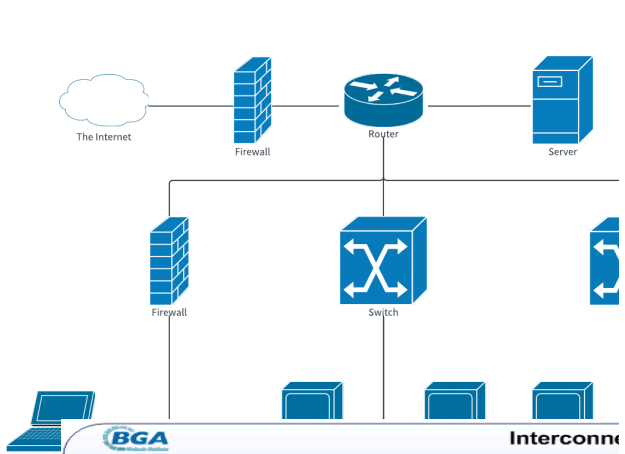
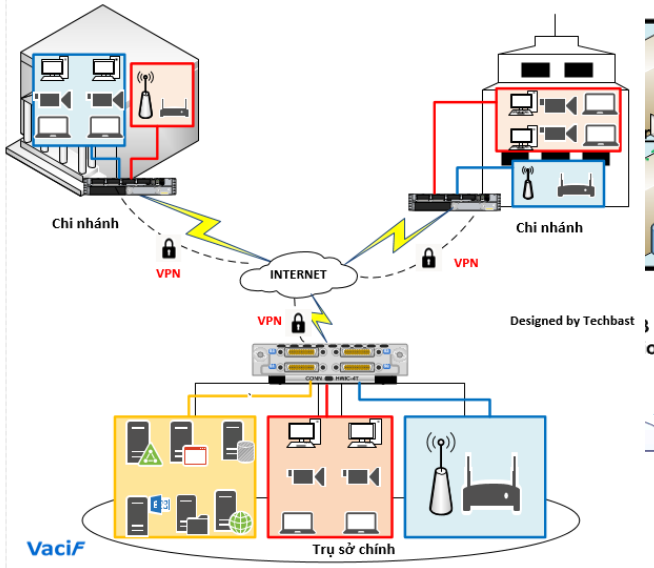
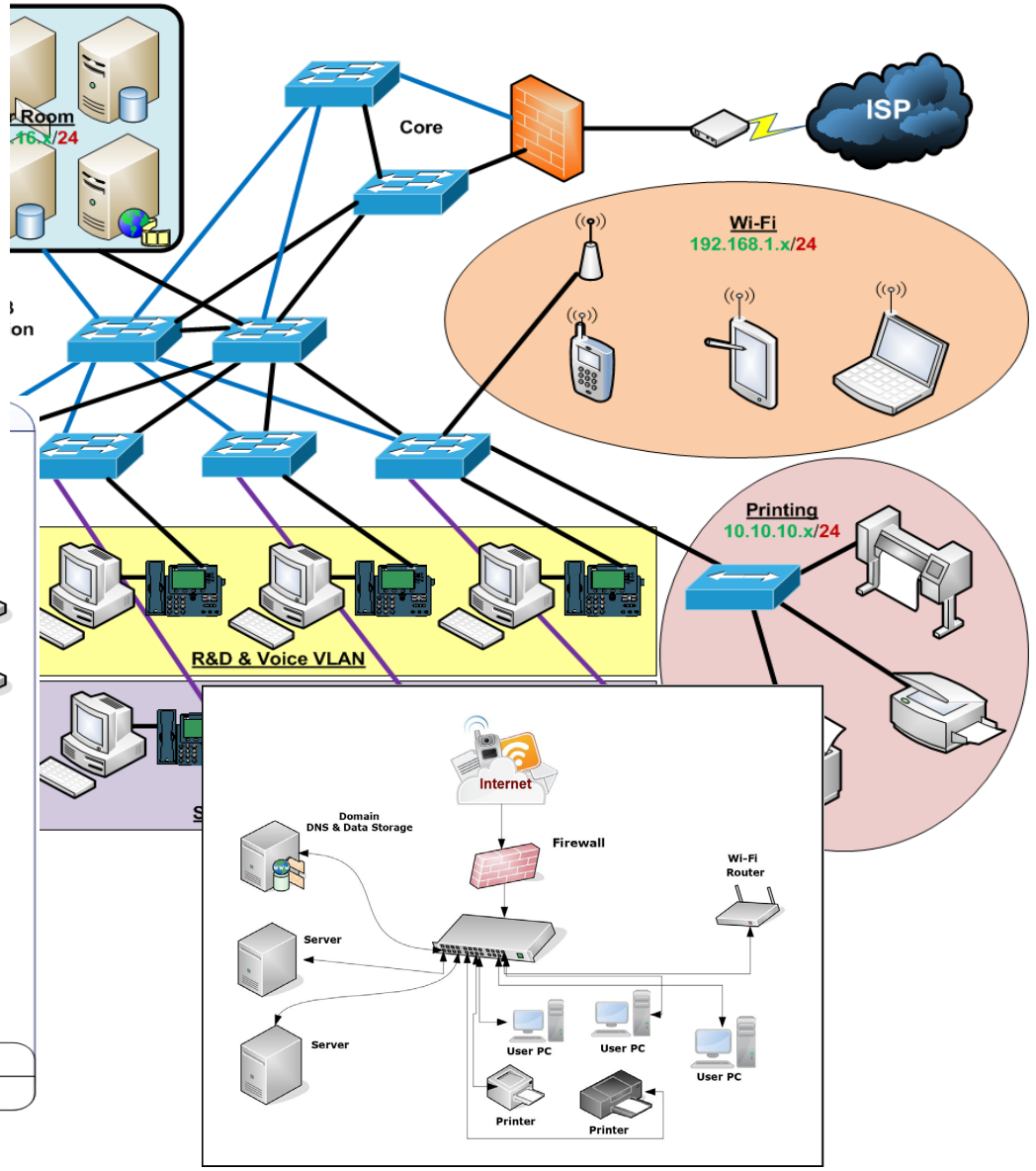
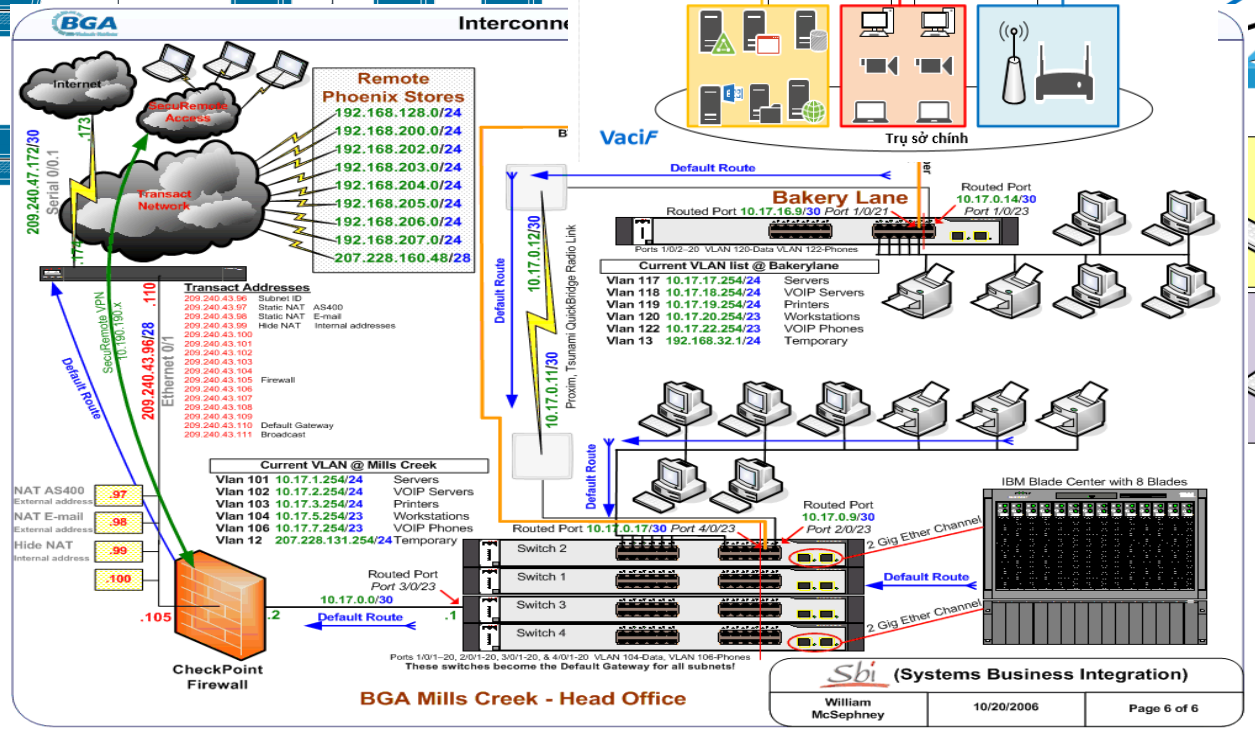
Lab Orientation





