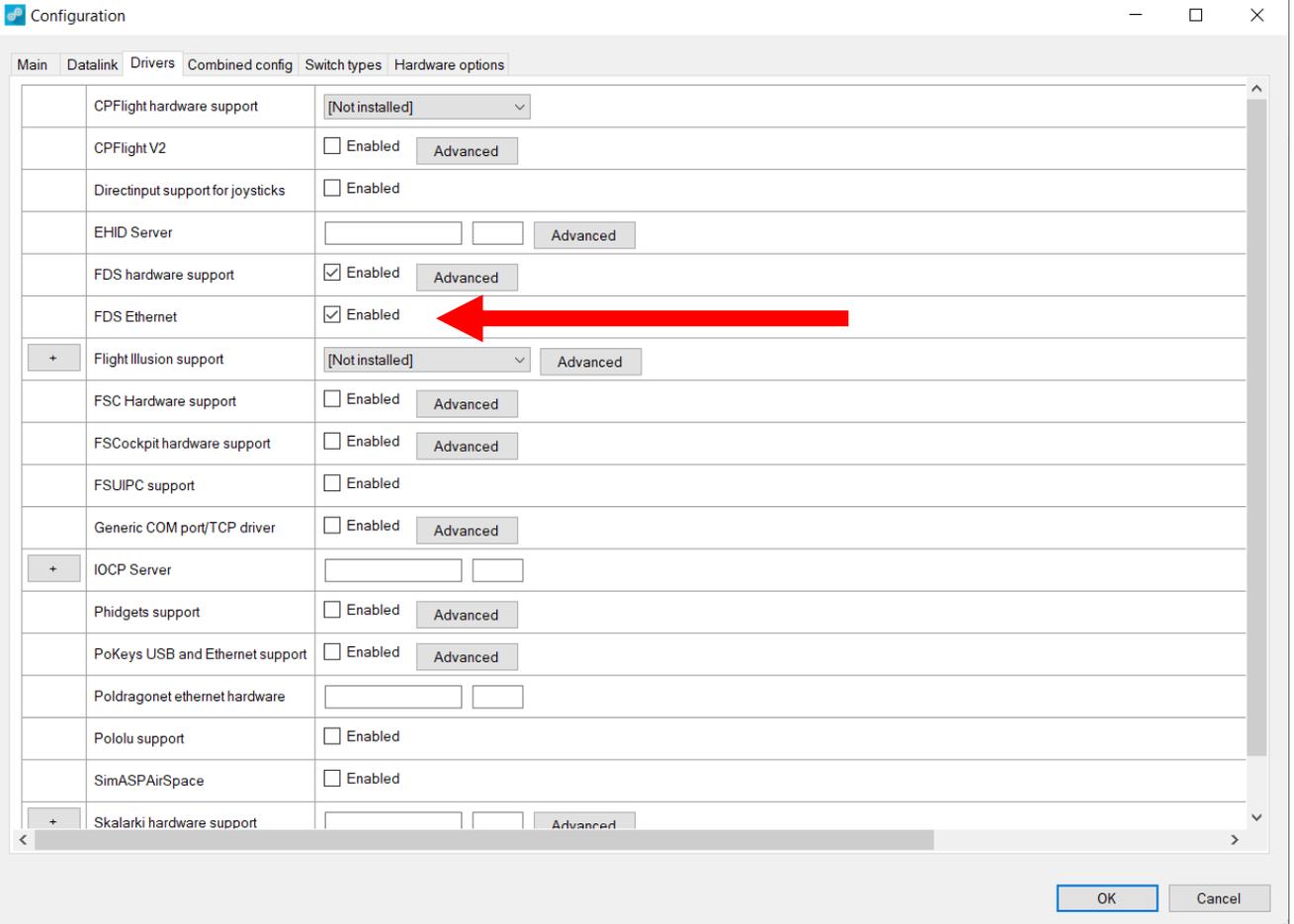
Cables connected to the CDU



Pin1 – DC voltage from “0 to 5V” from voltage regulated dimmer **OR** “PWM” from PWM dimmer.

