



*A Networking Technology Convergence Resource Center
at CCCCD*

*GOAL - Establish a fully-integrated Network for
the purpose of teaching Voice, Data, Image, and
Video Technologies*

Keystone



DEX 200



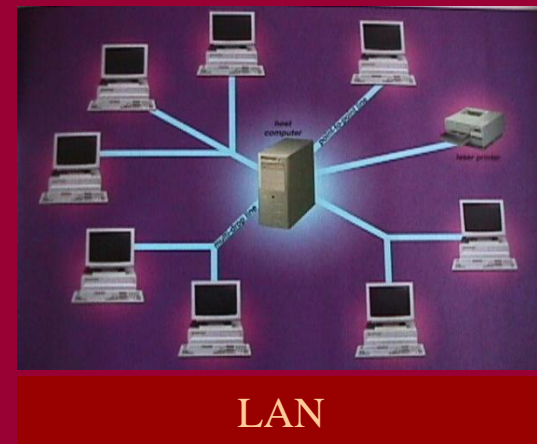
Need for Convergent Instruction

- ◆ Demand for Integrated Services
- ◆ Continuum of new ideas becoming realities daily
- ◆ Major Shortage of Technically Qualified People

Present

◆ A Mature Computer Networks Program in Place

- Microsoft NT
- Novell NetWare
- UNIX







Present

- ◆ Degree offered
 - Associate of Applied Science in Computer Networking Technology

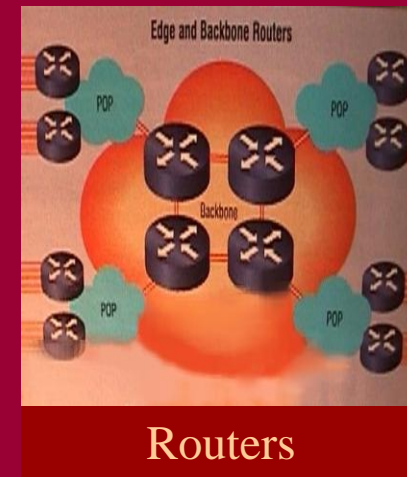


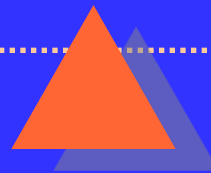
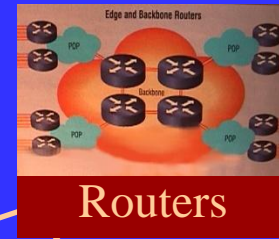
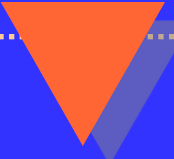
Present

- ◆ Courses with “hands-on” preparation for:
 - Microsoft Certified Systems Engineer (MCSE)
 - Novell Certified Network Engineer (CNA, CNE, and ECNE)
- ◆ CCCCD certificates - Computer Networking
 - Hardware
 - Software
 - Hardware/Software

Present

- ◆ We are a Cisco Regional Training Center
 - Routers and switches







Beginning September 1998

◆ Cisco Certifications

- **Networking Associate (CCNA)**
 - High school
 - CCCC
- **Networking Professional (CCNP)**
 - CCCC
- **Internetworking Expert (CCIE)**
 - Senior College

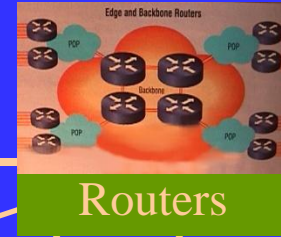
Beginning September 1998

◆ *Switching Systems*

- Digital Switch Corporation DEX 200,
- Nortel DMS xxx
- **Certifications programs needed**
 - ◆ Entry Level
 - ◆ Intermediate Level
 - ◆ Advanced Level



CO Switch

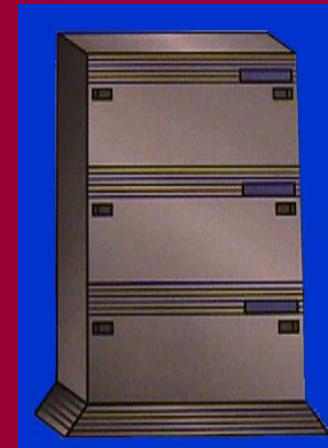


Beginning January 1999

◆ Switching Systems

– Meridian 1 Switch (PBX)

