

Technology Services



Technology Services



Mission

- Ensure the reliability of video, security and data communications at all locations.
- Assist the school communities in gaining access to educational networked services.
- Assist the school communities in planning and implementing local technology services.
- Maintain archived data and historical information on students, staff, grants and programs.

Technology Services



Services

- Coordinate professional and timely resolution of network troubles.
- Provide problem management for District communications services.
- Provide hardware, software and network configuration services. (Project Management)
- Provide Internet services.
- Manage network adds moves and changes to minimize disruption.

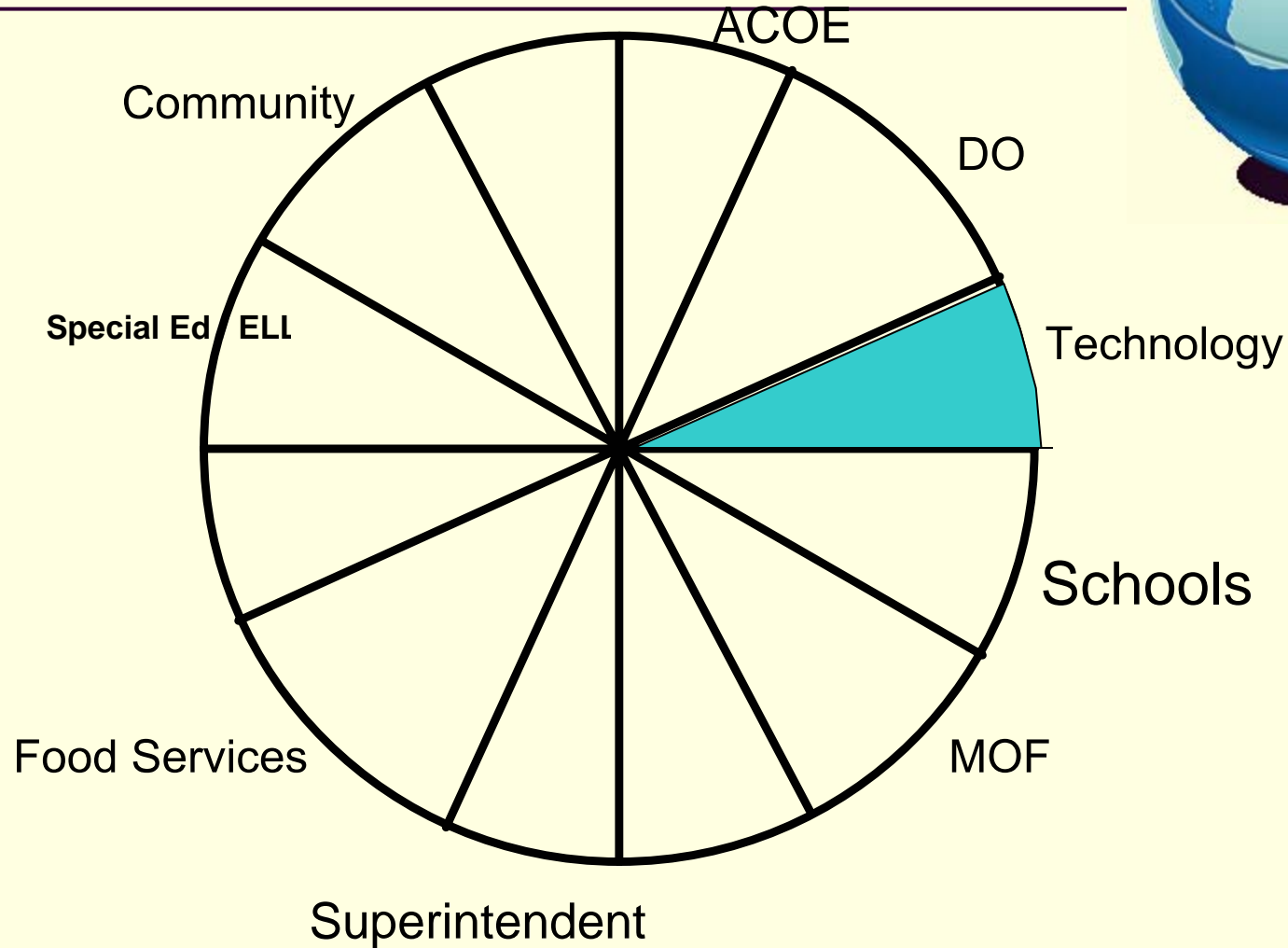
Technology Services



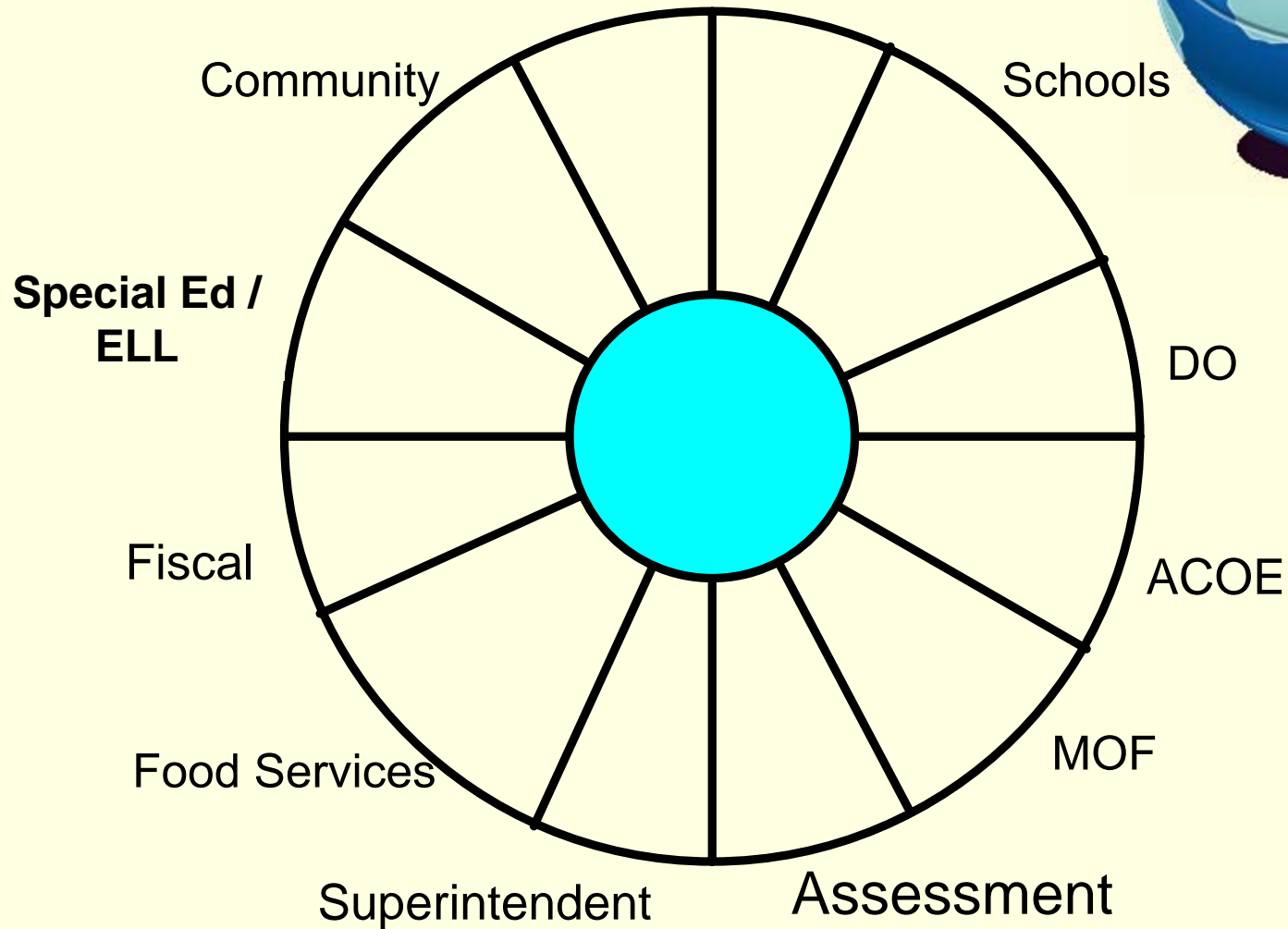
Observations

- Most departments / sites felt TS was a road-block
- Most departments / sites feel TS is understaffed.
- No real understanding of TS role and function within District / Ed Services
- Need published procedures for most scenarios.
 - Too few rules and regulations. (**standards**)
 - Too many rules and regulations. (**procedures**)
- Need better communications / closure / feedback
- No roadmap of educational technology for future.