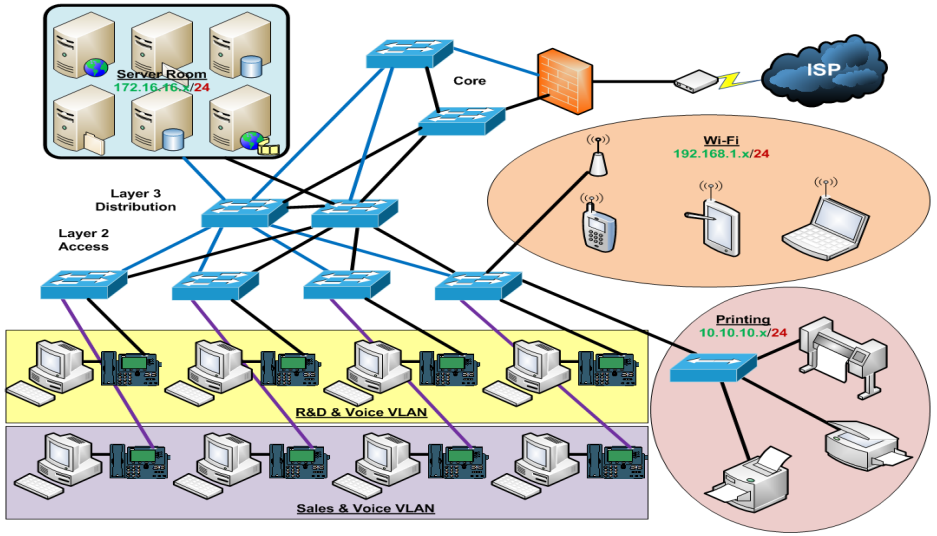


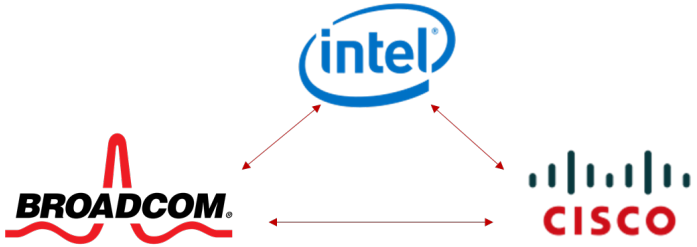


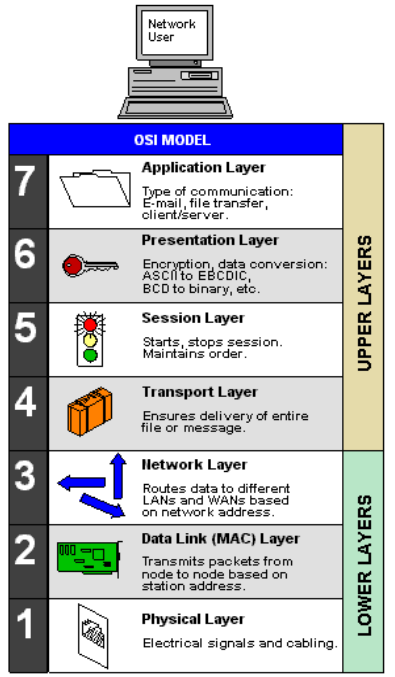
Lab Orientation

Summery

- Things you need to know.
- Class Room / Lab
- Closer look at the equipment available to you in the labs.
  - Inside of a Router
  - Inside of a Switch
  - 2901 Router
    - Basic Ports on a 2901 Router
    - Back of a module, connection to system
    - HWIC-1GE-SFP / HVIC-2A-S / WIC-4ESW Switch
    - HWIC-2FE / HWIC-2SHDSL, 2 DSL (RJ11) / HWIC-4B-S/T (ISDN)
    - Serial Ports
    - VIC3 FXS/DID / VIC2-4FXO / VIC2-2FXO
    - VWIC-4MF-T1/E1 / NM-ESW-16
- Lab Network
- Lab Time
- Your Equipment
- Serial Ports & What equipment is available?
- Pod Sheets
- End of Class in the Labs