Pin2 – GND

*\*Connects to the FDS IBL Dimmer in the Pedestal with the supplied cable. See **page 11** in the **FDS-PRO-Ethernet-CDU Manual** for further details on connecting this harness if required.*

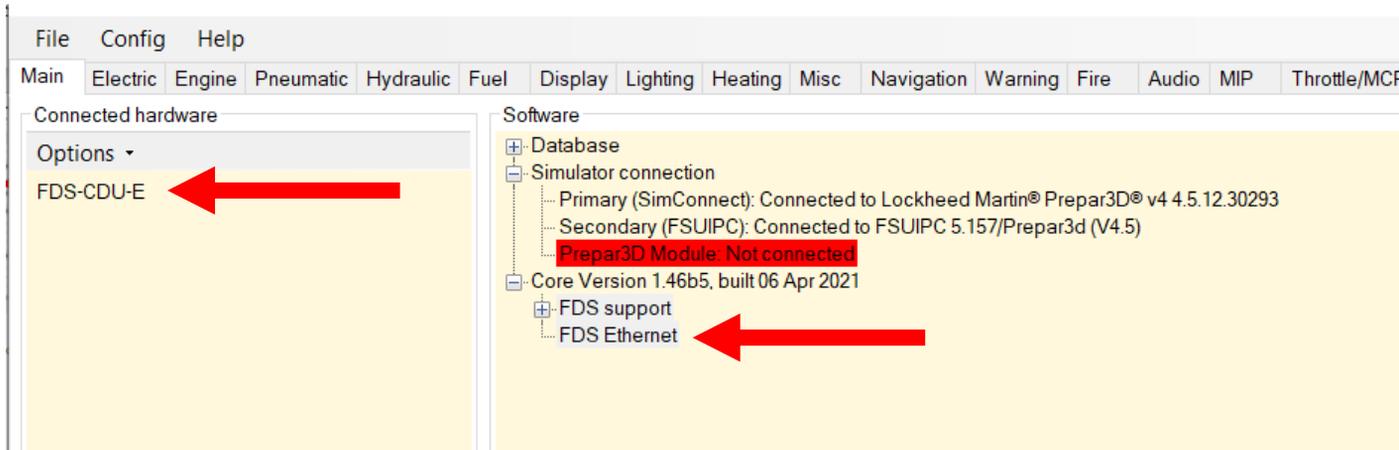


Open the ProSim System A320 Config screen and open the Drivers Tab.

Enable **“FDS Ethernet”**

Click **“OK”**

**ProSim will reload.**

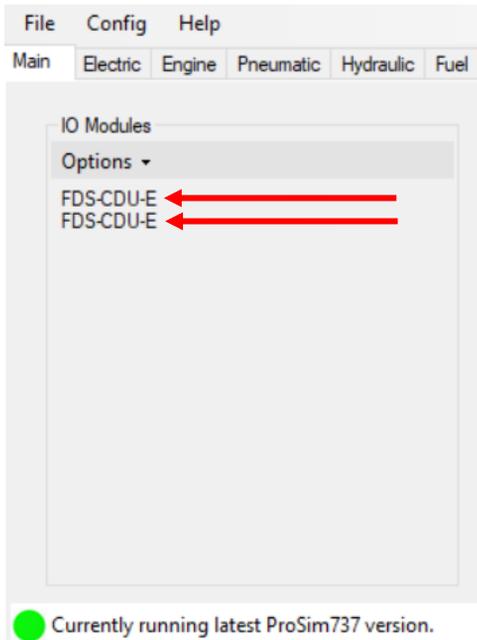


In the IO Modules list you will see “FDS-CDU-E” and FDS Ethernet in the Software List.

