



Cuyahoga County

Together We Thrive

Cuyahoga County IT Standards

Department of Information Technology

The Department of Information Technology provides system integration and IT solutions to clients within county government and other municipalities. We promote the use of technology to expand the scope, scale and quality of services provided by the entities we serve. We strive to deliver practical solutions, promote policies to make innovation sustainable, and work with intergovernmental partners to not only build systems and applications, but also facilitate collaboration and foster innovation.

Cuyahoga County IT Standards

Table of Contents

I. Policy & Scope	2
Policy Exceptions.....	2
II. IT Hardware and Software Standards	2
PLATFORM (HARDWARE) STANDARDS SUMMARY.....	2
DESKTOP (LAPTOP) APPLICATION & SOFTWARE STANDARDS SUMMARY.....	3
MOBILE DEVICE (SMARTPHONE & TABLET) APPLICATION & SOFTWARE STANDARDS SUMMARY.....	3
ENTERPRISE APPLICATION & SYSTEM STANDARDS SUMMARY.....	3
III. REVISION HISTORY	6
IV. INQUIRIES	6
APPENDIX I – HARDWARE STANDARD DETAILS	8
Enterprise Desktop/Workstation.....	11
Enterprise Laptop/Tablet.....	12
Small Form Factor (SFF) Desktop.....	14
Standard Display Monitors.....	15
Web Camera Hardware Standard.....	16
Network Printer/Copier Standard.....	16
Desktop Phone Hardware Standard.....	17
Enterprise Server Hardware.....	18
Enterprise Storage.....	21
Hardware Refresh Cycle Standard.....	23
APPENDIX II – APPLICATION & SOFTWARE STANDARD DETAILS	25
Desktop Software Standard.....	25
Server Software Standard.....	27
BUSINESS SOLUTIONS/PLATFORMS.....	28
APPENDIX III – NON-EXECUTIVE AGENCY STANDARDS	29
Cuyahoga County Courts.....	30
Other Courts.....	30
Cuyahoga County Public Defender’s Office.....	31
Cuyahoga County Prosecutors Office.....	31
Boards and Commissions.....	32
Other.....	32

Cuyahoga County IT Standards

I. POLICY & SCOPE

Policy is in reference to section 1 (Mission) and 2 (Principals) within the [Technical Advisory Committee \(TAC\) Operating Policy and Procedures](#) located on the County Intranet. This document outlines what systems, services, configurations, and solutions TAC has approved and considers an IT Standard. Please reference the Tables below for standards.

Note: A “**” denotes a Software or Infrastructure as a Service or Hybrid solution.

Note: Solutions that flagged as “on file” denote items that are not subject for publication.

POLICY EXCEPTIONS

Exceptions for this list can be made via TAC approval. Additions to this list can also be made by TAC vote or the combined decision from the Department of IT leadership and review by the Information Security Officer.

II. IT HARDWARE AND SOFTWARE STANDARDS

The following sections identify a quick summary of all the major hardware and software standards for the Department of IT operating on the Cuyahoga County Executive Network. Other non-executive Agencies may have additional IT Hardware and software standards that are referred to in APPENIX III.

PLATFORM (HARDWARE) STANDARDS SUMMARY

Desktop	HP Z Series
Small form Factor Desktop	HP Mini Series
Laptop	HP Elite Series, Zbook Series
Laptop Portable (optional 4/5G)	Microsoft Surface Pro Series
Monitor	HP
Tablet/Laptop Dock	HP, J5. Plugable, CaliDigit
Tablet Portable w/4G	Microsoft Surface Pro Series, Samsung Active3+, Apple iPad (HHS)
Mobile Phone (Voice Only)	Kyocera DuraXE Epic
Smart Phone	Samsung Galaxy S22+ (Android) iPhone 13+ (iOS)
Office Phone	Cisco VoIP
Phone Management	Cisco Call Manager System
Video Management	Cisco
Server	HP Proliant Series
Storage	HP/Nimble / NetApp
Routers	Cisco
Switches	Cisco
Fiber Switches	Cisco
Wireless Access Points	Cisco / Meraki
Network Printer	Konica Minolta
Video Camera Hardware	SONY
AV Control Center (Council) AV System	Creston AV system

Cuyahoga County IT Standards

Credit Card Systems	Keybank/Elavon, PointNPay
Email Relay	Barracuda
Secure USB Device	Bitlocker (End Users) / Apricorn Aegis
Firewalls	<i>On File</i>
Web filter	<i>On File</i>

[See more in APPENDIX I – HARDWARE STANDARD DETAILS](#)