FANSHAWE

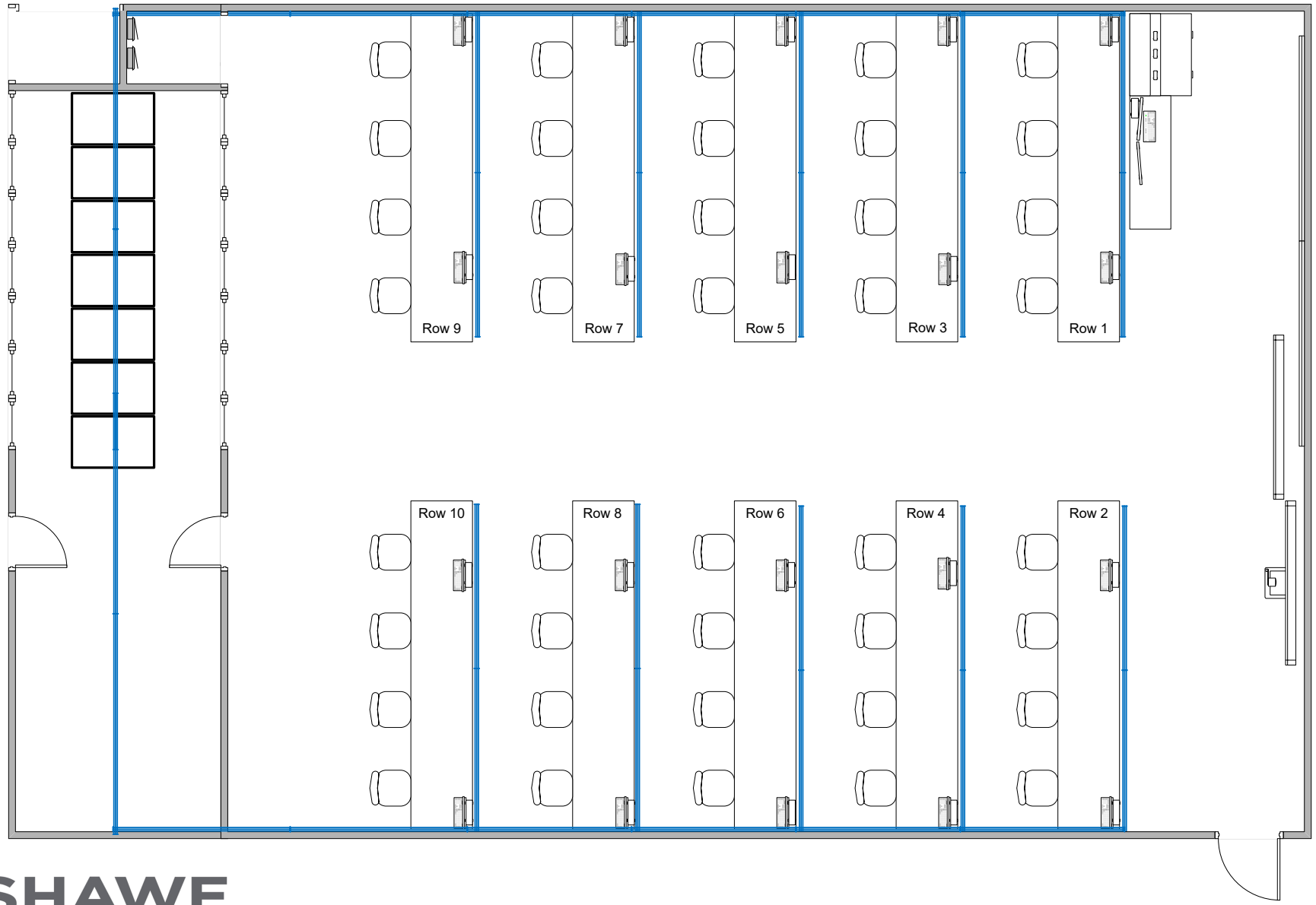
Things you need to know.

- Professor: Jeff Grose
- Contact: j_grose@fanshaweonline.ca
- Lecture Room/Times: Online – See FOL
- Lab Room/Times: Online – See FOL

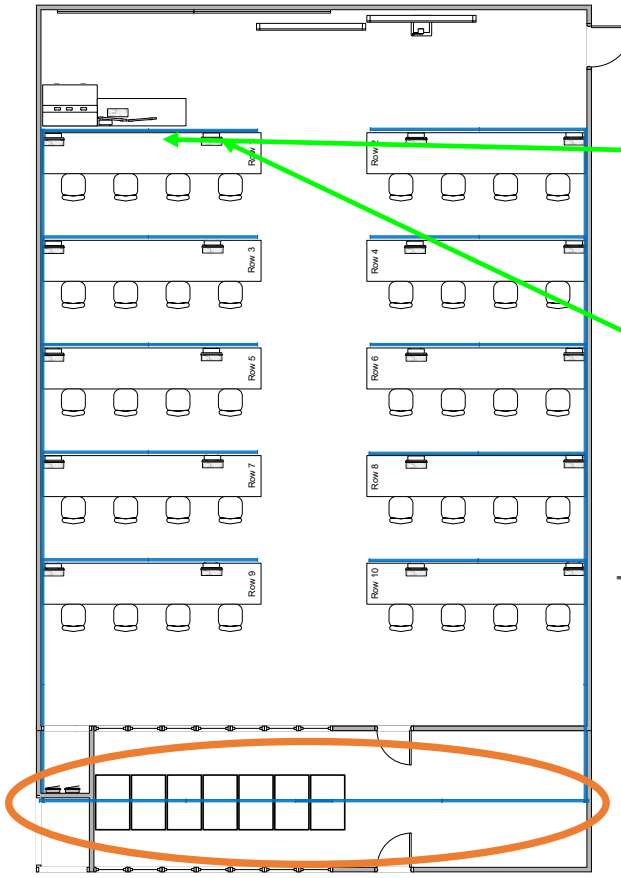
- Email must have a subject that incudes
- Subject: “INFO-6047-**xx** <then your subject>”
- Where **xx** is you section number
- If your subject line is not configured as above, your message will be **ignored**!

- The professor will not chase you for an assignment.
- You need to manage **your** time.
- When doing a timed assignment / test / exam the professor is **NOT** required to give warnings, as to how much time is left before the deadline!
- When a deadline for assignment / test / exam is past, the professor **WILL NOT** except a submission after the deadline **FOR ANY REASON**!