Technology Services



Technology Services

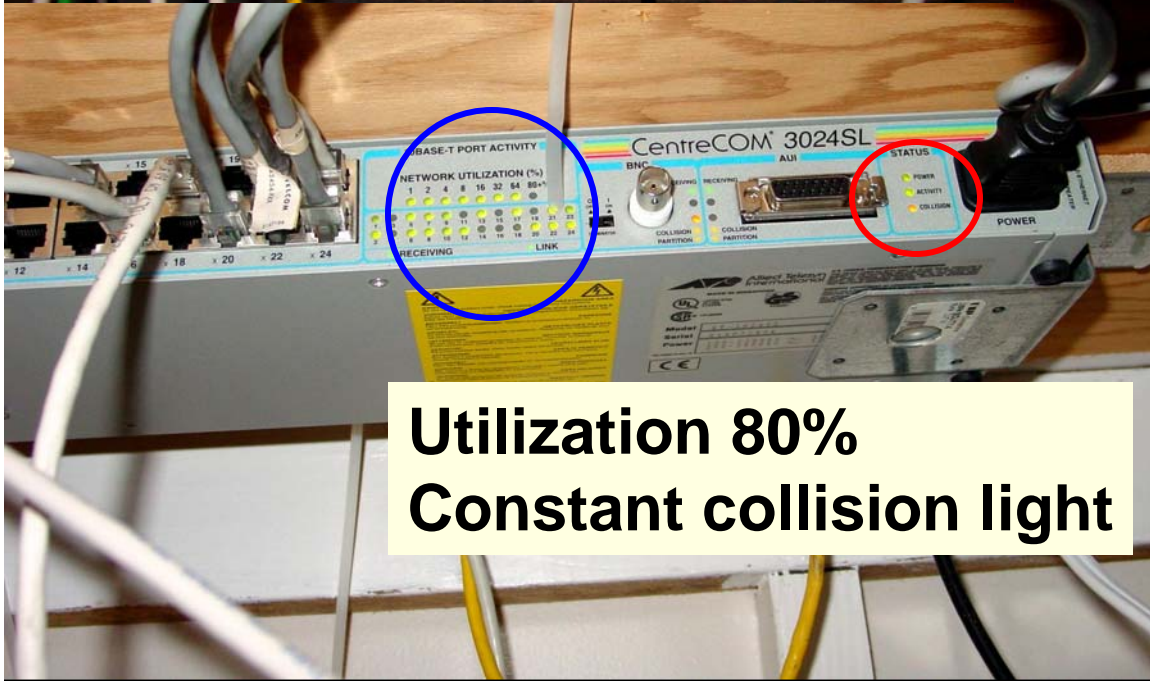


Technology Services



Visiting the sites

- No tactical planning
- No road map of technology
- No understanding of user requirements
- No standardization
- No trust in users
- Consistent hardware and software issues across the district
- Most sites go around Technology
- Some sites utilize 20 hours per week of someone else
- One site wants to save \$5.00 on memory upgrade for a laptop, and void their warranty



Utilization 80%
Constant collision light



System Properties

- System Restore
- Automatic Updates
- Remote
- General
- Computer Name
- Hardware
- Advanced



System:
Microsoft Windows XP
Professional
Version 2002
Service Pack 1

Registered to:
AUSD
AUSD
55274-OEM-0011903-00101

Manufactured and supported by:



Hewlett-Packard
HP dc5000 SFF(DX854AV)
Intel(R)
Pentium(R) 4 CPU 2.80GHz
2.79 GHz
248 MB of RAM

Support Information

- OK
- Cancel
- Apply


Local Area Connection Status

General Support

Connection

Status: Connected
Duration: 17 days 05:39:30
Speed: 100.0 Mbps

Activity

Sent —  — Received

Packets: 2,570,925 | 2,594,726

Properties Disable

Close

Wireless Network Connection Status

General Support

Connection

Status: Connected
Duration: 17 days 05:39:30
Speed: 54.0 Mbps
Signal Strength: 

