

IT STANDARD MEETING 09-16-2015

All of these standards are based on California State guidelines on TCO (Total Cost of Ownership)

They also reflect Accreditation recommendations to adhere to the TCO model

Current Campus Configurations that meet the standard

	Core Switch	Fluke
DO	HP 10504	Optiview III
LACC	HP Procurve 8212	Optiview III
ELAC	Cisco 6509 (Dual)	Optiview III
LAHC	HP Procurve 8212 (Dual)	Optiview III
LAMC	Cisco 6509 (Dual)	Optiview III
LAPC	HP Procurve 8212	Optiview I
LASC	Cisco 6807 (Dual)	none
LATTC	Cisco 6509 / Dual	Optiview III
LAVC	HP 10508 (Dual)	Optiview III
WLAC	Cisco 6509 (Dual)	none

Satellite		
DO	Van De Kamp	85mb TW
ELAC	South Gate	1gb ASE
	Corporate Plaza	500mb Microwave link

PC & MAC Desktop Standards (minimum)

Recommended

Multi-Core Processor	Core i7, i5, A8 Pro +	
8 GB RAM +	n/a	

DVD-RW	n/a	
500GB Disk Sata	500GB Disk SSHD (solid state hybrid drive)	
1 Gb NIC	n/a	
5 year warranty/Next Business Day on Site	5 year warranty/Next Business Day on Site	
20" LCD Monitor (Glass Cover Option for labs)	22" LCD Monitor (Glass Cover Option for labs)	
Optional Computrace Complete	Computrace Complete (Highly recommend Option)	
5 year Replacement Cycle (Target)	n/a	
DisplayPort + VGA	Dual Monitor optional	
Power Supply Efficiency 80% +	Power Supply Efficiency 90% +	
Management API/Hardware		
Enterprise/Business Class machine		
Laptops	Recommendation	
Multi-Core Processor	Core i7, i5, A8 Pro +	
8 GB RAM	n/a	
no optical drive required	DVD-RW	
250 GB Disk		
3 year warranty/Next Business Day on Site	5 year warranty/Next Business Day on Site	
11" LCD Monitor	n/a	
5 year Replacement Cycle (Target)	n/a	
Computrace Complete	n/a	
802.11N	802.11N/AC	
Business Class machine	n/a	

Virtual Desktop Infrastructure		
Minimum	Recommendation	
2 GB RAM	4 gb ram	
25 GB-60 GB		
10 IOPS	20 IOPS	
5 Per Core (Academic)		
7 Per Core (Admin)		
Final Based on Testing/Work Load Evaluation		
HDI/Blade PC		
8 gig ram		
60 GB Disk		
Multi-Core Processor (Core i7, i5, A8 Pro +)		
5 year Replacement Cycle (Target)		
3 year warranty/Next Business Day on Site		
Thin Client (Desktop)		
4 GB RAM		
16 GB Flash		
Dual Video Output (VGA/DVI/DisplayPort)		
20" LCD Monitor (Glass Cover Option for labs)		
3 year warranty/Next Business Day on Site		

Thin Client (Mobile)		
4 GB RAM		
16 GB Flash		
3 year warranty/Next Business Day on Site		
5 year Replacement Cycle		
Optical Drive Optional		
Computrace Complete		
14" LCD Monitor		
802.11N		
Tablet (Ipads, Androids, etc)		
Minimum	Recommendation	
4 Gb Ram		
Minimum Available, change based on need.	64 Gb Storage	
External video output		
Location Tracking software	Absolute Mobile	
Enterprise MDM Managable		
District VPN Tunnel		
IPSEC Tunnel		
CISCO/Palo Alto		
2 Factor Authentication required		