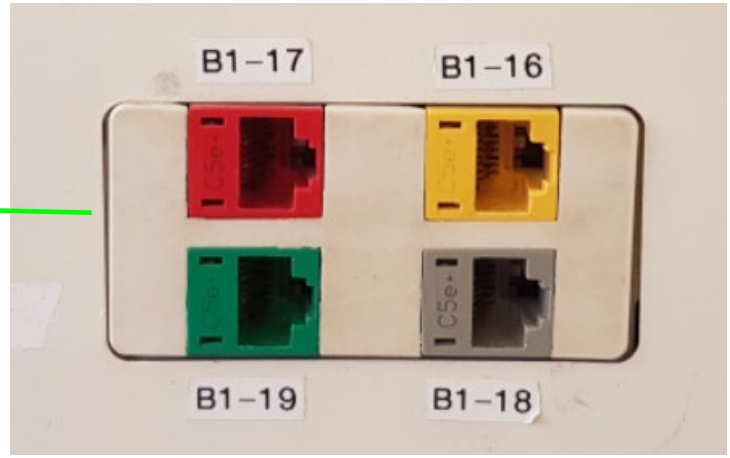
Class Room / Lab



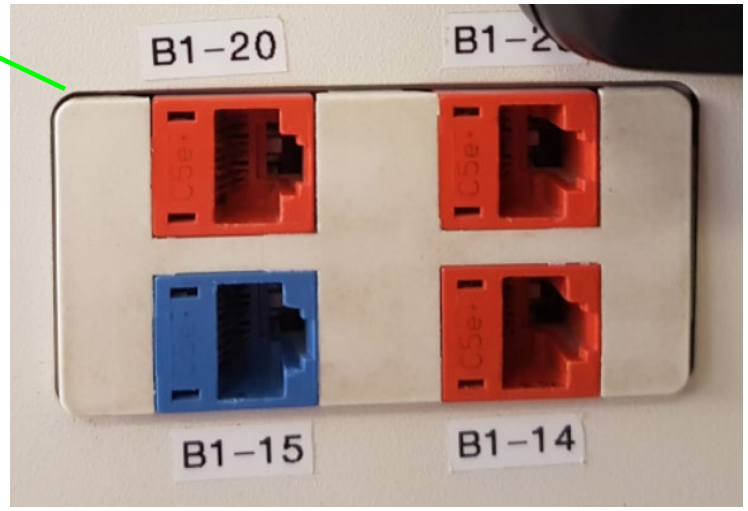
Class Room / Lab (Continued)



Row 1

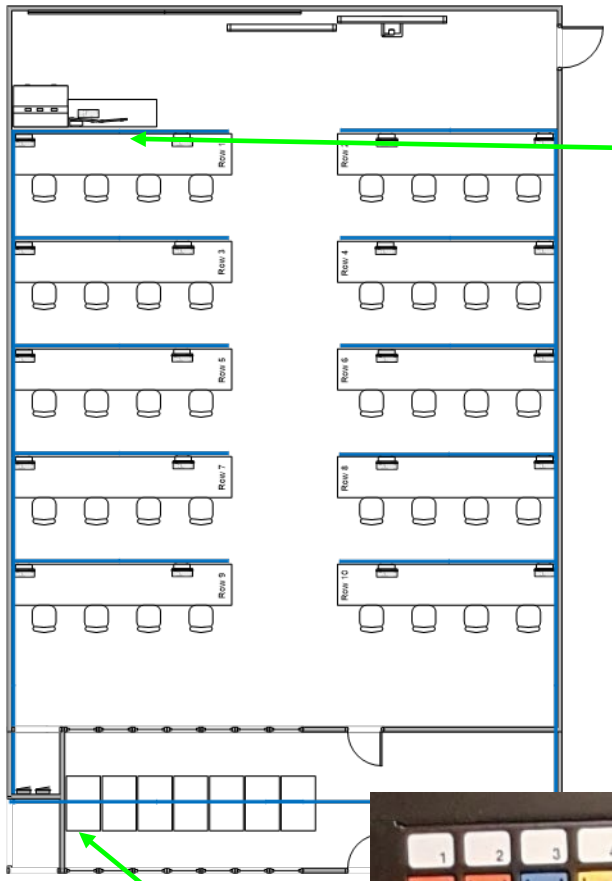


The class rooms 2010-2013 have a common equipment room, the connectors on your desk connect you to one of the equipment cabinets.

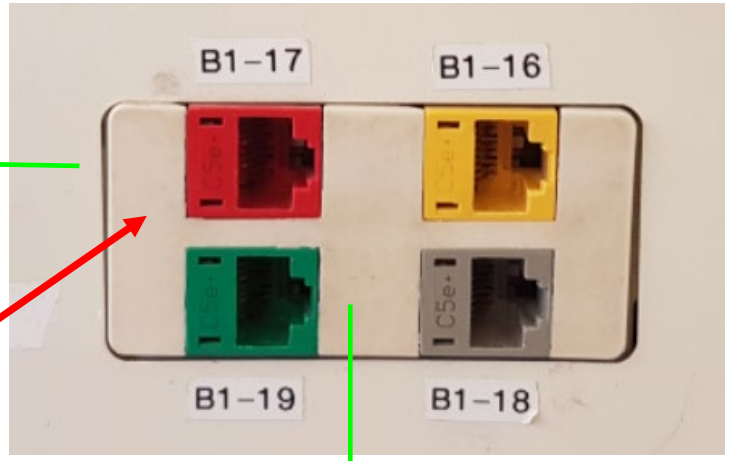


The desk top connectors in room 2013 start at 1 and go to 12, room 2010 start at 13 and go to 24