◆ Certification Programs needed



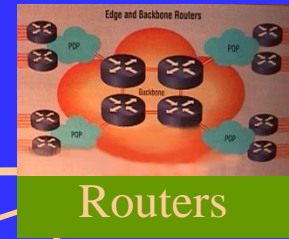
PBX



PBX



CO Switch



Routers



LAN



LAN

June 1999

◆ *PCS*

– Certification Preparation

- ◆ Voice
- ◆ Data



PCS



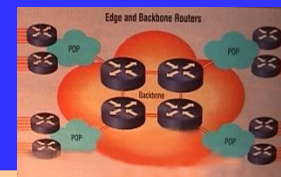
PCS



PBX



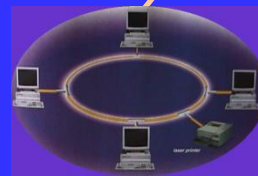
CO Switch



Routers



LAN



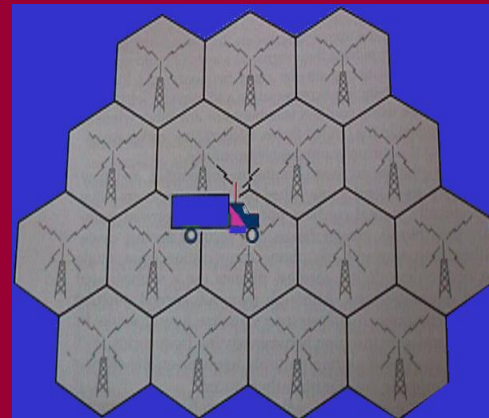
LAN

January 1999

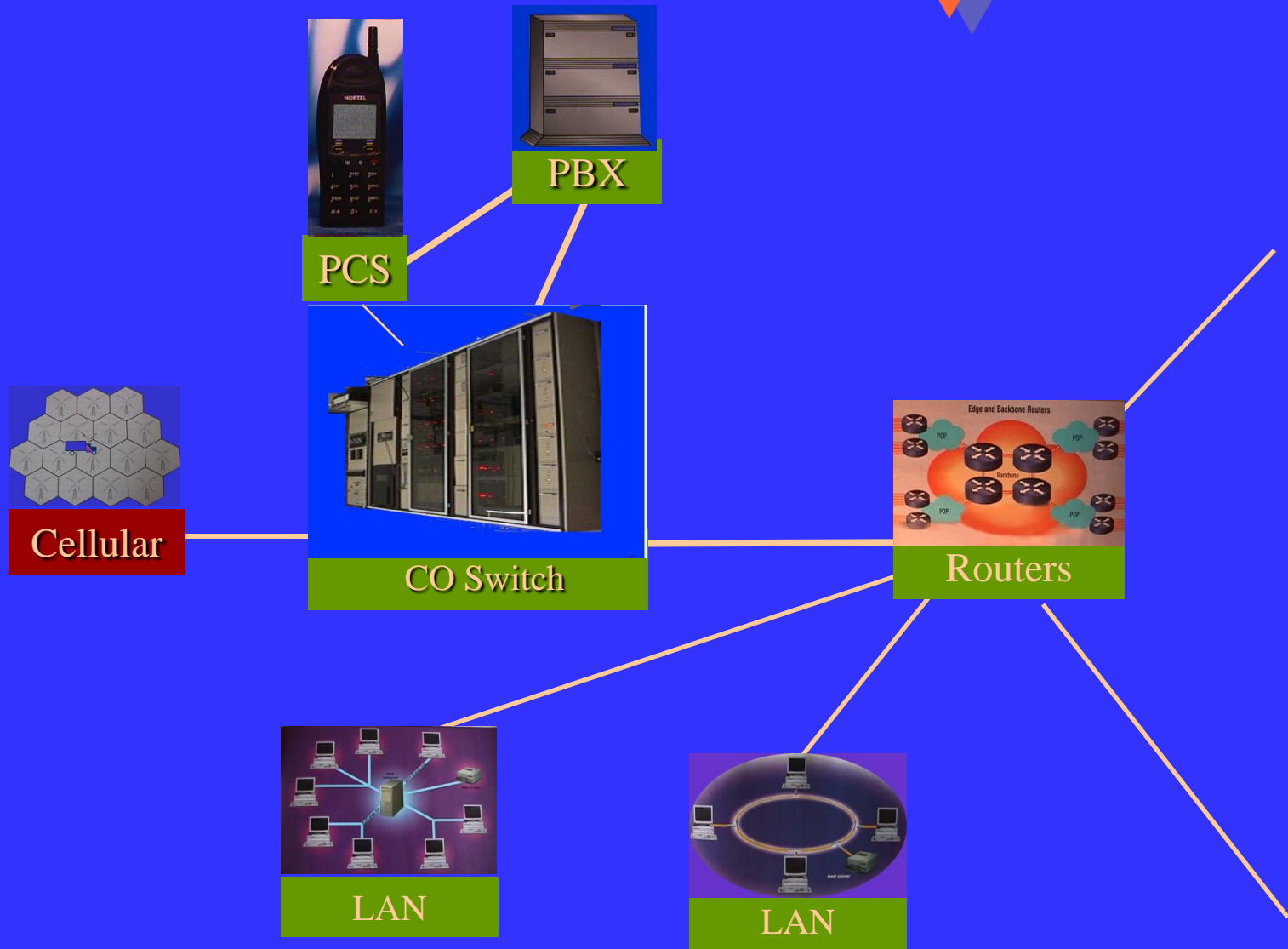
◆ *Cellular*

– *Certification Preparation*