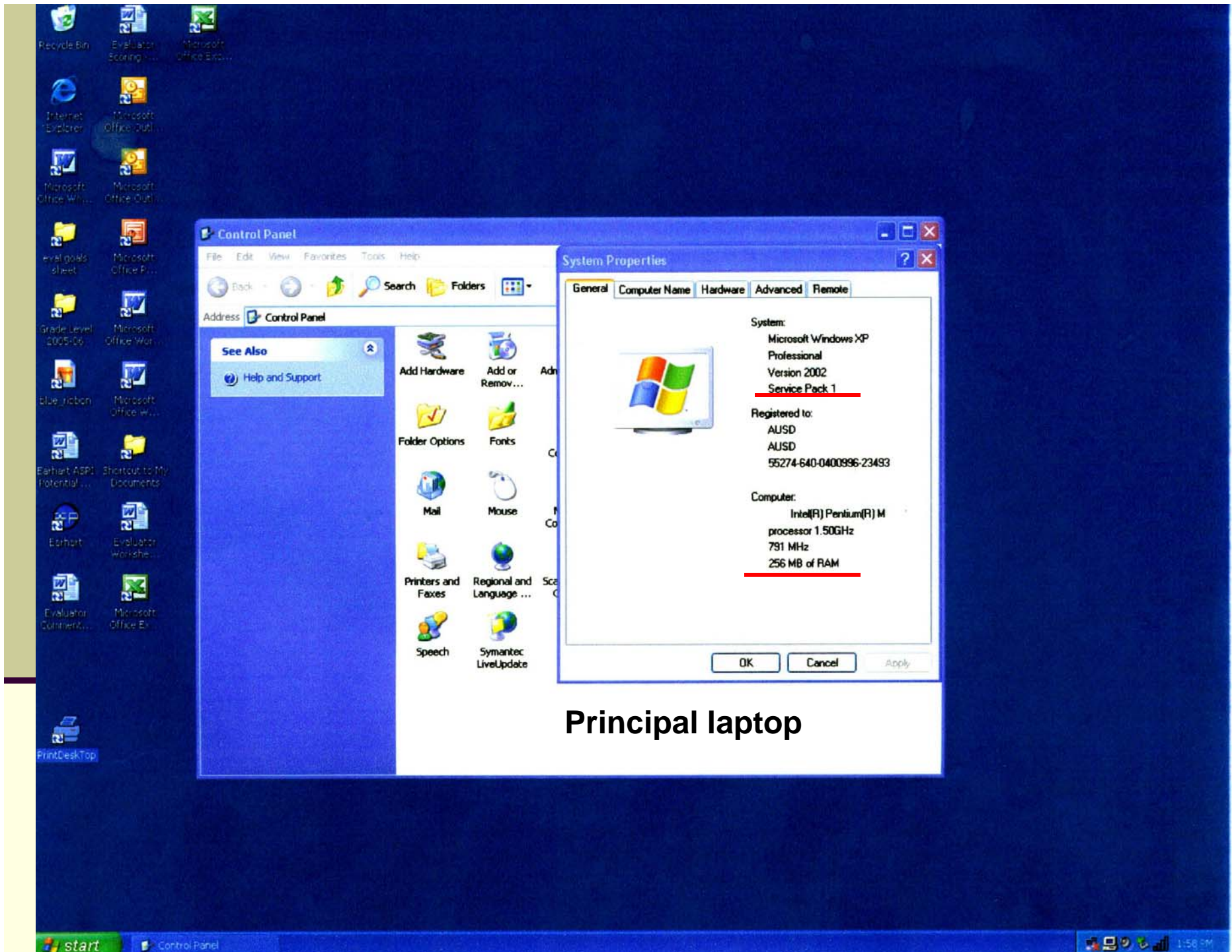
Activity

Sent —  — Received

Packets: 5,614,265 | 515,700

Properties Disable

Close



Principal laptop



The airline industry is having a terrible decade.

Several airlines are in merger talks (United and Continental) other airlines are trying to come out from bankruptcy proceedings.

One airline has shown increased profits and sustainable growth over the past two decades. That airline is Southwest, last year they had a **profit** of \$484 million.

How have they done it? Standardization.

Southwest only flies one type of aircraft, Boeing 737s

All of their pilots are trained on 737s

All of their mechanics are trained on 737s

They only stock one model of spare parts, Boeing 737s.

They know exactly how many people they are going to have on the plane and exactly how much it will cost to fly from point A to point B, and exactly how long it will take, every time.



600 MHz
Intel Pentium III processor

With Microsoft Windows 98

e MONSTER

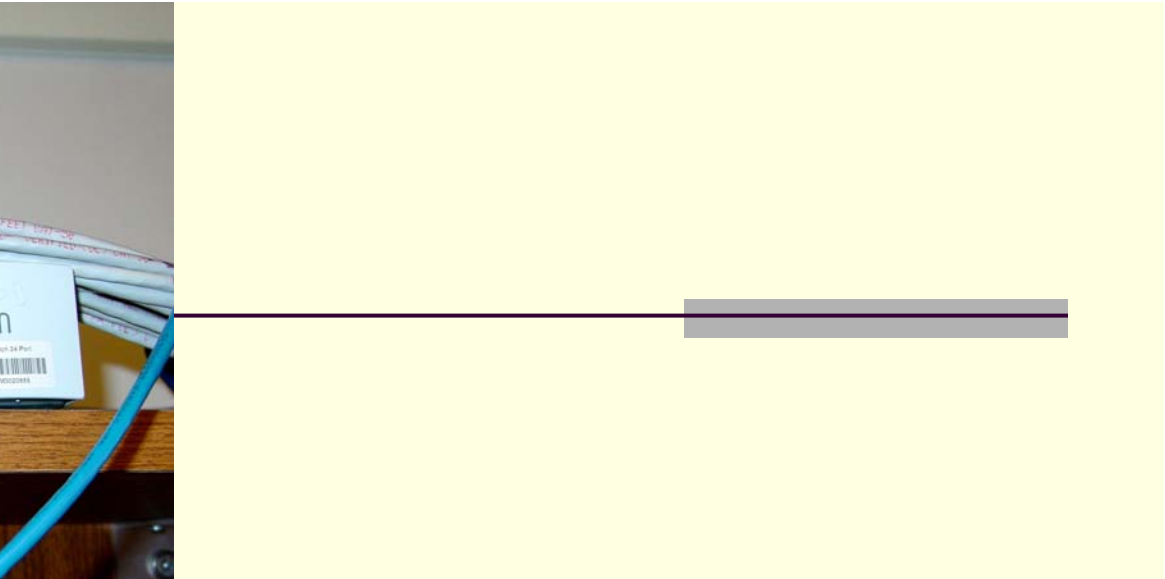
64 MB SDRAM 256 KB L2 Cache 20 GB Hard Drive DVD DVD-ROM Drive 56K Fax Modem 3D AGP graphics and more