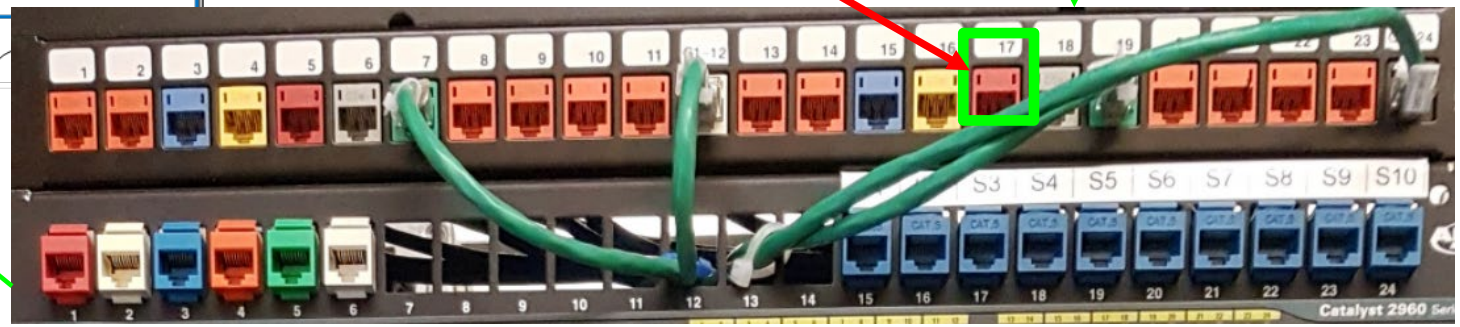
Class Room / Lab (Continued)



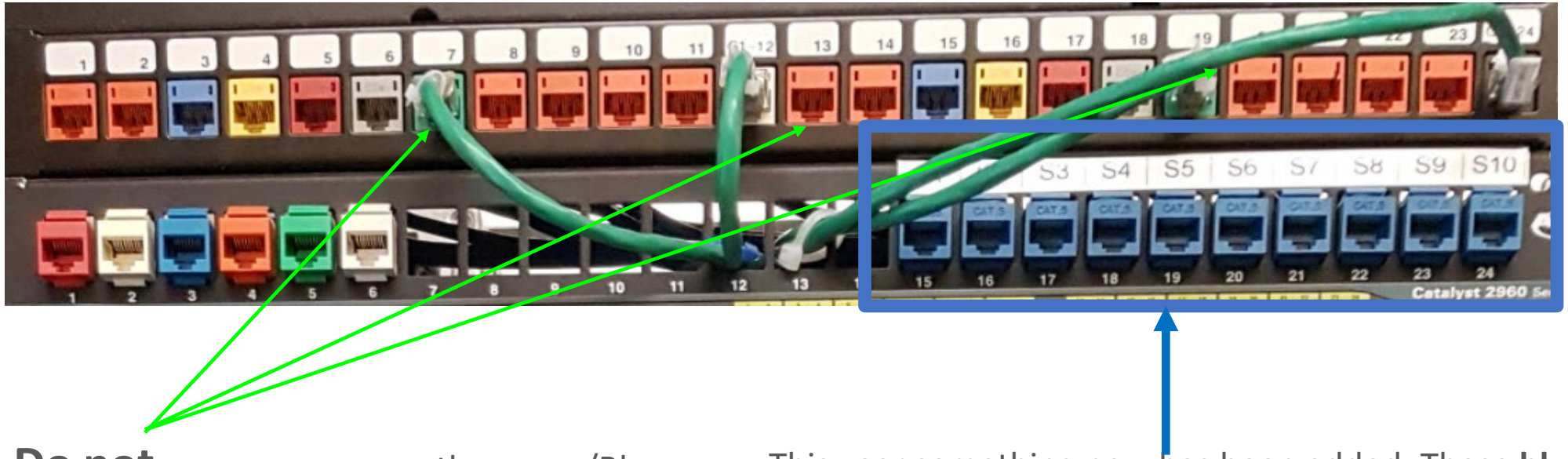
Row 1



In this case
B - is for the room 2010
1 - is the row / equipment cabinet #
17 - is the RJ45 #



Class Room / Lab (Continued)



Do not remove, or move the green/Blue cables for any reason!

In room 2013 jacks 7, & 12 are for special use.
In room 2010 jacks 19, & 24 are for special use.

This year something new has been added. These **blue** connectors.
The console connections (blue rollover cables) for the switches are now routed to the front of the cabinets.

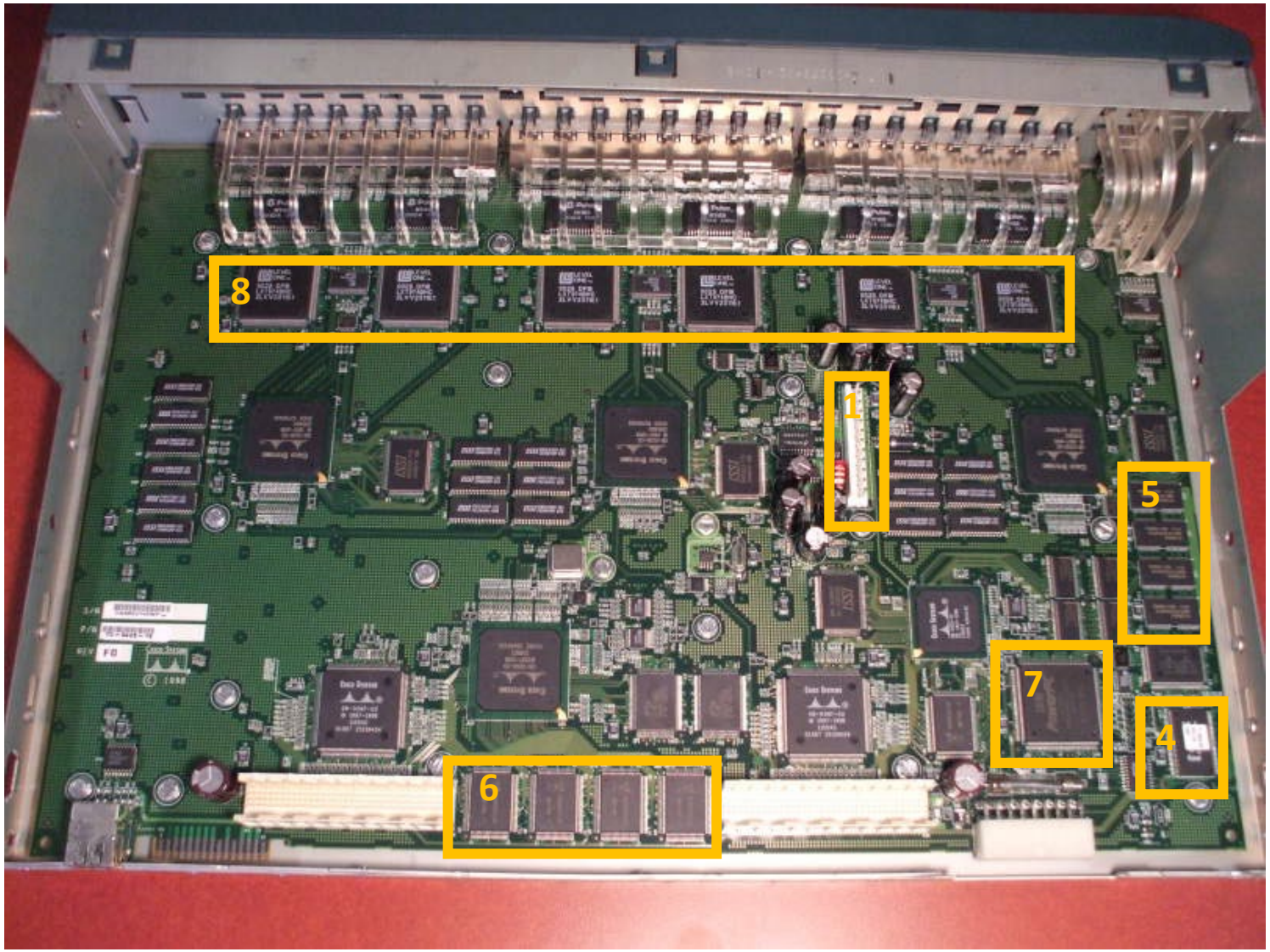
Closer look at the equipment available to you in the physical labs.