- ◆ Voice
- ◆ Data



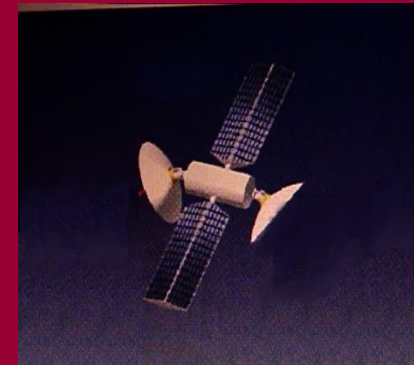
Cellular



1999

◆ Satellite Networks - Constellations

- Low Earth Orbit Networks (LEO)
- Hybrid Networks
 - ◆ Geosynchronous
 - ◆ Mid Earth Orbit
 - ◆ LEOs



Satellite



Satellite



PCS



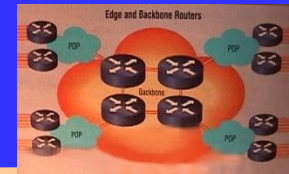
PBX



Cellular



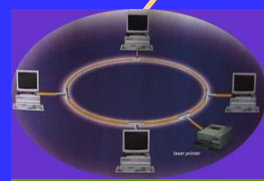
CO Switch



Routers



LAN



LAN



1999

◆ Satellite for Education

– American Satellite Radio Corporation
(AMSAT)

