## Standards Review Date

Category Name	Standards Review Date
1. Computers	Augustpage 1
2. Operating System	Novemberpage 2
3. Internet Browsers	Februarypage 4
4. Printers	Augustpage 5
5. Scanners	Maypage 8
6. Software	Augustpage 9
7. Servers	Novemberpage 11
8. Server Back Up	Novemberpage 12
9. UPS	Augustpage 14
10. Virtualization	Maypage 15
11. Communications Equipment	Augustpage 16
12. VoIP	Novemberpage 18
13. Video Conferencing	Novemberpage 19
14. Network Optimization	Februarypage 20
15. End Point Management	Maypage 21

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VoIP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

Category: 1. Co	omputers	
Sub Category	<i>Item</i>	Comments
A. Desktop B. Laptop C. Tablet D. Chromeboo	k	
А, В, С	Apple	
A, B, C, D	Acer	
	Dell	
	HP	
	Lenovo	
В	BAK	Atlas only NNI/Under Review 8/22/18
B, C, D	Asus	Added 11/12/14
	Microsoft	Added 11/13/13

Samsung

D

Chromebook only

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	2. Operating Systems

	, , ,	
Sub Category	<i>Item</i>	Comments
A. Network	Linux	Red Hat/Ubuntu Actively supported version
	Micro Focus (formerly Novell)	NNI 11/15/2017 Actively supported version
	VMWare	Actively supported version
	Windows	Actively supported version Includes MS Hyper V
B. Workstations	Chrome OS	Actively supported version
	Linux	Red Hat/Ubuntu Actively supported version
	Mac OS X	Actively supported version
	Thin Zero Client	Actively supported version
	Windows	Actively supported version
C. Tablets	Android 3.1	OS, Applications and Hardware capab must be verified by Michelle Okal or Ja Mathis prior to purchase (Actively supported version)

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

C. Tablets

iOS4.1

OS, Applications and Hardware capability must be verified by Michelle Okal or Jan Mathis prior to purchase (Actively supported version)

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	3. Internet Browsers	
Sub Category	<i>ltem</i>	Comments
	Chrome	Actively supported version
	Edge	Added 2/15/17 Actively supported version
	Firefox	Actively supported version
	Internet Explorer	Actively supported version
	Safari	Actively supported version

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

to adding/removing from	the Standards List.	
Category:	4. Printers	
Sub Category	Item	Comments
A. 3D		Updated 8/19/2020: Per OCM 220-38 bi
B. High Speed Networked Digital	Canon	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Konica-Minolta	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Kyocera Mita	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Panasonic	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Ricoh	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Sharp	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns
	Toshiba	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.ns

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

B. High Speed Networked Digital	Xerox	Selected models that are listed on the Erie 1 BOCES bid High Speed Printers https://main.wnyric.org/doc/Erie1Coo.nsf
C. Standard		Others as required or recommended by specific supported services/applications
	Dell	
	Epson	
	HP	
	Lexmark	
	Okidata	
	PTM Document Systems	Print to mail units for Standards supported printers
	Ricoh	
	Xerox	
D. Large Format Printer	HP	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VoIP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

Category:	gory: 5. Scanners	
Sub Category	<i>ltem</i>	Comments

Others as required or recommended by specific supported services/applications

Canon

HP

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

Category: 6. Soft	ware .	
Sub Category	Item	Comments
A. Anti Theft/Data Protection	Absolute Computrace	
B. Collaborative Software	Exchange	
	Lotus Notes	NNI 8/29/2019
C. Desktop Image Protection	Deep Freeze	Refer to WNYRIC End Point Management Best Practices
	ZenWorks	Refer to WNYRIC End Point Management Best Practices
D. Desktop Imaging	Broadcom (Formely Symantec Ghost)	Updated 8/19/2020
E. Malware Protection	Broadcom (formely Symantec)	Updated 8/19/2020
	Computer Associates	NNI 8/19/2020

McAfee

Protection

Sophos

Microsoft Endpoint Updated 8/24/16

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VoIP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