by emachines

Mat. No. 112489

NVIDIA 12.1 INCH TFT

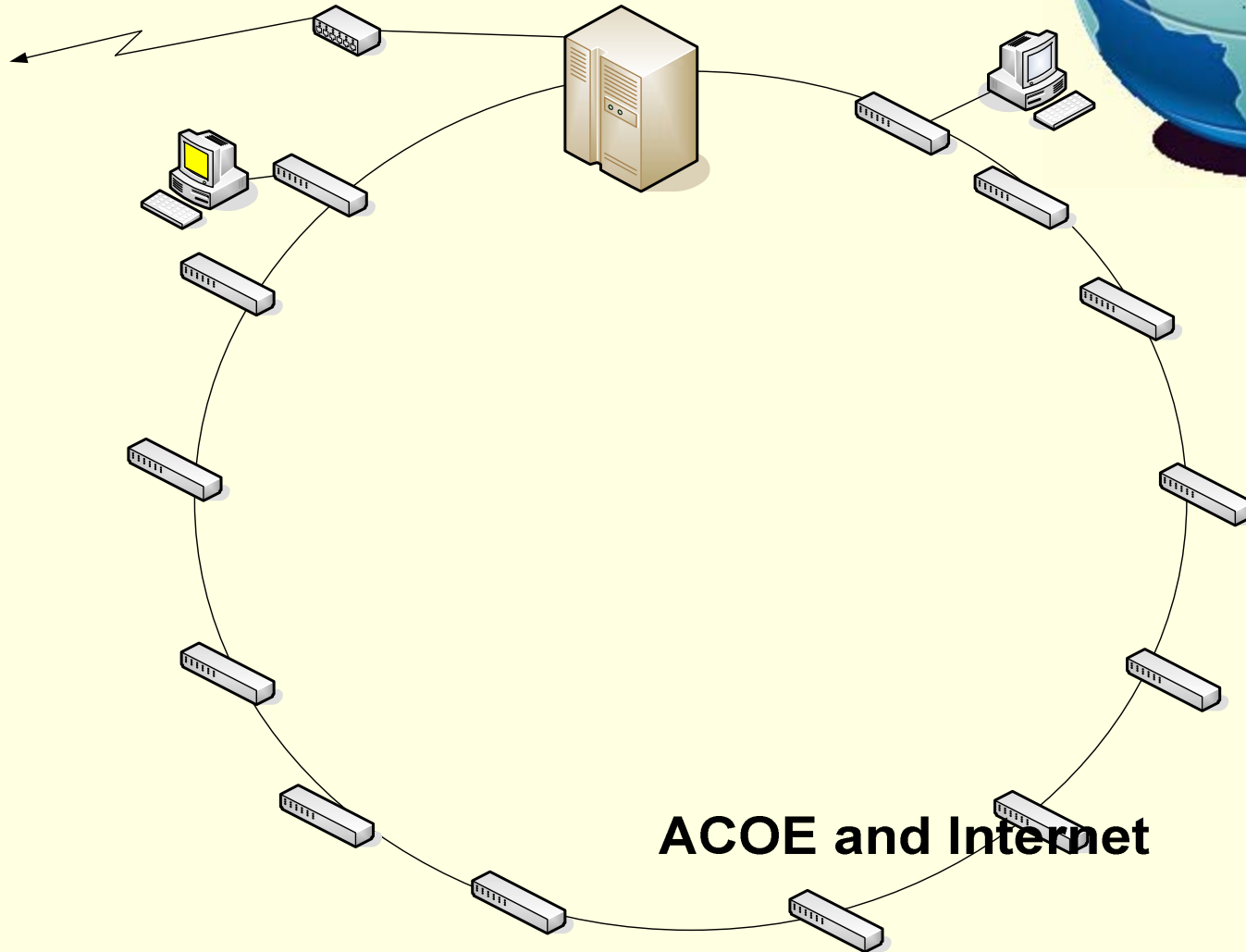
Dell
 IBM
 HP
 Compaq
 E-machines
 Mac (old and new)
 Micron
 Multiple ABM



- Cisco
- Synoptics
- Extreme
- 3Com
- SMC
- Avaya
- HP
- Linksys
- AlliedTelesys
- Netgear
- Proxim