- ◆ Weber State
- ◆ University of Surrey
- ◆ Naval Post Graduate School



Satellite



PCS



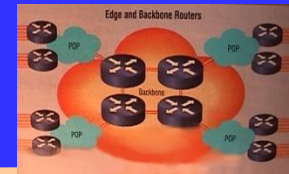
PBX



Cellular



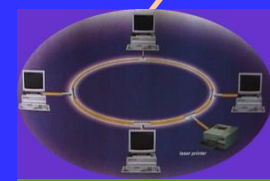
CO Switch



Routers



LAN



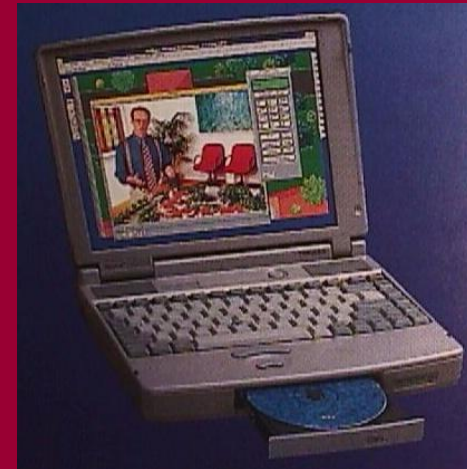
LAN

2000

◆ *Wireless PC*

– *Certification preparation*

- ◆ Voice
- ◆ Data
- ◆ Image



Wireless PC



Satellite



PCS



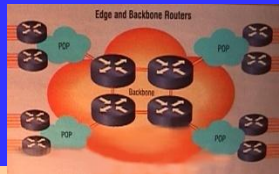
PBX



Cellular



CO Switch



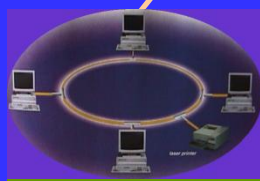
Routers



Wireless PC



LAN



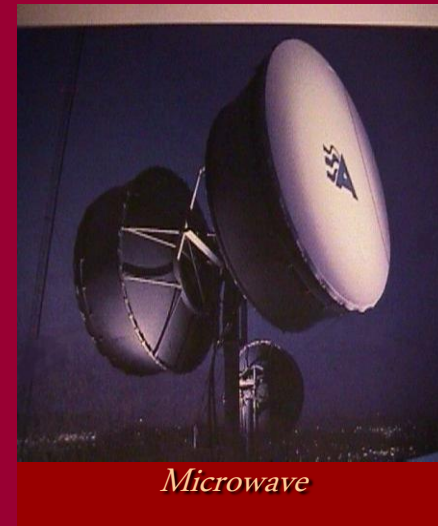
LAN

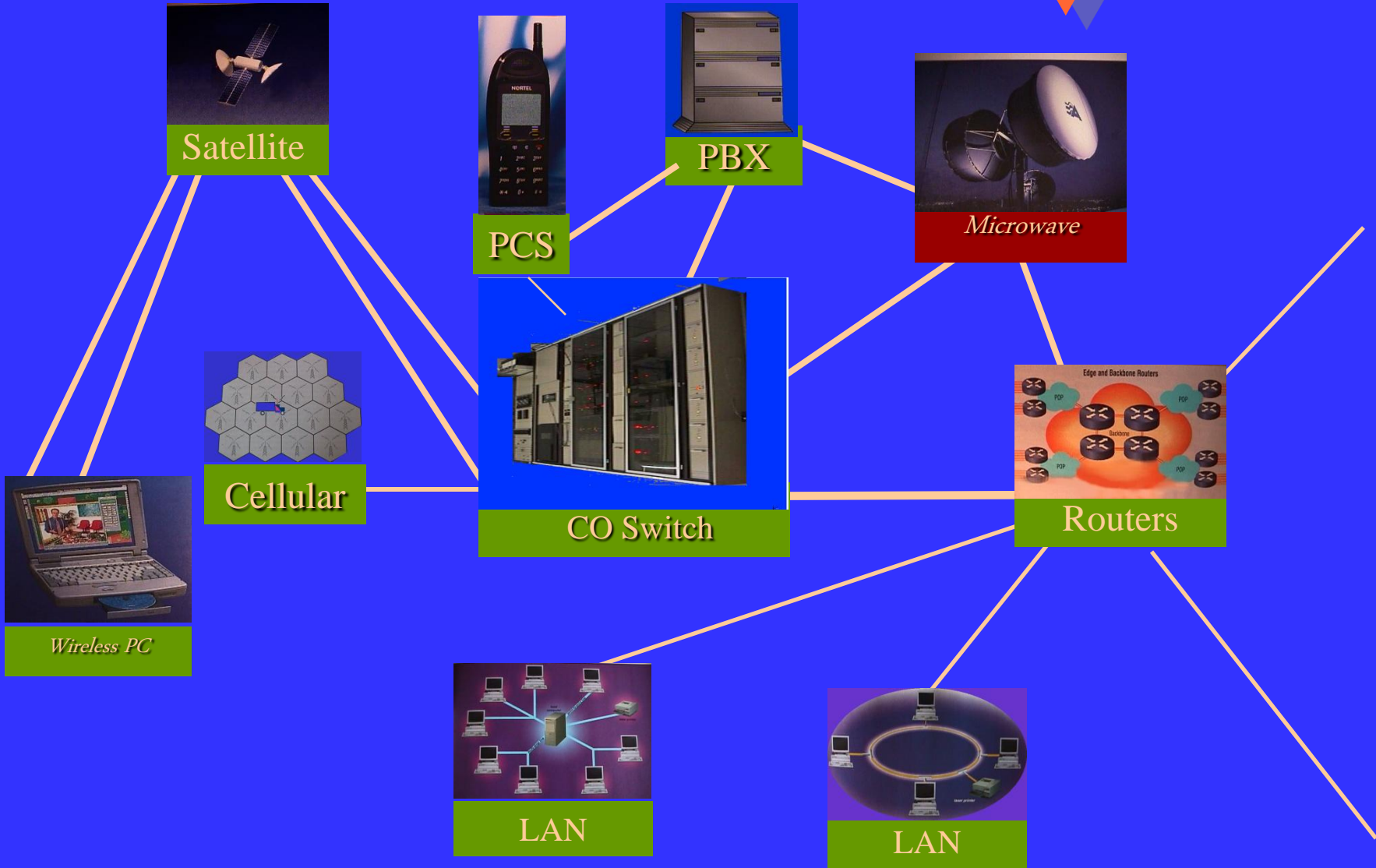
1999

◆ *Microwave*

– Certification Preparation

- ◆ Voice
- ◆ Data
- ◆ Image





Future

◆ *Cable*

– Certification Preparation

- ◆ Voice
- ◆ Data
- ◆ Image



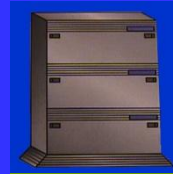
Fiber



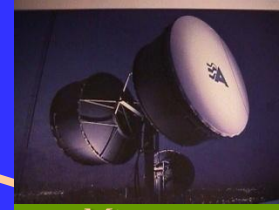
Satellite



PCS



PBX



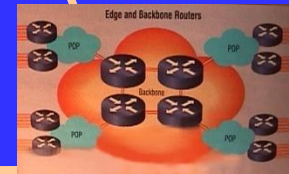
Microwave



Cellular



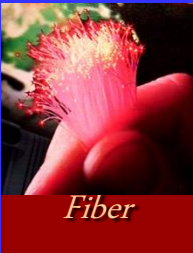
CO Switch



Routers