Inside of a Router

1. Power Supply
2. WIC (WAN Interface Card)
3. Fan
4. ROM
5. SDRam
6. NVRam
7. CUP
8. AIM (Advanced Integration Module)

Inside of a Switch

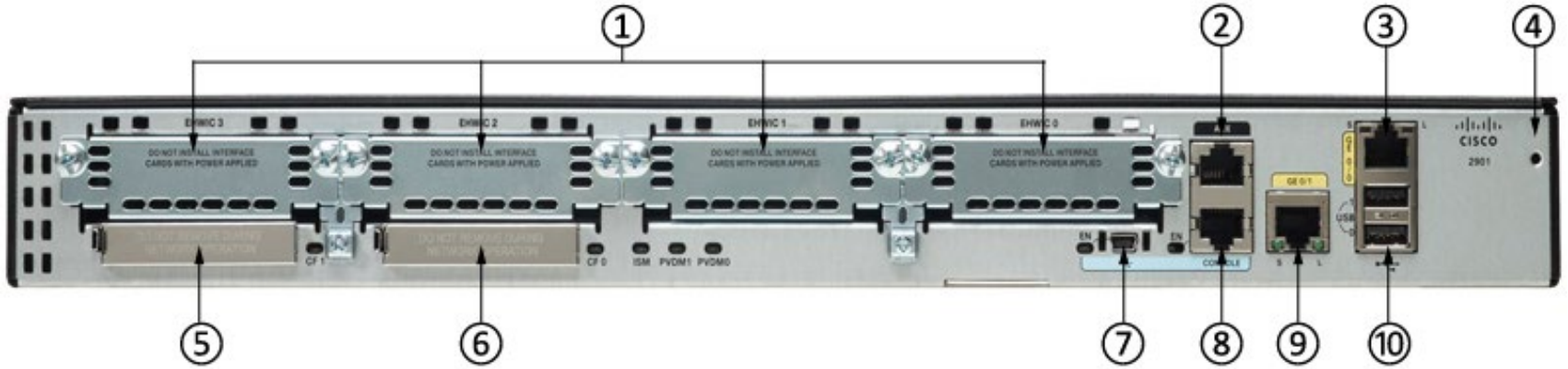
1. Power Supply (Off Screen)
2. ~~WIC (WAN Interface Card)~~
3. Fan (Off Screen)
4. ROM
5. SDRam
6. NVRam
7. CUP
8. ASIC (Application=Specific Integrated Circuit)



2901 Router

This is what a 2901 router looks like in the real world

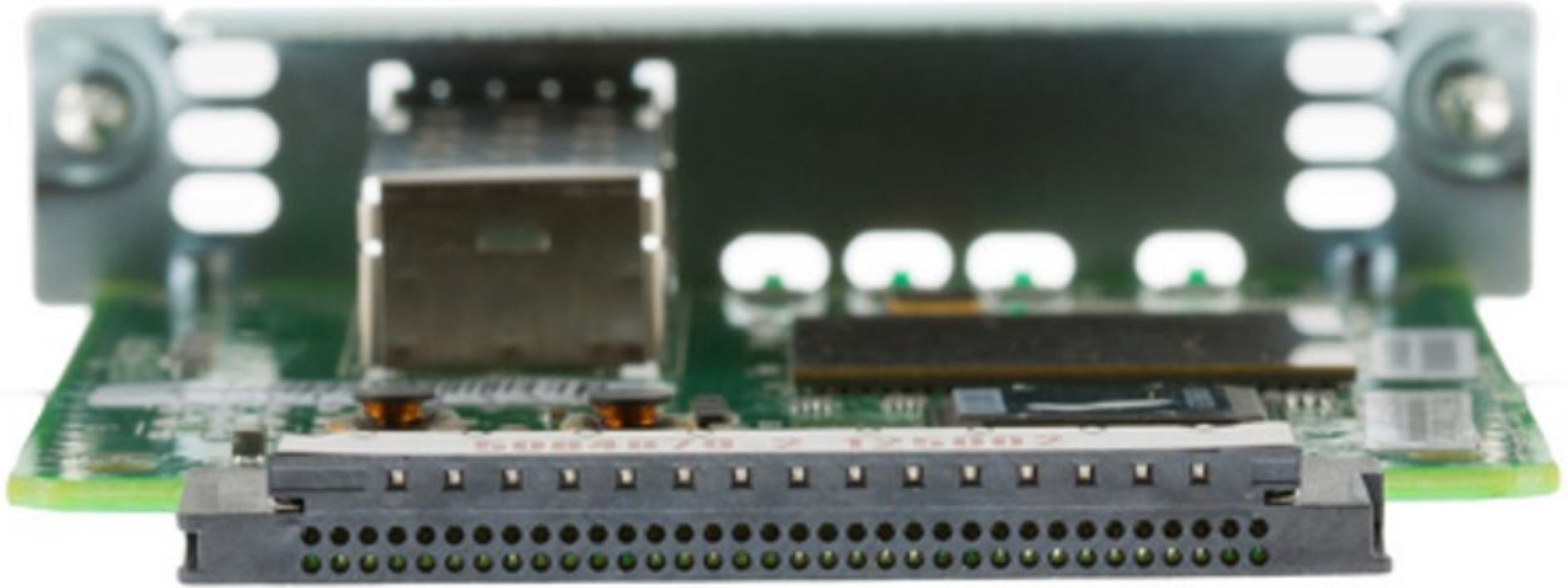
1) *4 small Expansion Slots*
2) *RJ45 Serial Aux Port*
3) *Gigabit Ethernet Port 0/0*
4) *Grounding screw hole*
5) *CF card Expansion Port*
6) *CF card Expansion Port*
7) *USB Type B Console Port*
8) *RJ45 Serial Console Port*
9) *Gigabit Ethernet Port 0/1*
10) *USB Type A Upgrade Ports*