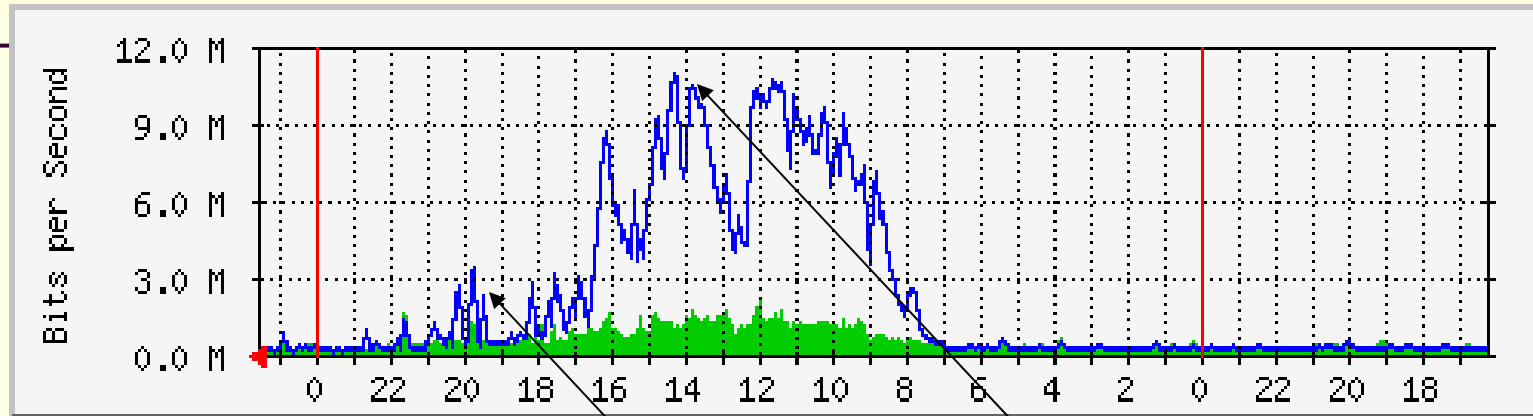


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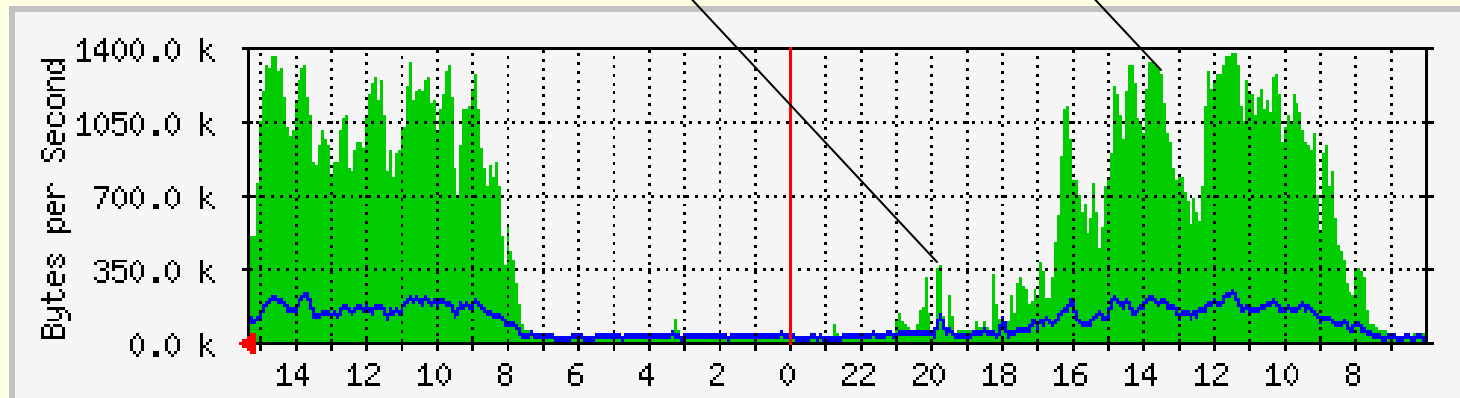