**\*It is recommended you use the Test Module to locate the IP Addresses of each MCDU. ProSim does not have a way to tell you which MCDU is which. Configuring 1 at a time is recommended.**

**\*ProSim uses the “Hostname” now to locate the network devices. You need to change each MCDU Hostname to Identify each MCDU. (CA\_MCDU and FO\_MCDU)**

**\*\*\*These are the only names you can use.\*\*\***



IO Modules list you will see **“FDS-CDU-E”** and **FDS Ethernet** in the Software List. You will see two **“FDS-CDU-E”** if you have 2 MCDU’s installed and configured. See above.

## Changing the MCDU Hostname

- Open the Test Module or the ProSim System Screen you can locate the MCDU IP Address. Type the IP Address into a browser:



- Note the Hostname in the Top Left Corner.
- Select “Settings”
- Enter the new Hostname of the MCDU you are assigning:

CA\_MCDU

FO\_MCDU

**Note: there can be no blank spaces in the Hostname.**

# Changing the MCDU Hostname

- Default Hostname shown below. It is the actual serial number of the board.

Host Name: IIT682719E18BCA FDS-CDU-E

HOME DEVICE INFO SUB BOARDS **SETTINGS** ADMIN

CAUTION: Incorrect settings may cause the device to lose network connectivity.

Network	Miscellaneous
Host Name: IIT682719E18BCA	Board Location: 1
MAC Address: 68:27:19:E1:8B:CA	Board Usage: 1
<input checked="" type="checkbox"/> Enable DHCP	
IP Address: 10.0.10.113	
Gateway: 10.0.10.1	
Subnet Mask: 255.255.255.0	
Primary DNS: 192.168.1.1	
Secondary DNS: 0.0.0.0	

Save Configuration

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Host Name: IIT682719E18BCA FDS-CDU-E

HOME DEVICE INFO SUB BOARDS **SETTINGS** ADMIN

CAUTION: Incorrect settings may cause the device to lose network connectivity.

Network	Miscellaneous
Host Name: CA_MCDU	Board Location: 1
MAC Address: 68:27:19:E1:8B:CA	Board Usage: 1
<input checked="" type="checkbox"/> Enable DHCP	
IP Address: 10.0.10.113	
Gateway: 10.0.10.1	
Subnet Mask: 255.255.255.0	
Primary DNS: 192.168.1.1	
Secondary DNS: 0.0.0.0	