Require Certificates		
Maintenance contract Required		
Gigabit Link		
Firewall		
Application/Layer 7 aware Next Gen +		
Palo Alto Networks		
40 Gb throughput		
content filtering		
zones (virtual firewalls)		
High Availability		
Rate limiting/throttling/QOS		
Core Switch	If the deployment in pair must be identical dual core	
Modular/10-40Gig/Layer 3/QOS/802.1q/Copper/Fiber		
Fault Tolerant (w/redundancy)		
Two management modules		
two+ power supplies		
100 Gig Blade Line Rate		
Ambient Sensor (temp, humidity) for Data Center and MPOE		
Layer 2/3 Fault Tolerance (i.e. VRRP, HSRP, IRF)		
Maintenance Contracts		
10G Uplink (Between Building-Distribution), SFP+ Preferred		

Alternate Backup Power/ATS/No disruption of Service/PowerConditioning/N+1		
MultiChasis Trunking (IRF,VSS,etc)		
Distribution Switches	Recommended	
Limited Lifetime warranty		
802.1q		
802.1x		
Remote Management		
Maintenance		
10G Uplink Capablity	to dual core	
	Dual Link to Core	
Wirespeed on all ports		
POE+ 802.3at +		
Layer 3		
UPS Connected		
QOS (COS & DSCP)		
Redundant power supplies		
Access Switches		
Limited Lifetime warranty		

QOS (COS & DSCP)		
802.1q		
802.1x		
Remote Management		
wirespeed preferred		
10 gig uplinks		
1Gig to the Desktop		
Redundant power supplies		
POE+ 802.3at +		
Wireless		
802.11g	AP	
802.1x	AP	
802.11n	AP	
802.11AC	AP	
POE	AP	
802.1q	Controller	
Guest VLAN (Delegation Attributes)	AP, Controller	
Centralized Control (Wireless Service Modules/Applia	Controller	
Authenticated (Must provide Credentials)	Controller	
Rate Limiting	Controller	
WPA2 Enterprise 802.11i	Controller	
Software		

Antivirus	Symantec Endpoint Protection/Microsoft System Ce	
Office Suite	Windows Office 2013 / Mac Office 2016	
Document Imaging	ApplicationExtender	
Databases	Microsoft SQL 2012	MySQL
Email Server	Exchange 2010	
Help Desk/Work Order System	SAP (CMMS)	
Servers		
Remotely Managable		
Error Correcting Memory		
Fault Tolerant Storage		
Fault Tolerant Power		
OS for Servers		
Apple OSX Server		
Linux		
Windows 2012 R2		
Printers		
Laser		
Duplex		
Networkable		
3 year warranty		

MFD Printer/Copier/Scan/Fax		
Laser		
Duplex		
Networkable		
Service Contract		
Projectors		City
Close Captioning		East
IP Management		Mission
Theft Deterent		LAHC
1280x720 (720P) WXGA 16:9		West
Compatible with Management System (Crestron, Extron,etc)		SW
Utology Compatible		Valley
3000+ Lumen		Trade
HDMI/VGA/Composite/RS232/HDBaseT		Pierce
		DO Ed Center
Mobile Projector		
2400 Lumens		
XGA +		
Sub 4 lbs.		
VGA/DVI/HDMI		

Ultra Mobile LED / Projector		
800 Lumens		
XGA+		
Sub 4 blds.		
VGA/DVI/HDMI		
A/V Infrastructure		
Server based Management System (i.e. Roomview, Utelogy)		
VOIP Standards		City
SIP		East
		Mission
		LAHC
		West
		SW
		Valley
		Trade
		Pierce
		DO Ed Center
Virtualization Software (Servers)_		
VMWare, Citrix, Microsoft		

Virtualization Software (Desktops)_		
Quest, VMWare, Citrix, Microsoft		
Mobile Smart Phones		
Remote Wipe capable		
Active Sync		
MDM Capable		
Operating Systems		
Win 7 Enterprise 64bit		
MAC - Yosemite 10.10		
Browser		
FireFox		
Chrome		
IE 10		
Safari		
Tech II (TCO Model) Staffing level - Per Node or Per FTES/FTE		

Removable Media (Flash/USB Drives/External Drives)		
Password Protection	Encryption	

CISCO	Upgraded					
CISCO	New					
CISCO	New					
Nortel						
CISCO	New					
NEC	Upgraded					
NEC	Upgraded					
CISCO	New					
Shoretel/Mitel	Upgrading					
NEC						