ACOE and Internet

Internet traffic

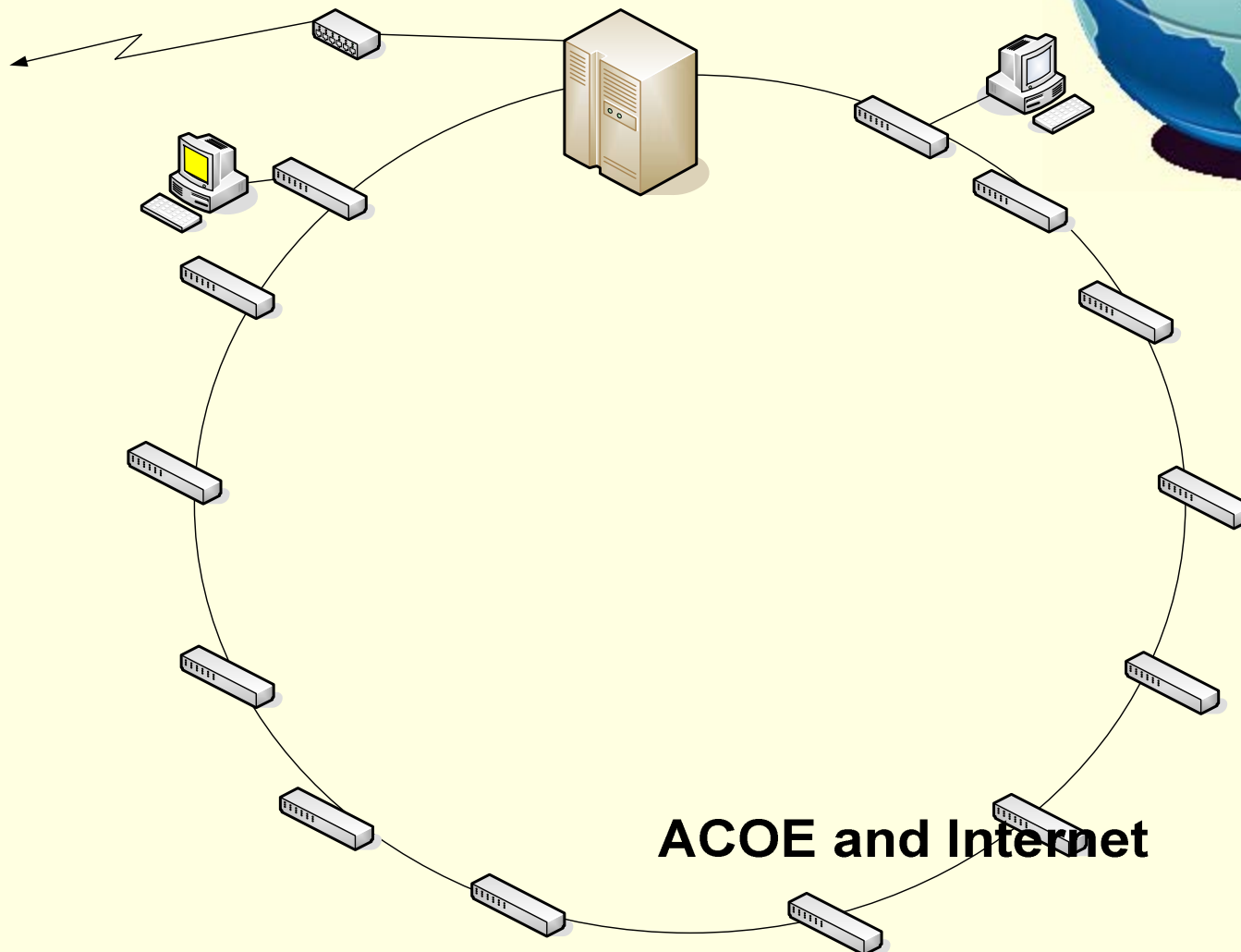


From DO to ACOE (internet at ACOE) (Blue)

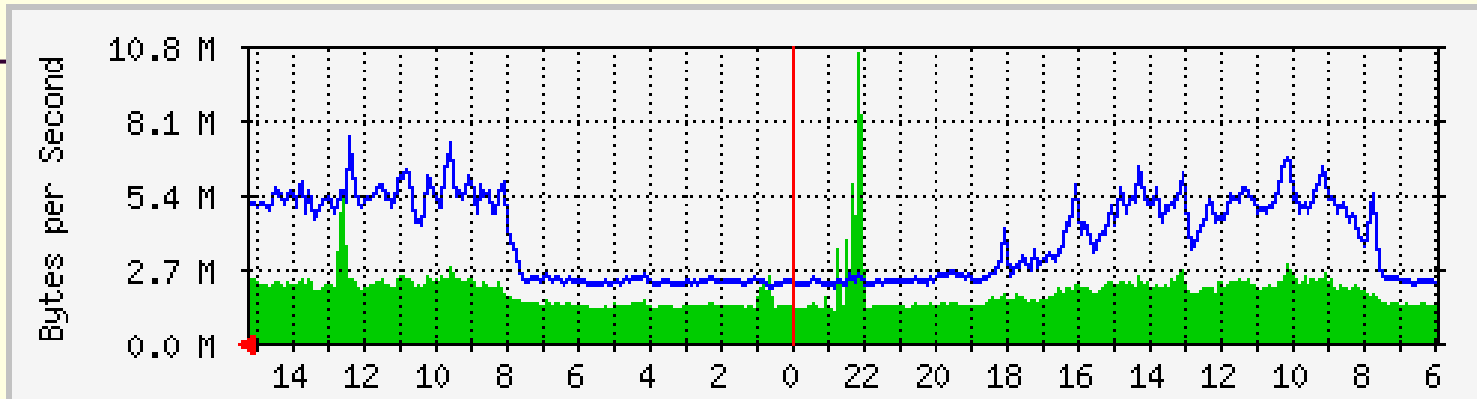


From DO to ACOE (output from DO) (11.0 peak Green)

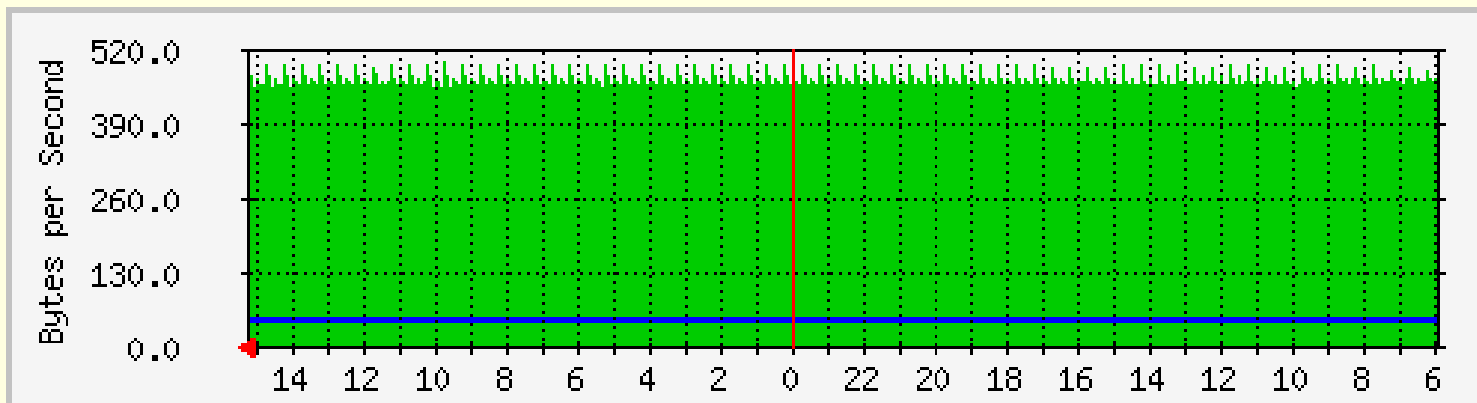
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District network traffic