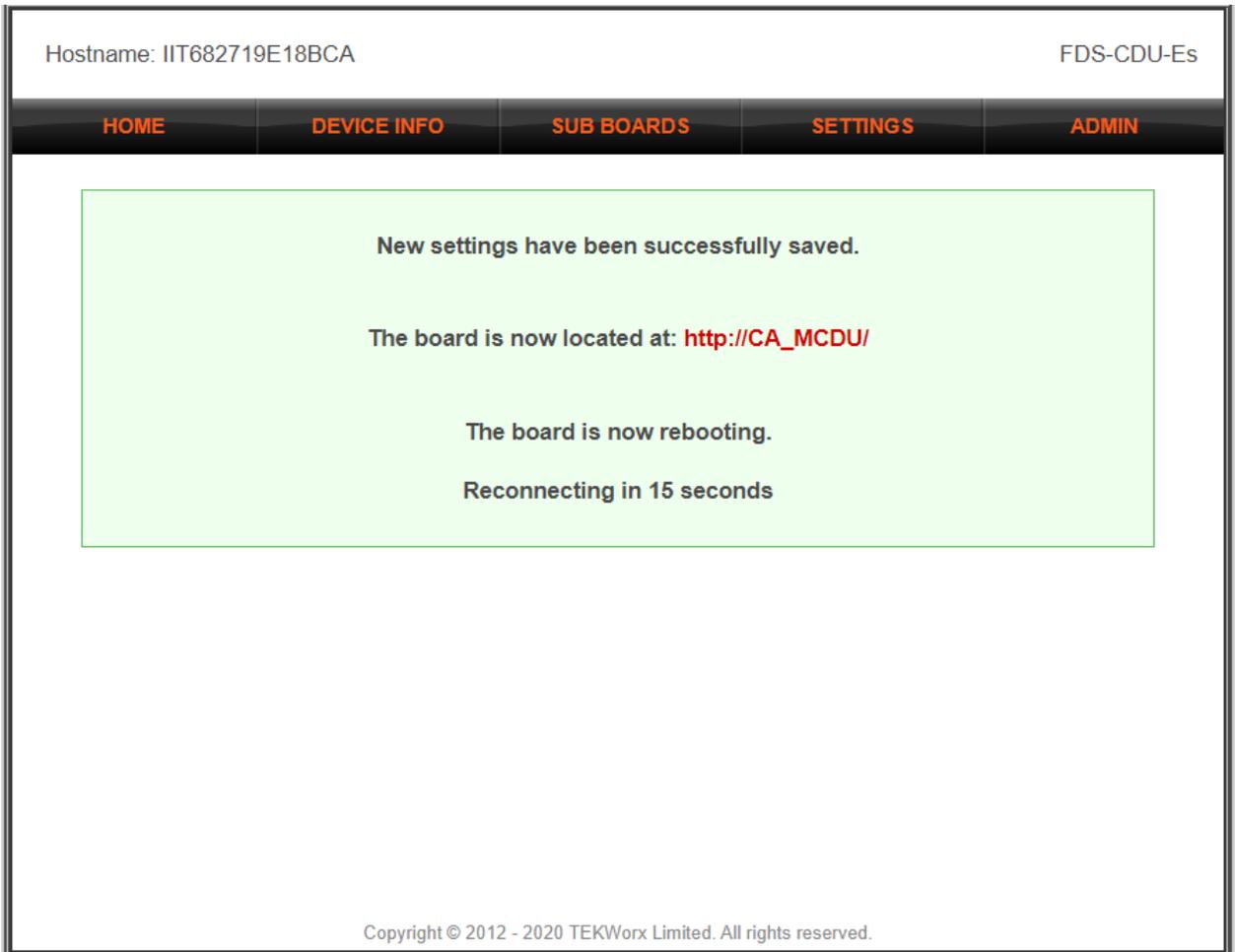
Save Configuration

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- Click on “Save Configuration”

**Save Configuration**

- The Board will Reboot, the new Hostname will be shown.



Do the same thing for the FO MCDU by changing the Hostname to “FO\_MCDU.

Close the Browser and start the ProSim Software.