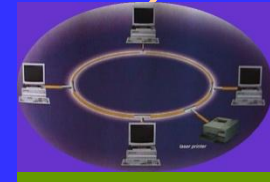
Wireless PC



Fiber



LAN



LAN



Summary Computer Networking Certifications

◆ Certificate preparation

- MCSE
- CNA, CNE, ECNE
- A+

◆ CCCCD Certificates

- Computer Networking Hardware
- Computer Networking Software



Summary Tcom Certifications

- ◆ Customer Service
- ◆ Instrumentation
- ◆ IP
- ◆ Management
- ◆ Manufacturing
- ◆ Network Design, Planning
- ◆ Research
- ◆ Switching Technology
- ◆ Systems Development
- ◆ Transmission Technology
- ◆ Testing, Analytical
- ◆ Wireless Communications



Needs

- ◆ Identify TCOM Jobs
- ◆ Define the skill sets required for these technical positions
- ◆ Define a Certification programs
- ◆ Define Courses to meet these needed skill sets
- ◆ Need Advisory Council to provide Guidance



Conclusion

- ◆ Convergent Technology is happening
- ◆ CCCCD striving to fill the market demand with qualified people resources
- ◆ CCCCD some key hardware in place
- ◆ Certifications programs are being developed
- ◆ **More Specializations and Certifications need to be developed**