This is what a 2901 router looks like in the "Cisco Packet Tracer" or PT virtual world

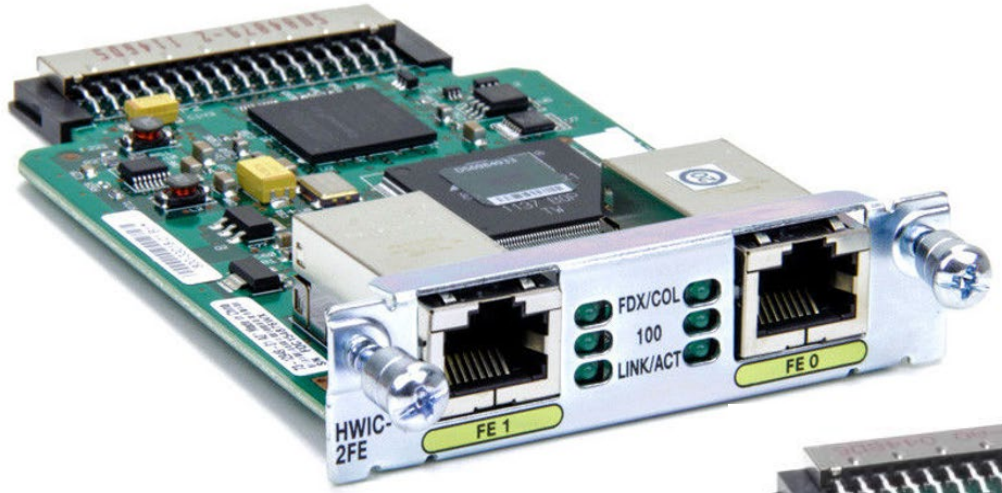
Basic Ports on a 2901 Router

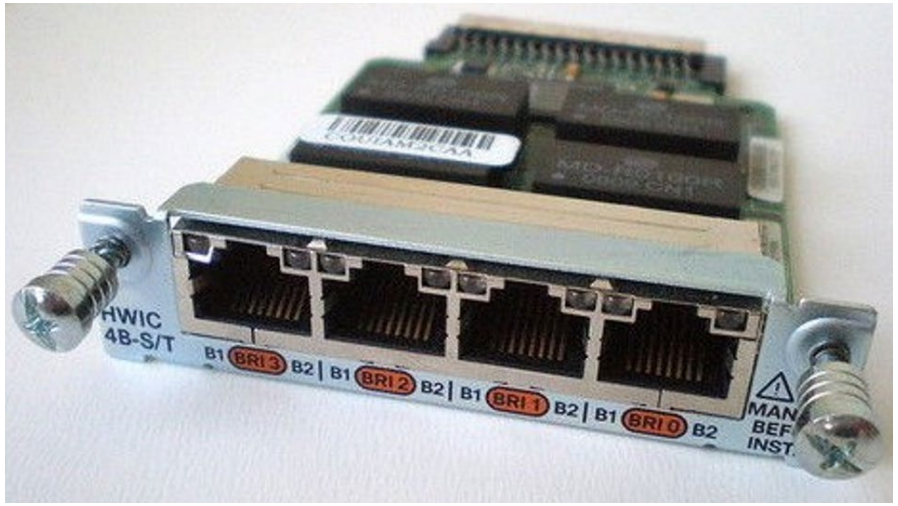
Back of a module, connection to system



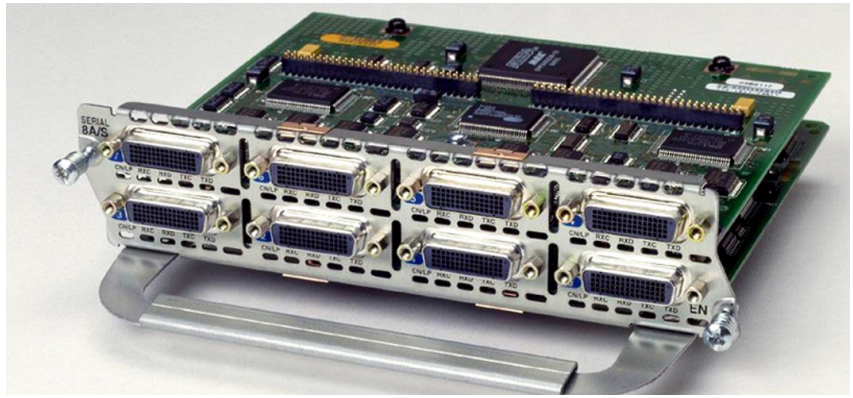
HWIC-1GE-SFP / HVIC-2A-S / WIC-4ESW Switch

HWIC-2FE / HWIC-2SHDSL, 2 DSL (RJ11) / HWIC-4B-S/T (ISDN)





NM-8AS

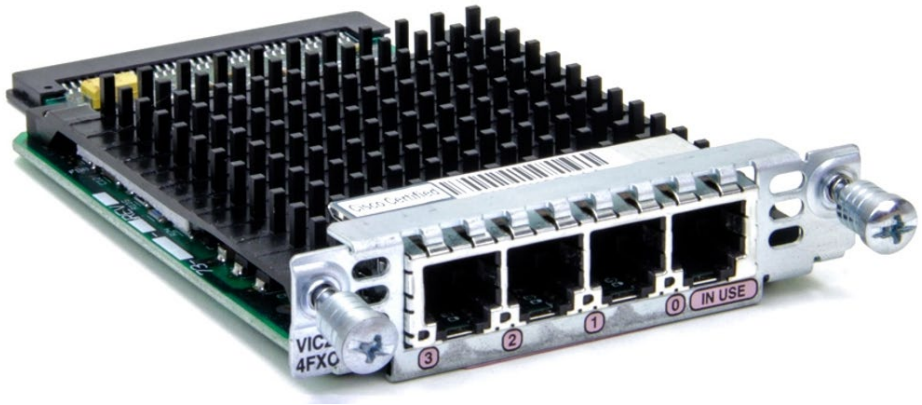


HWIC-16A
(Asynchronous ports, RS232)