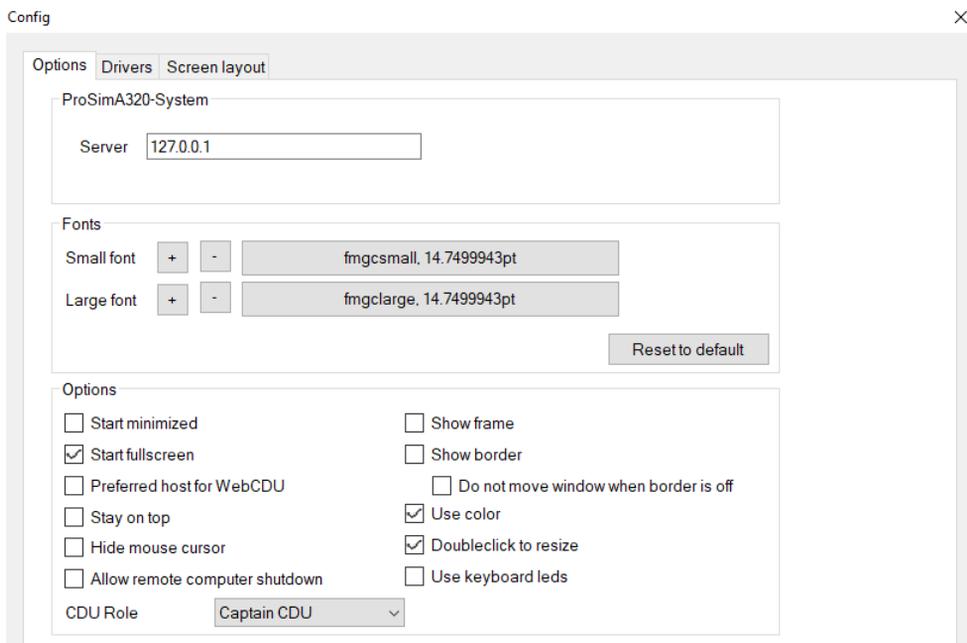
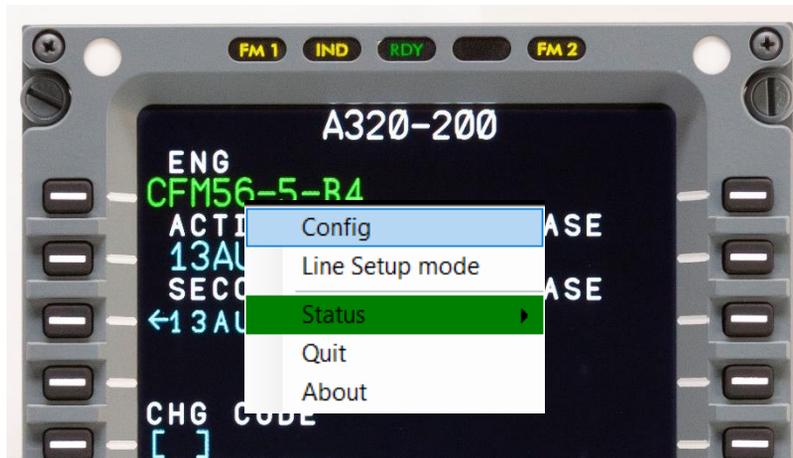
This is how ProSim identifies each MCDU and assigns the position.

- Open the ProSimCDU Software.
- Setup the MCDU software by selecting the CDU Position (Captain or First Officer)





- Open the Config and Select the MCDU Role (Captain or First Officer)
- We usually set the Font's to 14.95 for both
- Drag the CDU to the CDU screen.
- Follow the ProSim Instructions to use the CDU in Full screen.