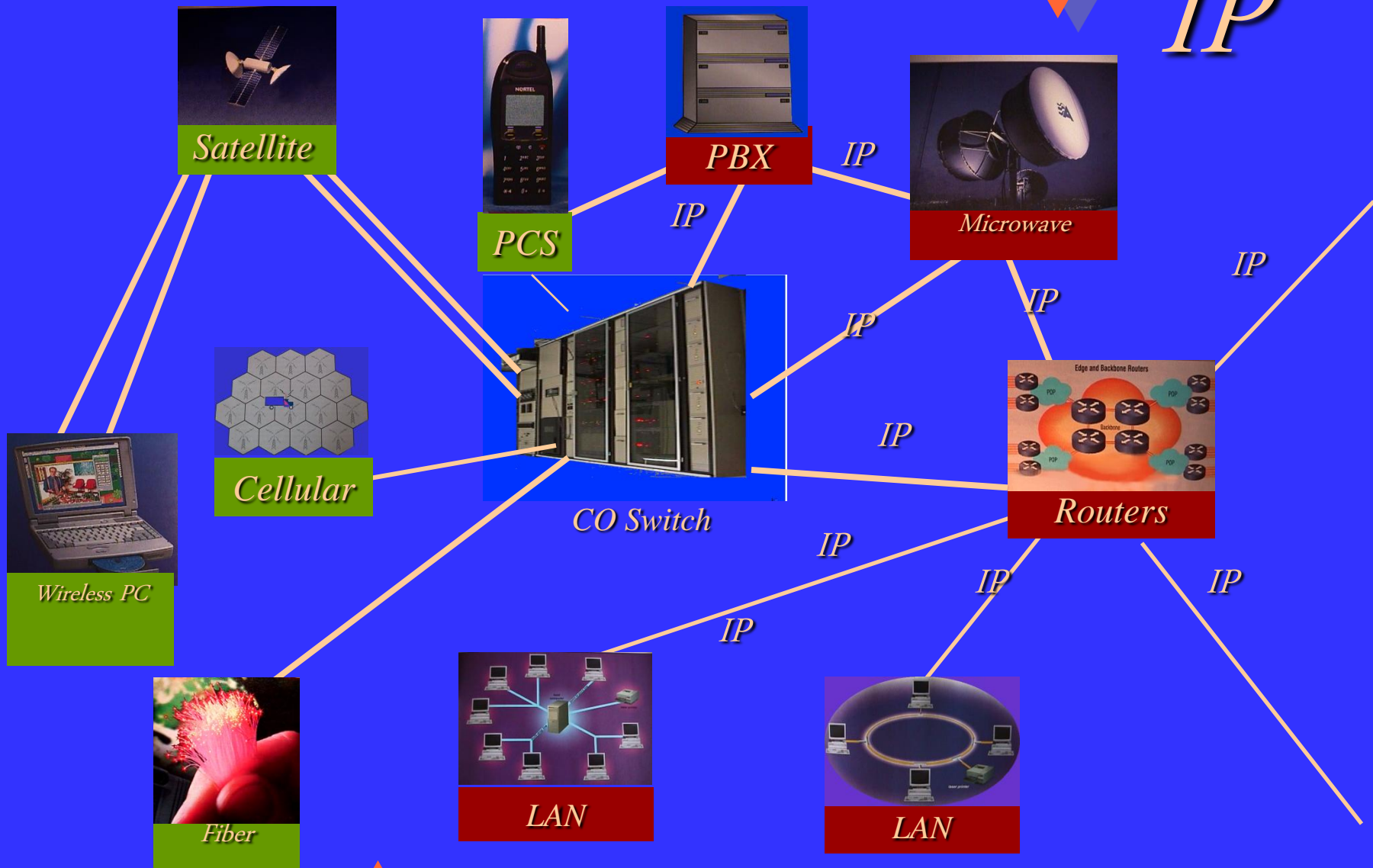


*Networking Technology Convergence Resource Tools
now in place at CCCC*

*On our way to becoming a Fully Integrated Network for Teaching
Voice, Data, Image, and Video Technologies Across Multiple Disciplines*



IP



*Together We can Define the Most Needed
Tcom Certification Programs*

Questions