From DO to Alameda H S 43.2 megabits (Blue)



From Edison to DO 320 bits (Green)

Technology Services



Recommendations

- **Develop realistic staffing plan**
- **Upgrade existing computer hardware and software**
- **Develop a communications and feedback plan**
- **Develop network plan**
- **Provide value added services**

Align Ed Tech Plan, Special Ed Plan, District Plan and these recommendations into one overall Technology use plan.

Technology Services



Develop realistic staffing plan in conjunction with the Districts Strategic Plan and Educational Technology Plan.

- CUHSD 6 schools 7 staff
- Alisal 11 schools 11 staff
- SCUSD 22 schools 13 staff
- *Alameda 18 schools 5 staff*
- As soon as possible, staff one additional site tech support.
- As soon as possible, create the position of Help Desk Analyst (tech support) and staff accordingly.
- As soon as possible, create the position of teacher on special assignment and staff accordingly.

Technology Services

Upgrade existing computer hardware and software

- Lack of memory
- Downgraded software
- Older processors
- Accessibility / functionality - video, TV, projector problems
/ no real thought as to what functionality was needed



Technology Services



Develop a communications and feedback plan with the end users and all support functions

- Technology Steering committee
 - Develop policies and procedures for technology
 - Develop Service level agreements and expectations
- Reorganize site technology contacts (STCs)
 - Train and give rights to support their sites
- Utilize web and e-mail to communicate and inform all interested parties / parents

Technology Services



Develop network plan

- Future of network with AP&T (09-10 school year)
 - Redesign AP&T network,
- Implement standard hardware and software
 - Currently have one of everything, lots of incompatibles and issues
- Fix the wireless network
 - Never designed, no real plan to implement, cumbersome and over-equipped
- Fix the wired network

Technology Services



Provide value added services

- Teacher on special assignment
 - Work with teachers on technology strategies and training
 - Grants, funding, planning
- Develop and implement VPN for remote access
- Develop and implement training program
- Develop and implement unified web / internet / mail presence
- Develop and implement content and spam filtering policies and if necessary associated hardware and software

Technology Services



	Item	Cost - 06-07	Cost - 07-08	Cost - 08-09	Total by item	Funding
1	Staffing					
	Technical		\$130,000	\$200,000	\$330,000	General Fund
	Teacher on special assignment		\$80,000	\$80,000	\$160,000	Categorical
2	PC upgrade / replacement	\$150,000	\$200,000	\$200,000	\$550,000	Bond
3	Communications	\$10,000	\$10,000	\$10,000	\$30,000	General Fund
4	Network upgrade / replacement	\$50,000	\$125,000	\$125,000	\$300,000	Bond
5	Value added	\$25,000	\$25,000	\$25,000	\$75,000	Bond
	Total by year	\$235,000	\$570,000	\$640,000	\$360,000	General Fund
					\$160,000	Categorical
		\$1,445,000	Estimated		\$925,000	Bond

FCMAT Issue	FCMAT Recommendation	AUSD Plan	Funding (if necessary)
Staffing			
under staffed for number of users / devices	6 new staff positions	2 staff positions	general fund
unsatisfactory user support	cross training / staff development	cross training / staff development	general fund
long response times for requests / no feedback	Help desk	in-house rotation	
Operations			
communications	better communications with district	Tech committee / better communications	
unanswered calls or no response	Staff help desk / telephone support	in-house rotation	
loaner equipment	provide loaner equipment	purchase and stock ready spares	bond proceeds
weak or no policies and procedures	develop and publish	work with tech committee	
old or obsolete equipment	replace or upgrade	replace or upgrade	bond proceeds
difficult to manage the environment	systems management software	work with staff to identify and evaluate	general funds
Education Technology			
no framework for ed tech / teachers	Teacher on Special Assignment	TOSA and tech committee	categorical funding
user limitations and restrictions	remove restrictions / install DeepFreeze	remove restrictions and give rights	
web information and public information	develop plan for web / internet use	develop plan for web / internet use	bond proceeds
education software issues (SME - Measures - Mathtech)	provide VPN and remote access	TOSA and tech committee	bond proceeds
little site support	develop and implement STCs	TOSA and tech committee	categorical funding
staff training	who, what, when, better communications	TOSA and tech committee	
ASTI	integrate technology into ASTI	in process	multiple funding sources
few standards	develop and implement standards policy	TOSA and tech committee	