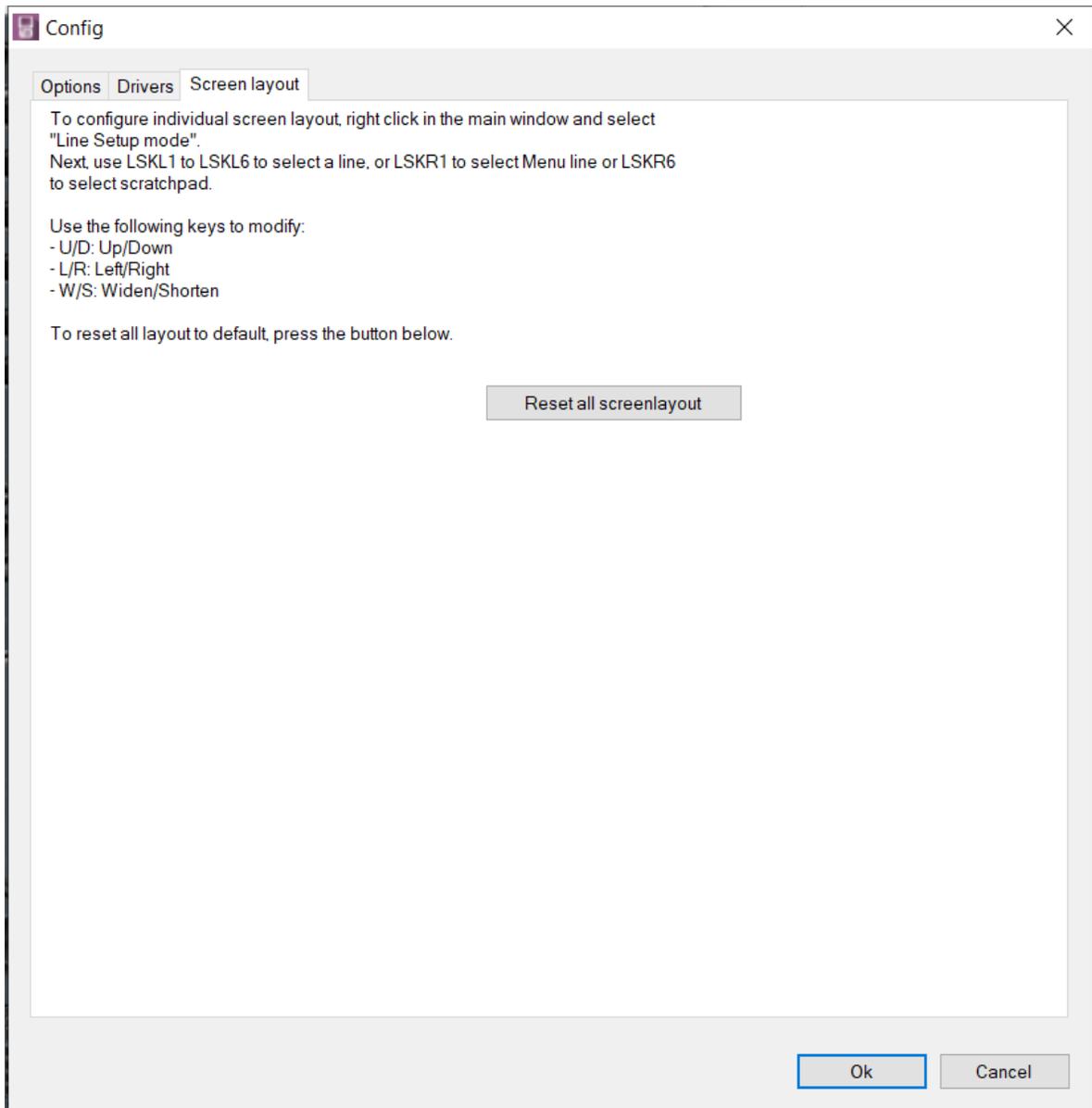


- Open the Config and Select the MCDU Role (Captain or First Officer)
- We usually set the Font's to 14.95 for both
- Drag the MCDU to the MCDU screen.
- Follow the ProSim Instructions to use the MCDU in Full screen.
- Start Fullscreen checked
- Show Frame and Show Border Unchecked.
- Click OK



Follow the Line Setup as per the ProSim Instructions.

Instructions show up in Config



Follow the Line Setup as per the ProSim Instructions.

Instructions show up in Config Tab under Screen Layout



Power Supply with adapters, Ethernet Cable supplied along with an IBL Cable for MCDU Key Backlighting.

## Terminology

<b>CDU</b>	<b>Computer Display Unit</b>
<b>MCDU</b>	<b>Multi-Function Control and Display Unit</b>
<b>LSK</b>	<b>Line Select Key</b>
<b>FDS</b>	<b>Flightdeck Solutions Ltd</b>
<b>GFX</b>	<b>Video Graphics Card</b>
<b>IBL</b>	<b>Integrated Back Lighting for FDS Panels</b>
<b>MIP</b>	<b>Main Instrument Panel</b>
<b>OH</b>	<b>Overhead</b>
<b>PED</b>	<b>Pedestal</b>
<b>TQ</b>	<b>Throttle Quadrant/Thrust Levers</b>
<b>Ethernet</b>	<b>Technology that connects wired local area networks (LANs) and enables the device to communicate with each other through a protocol which is the common network language. Devices are connected to a Network Switch and each device will have its own IP Address.</b>