F. Office Productivity File Maker Pro

Microsoft Office

Suite

Or its components

**OpenOffice** 

**G. Printer Management** Papercut MF Added 11/18/15

**Print Manager Plus** 

H. Terminal Servers Citrix

Microsoft

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	7. Servers	
Sub Category	<i>Item</i>	Comments
A. Standard	Dell	
	HP	
	Lenovo	Updated 11/18/15
B. SAN		Others as required or recommeded by specific supported services/applications
	Dell	
	HP	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	8. Server Backup	
Sub Category	<i>ltem</i>	Comments
A. Hardware	Dell	
	Exagrid	
	HP	
	IdealStor Backup Appliance Hardware Solutions	Hardware only: Teralyte, FraneNAS, and the IdealStor Backup appliance - excludes iBac product
	Internal Tape Backup recommended by manufacturer	
B. Software	ARCServ	
	Backup Exec	
	NovaStor	
	Paragon Backup and Restore	Added 11/12/14
	Retrospect MAC OSX	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

B. Software Veeam Backup Updated 2/14/18

Yosemite/Novanet NNI 2/14/2018

C. Cloud Veeam Backup for Added 8/19/2020

O365

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	9. UPS	
Sub Category	Item	Comments
	APC	Added 5/4/16Updated 5/1/19: New isntalls designed to be plugged into existing outlet (excludes hard wired solutions). Does incude Dell re-branded APC UPS units.

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	10. Virtualization	
Sub Category	<i>ltem</i>	Comments
A. Desktop Applicat	i <b>on</b> Parallel	
	VMWare	Updated 8/19/2020-removed word Fusion
B. Private Cloud	Classlink-	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	11. Communications	Equipment**
-----------	--------------------	-------------

Category:	11. Communications Equipment**		
Sub Category	<i>Item</i>	Comments	
A. Routers/Switches	Avaya/Extreme	Formely Avaya Updated 8/2/2019	
	Cisco		
	Cisco Meraki Cloud Managed Switch Gear	Added 11/12/14: Must consult with WNYRIC WAN Senior Engineer prior to purchase. NNI 2/12/20 NNI 2/12/20	
	Dell		
	HPE/Aruba		
	Juniper		
B. Wireless Access Po	oints Aruba		
	Avaya/Extreme	Formely Avaya Update 8/21/2019	
	Cisco		
	Fortinet (formerly Meru)	Updated 8/23/17: Meru was acquired by Fortinet	
	Meraki/Cisco		

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VoIP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

C. Wireless Bridge LigoWare

Ubiquiti

**D. VPN** Cisco ASA Added 5/1/19

Fortinet Fortigate Added 5/1/19--Must consult with

WAN/LAN Senior for sizing and requires district sign off for VPN use only (any work not related to VPN would be billable)

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	12. VoIP		
Sub Category	ltem	Comments	
	Avaya	Updated 11/13/13	
	Cisco		
	Mitel	Added 8/22/2018	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	<i>13.</i>	Video	Confe	erencing
-----------	------------	-------	-------	----------

Sub Category	<i>Item</i>	Comments	
A. Hardware Appliance Based	Cisco Tandberg Videoconferencing		
	Polycom Videoconferencing		
B. Software Based	Webex	Added 11/15/17	
	Zoom	Added 11/15/17	

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

\*\*\*When vendors go through a merger or acqusition, the Standards Committee will review on a case by case basis prior to adding/removing from the Standards List.

Category: 14. Network Optimization

Sub Category Item Comments

Vmware Vcenter Operations Manager

\*Includes Instructional Technology (CSLO) Peripheral devices, for example: video cameras, digital cameras, document cameras, handheld devices, tablets, projectors etc.

\*\*At least 2 districts from 2 separate BOCES must complete an Add Form for categories Communications Equipment and VolP. Both districts must complete a Proof of Concept and report back to the Standards Committee.

Category:	15. End Point Management	
Sub Category	<i>ltem</i>	Comments
	Faronics Deep Freeze Cloud Connector	
	Impero	Accessible on local network only
	JAMF Casper Suite	Added 2/11/15
	Lansweeper	Added 11/16/16
	SCCM	2012 SP1 and newer