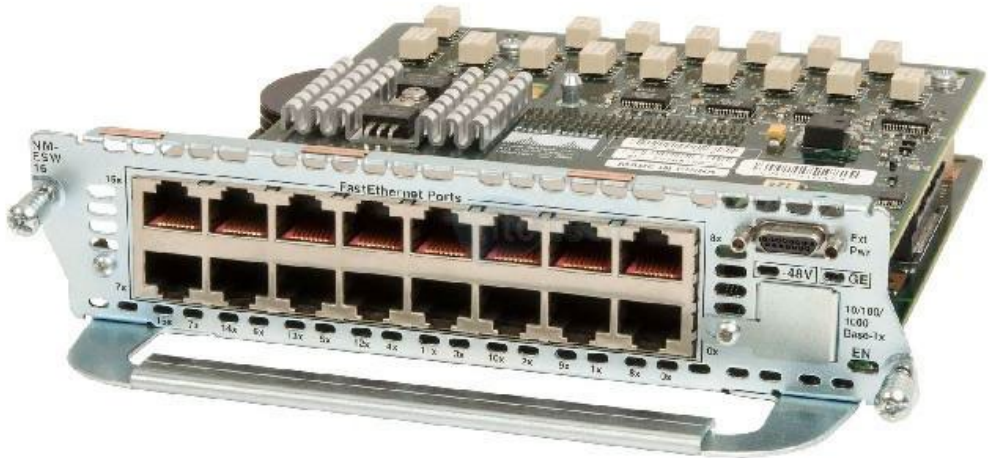
V.35 Serial Cable

8 Port RS232 cable

VIC3 FXS/DID / VIC2-4FXO / VIC2-2FXO
(Station Ports) / (Office Ports) / (Office Ports)



VWIC-4MF-T1/E1 (T1 1.554Mb/s, E1 2.048Mb/s) / NM-ESW-16



Lab Network

Fanshawe's network:

- Wireless.
- wired (4 port Hub at each desk).

NOTE:

From time to time, depending on the IP addresses used in the configuration of your switches and routers, and if you are connected to Fanshawe's network at the same time (hard wired or wireless) you may discover things don't work the way you thing they should. You May need to disconnect from any other network.

Depending on the configuration of your firewall (on your laptop) you may need to disable it to be able to ping your laptop.

Your Equipment

You will need you laptop.

Fanshawe's laptop requirements can be found @
http://connect.fanshawec.ca/laptops.html

You will need a cable kit.

This can be purchases at the Fanshawe store.

This cable kit should include a USB to Serial connector.
Serval strait through and crossover cables.
A DB9 to RJ45 blue rollover console cable.

Of course this is not needed if this is and On-Line course

You will need to install one of the following.

Putty.
TeraTerm.
SecurCRT.
Others.
Which ever you decide to install and use you need to know all of the function (How to use it).

No you can't use Microsoft's Hyper Term!

Your Equipment (Continued)

Yes it is **YOUR** equipment.

You are responsible for it's condition.

What does this mean:

If you where to show up for an assignment / test / exam with out some or all of your equipment, or it is not in working order, you will probably fail.

If you show up to class with out some or all of your equipment you need, or it is not in working order, you will **not** be loaned equipment for use in that class, this includes the PCs on the desktops.

Note:

Unless specifically told you are not to use the PCs on the desk top they are to remain **OFF**, if you come into class and find the PC at your desk is on please turn it off.

Serial Ports & What equipment is available?

30 Minutes

Plug in a console cable (rollover cable) and cross connect to a cisco console connection.

Lets get a serial connection working.

also

Take the hand out and fill in the blanks.

- What is it, switch or router.
- What is it's model number.
- How many ethernet ports does it have.
- Is it a layer 2 or 3 device.

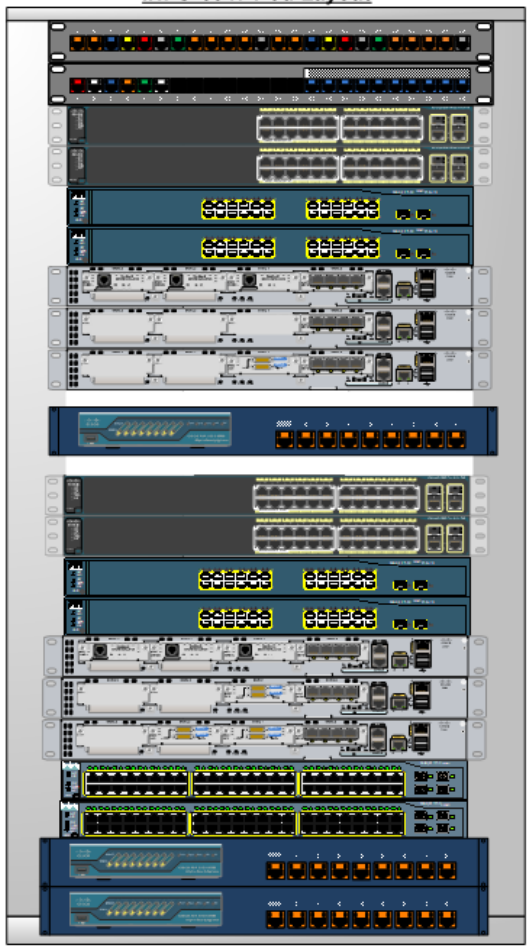
Pod Sheets

INFO-6047-S18 **Pod/Row #:** **Date:** / /

Section
01 02 03 04
Please circle you section number

Week:

INFO-6047 Pod Layout



Equipment Coordinator: _____ _____
Name (Please Print) Signature

FANSHAWE School of Information & Technology

INFO-6047-S18 **Pod/Row #:** FANSHAWE School of Information & Technology

Student 1: Devices Used

Please enter the relative name of the equipment used (example... R1, R4, S1, S9)

_____ _____
Name (Please Print) Signature

Student 2: Devices Used

Please enter the relative name of the equipment used (example... R1, R4, S1, S9)

_____ _____
Name (Please Print) Signature

Student 3: Devices Used

Please enter the relative name of the equipment used (example... R1, R4, S1, S9)

_____ _____
Name (Please Print) Signature

Student 4: Devices Used

Please enter the relative name of the equipment used (example... R1, R4, S1, S9)

_____ _____
Name (Please Print) Signature

FANSHAWE School of Information & Technology

FANSHAWE

End of Class in the Labs

Before you leave (end of class).

Reset you switches and router (see lecture-01/Lab-01/lab-02)

(remove any configuration you may have done).

Collect all your cables.

Clean up your area

(leave things clean and tidy)