DESKTOP (LAPTOP) APPLICATION & SOFTWARE STANDARDS SUMMARY

Office Software (Base)	Microsoft Office Suite
Browser (Base)	Microsoft Edge
Email (Base)	Outlook Web Access* / Outlook Client*
Project Management	Cherwell Service Management, Microsoft Project/Planner, Smartsheet
PDF Software (Base)	Nitro Pro, CutePDF
FTP / SFTP	WSFTP & Filezilla
Computer Aided Drafting (CAD) Software	AutoDesk
Geographic Information Systems (GIS)	ArcMap, ArcPro, ArcGIS Online
Fax Software	Rightfax
Streaming Media Format	mp4
Messaging – Conference - Collaboration	Microsoft Office 365, Cisco Collaboration, Slack (IT Only)
Password Storage and Management	KeePass / 1Password (IT)
File Compression and Encryption	7zip
VPN	<i>On File</i>
Oracle Client (Fiscal/Domestic Relations)	12c+
Messaging	Microsoft Teams, Big Ant (Domestic Relations Court), Slack (IT)
Jail Management (Sheriff)	IMACS

[See more in APPENDIX II – APPLICATION & SOFTWARE STANDARD DETAILS](#)

MOBILE DEVICE (SMARTPHONE & TABLET) APPLICATION & SOFTWARE STANDARDS SUMMARY

Antivirus	<i>On File</i>
Device Management	Microsoft Intune*
Mail	Outlook Client
Software for Mobile Devices	Cellebrite Desktops
Software for Mobile Devices	Cellebrite Touch

ENTERPRISE APPLICATION & SYSTEM STANDARDS SUMMARY

Cuyahoga County IT Standards

SOFTWARE – ENTERPRISE

Virtual Server	VMWare
Virtual Desktop Infrastructure (VDI)	VMWare HorizonView
Scanning	Kodak Capture Pro
Collaboration	Microsoft Office 365 Collaboration Suite* Cisco Collaboration Suite* (Approved Use) Zoom* (Approved use) Slack* (IT Only)
Cloud File Sharing	Microsoft OneDrive/SharePoint*, ShareBase*
Business Intelligence	Tableau*, PowerBI*, ArcGIS Insights
Data Archiving	Solix* CDP
Data Reporting	Tableau*, Solix*, Microsoft SSRS, Cognos (EAM)
Data Quality and Conversion	Tableau Prep/TextPipe
E-mail	Microsoft Office 365*
E-mail Relay	Barracuda
Enterprise Certificate Management	Entrust
Fingerprint Scanning/ID	CABIS (Thales Group)
PhoneCall Recording	MediaSense
Storage Management	NetApp
Endpoint Firewall	On File
Software Package Management	Adminstudio
Information Technology Service Management	Cherwell Service Management*
Backup Solution/Software	Veeam
Cloud Backup	Barracuda* (Office 365), Azure*, AWS*
Email Archiving	Barracuda*, Microsoft

APPLICATION / WEBSITE DEVELOPMENT

Applications Development	.NET
Database	Microsoft SQL-Server, Oracle
Web Content Management System	Synapse, Sitefinity
Law Management System	Matrix*
Court Management System	Proware CCJIS
Document Management System	Onbase
GIS Mapping Software/Services	Esri
Web TLS Certificates	EnTrust
Animal/Pet Management	PetPoint*
Cloud Storage	Microsoft OneDrive/SharePoint*, ShareBase*
Source Code Management	Microsoft Team Foundation Server / GIT
Web UI Framework	Telerik Product Suite
Stock Data (image/vector/footage/audio)	123RF*
Web & Multimedia Design Software	Adobe Creative Cloud Master Collection*
Database Admin Tool	RED-GATE Toolbelt

Cuyahoga County IT Standards

Web Development Prototyping software	Axure
Multimedia -Stock Music	Pond5
Web Development Accessibility/QA	Monsido*
Web Content Workflow Tool	GatherContent
Email (Bulk) Mailing solution	Constant Contact*

COMMUNICATIONS & NETWORK

Network Monitoring	Solarwinds
Phone Management	Cisco Call Manager System
Video Conferencing Management	Cisco Telepresence
Court Video Management and Recording	CourtSmart*
AV Control Center /Council AV System	Creston AV system

CYBER SECURITY AND PHYSICAL IT OPERATIONS

Active Defense	<i>On File</i>
Antivirus / HIPS	<i>On File</i>
Application Firewall	<i>On File</i>
Badge Access System	Galaxy Control Systems
Camera Management System	Milestone Video Management System
Physical IT Operations Services	Integrated Precision Systems
Web Reporting	Fastvue
IPS/IDS	<i>On File</i>
Threat Intelligence	<i>On File</i>
eDiscovery	Office 365* eDiscovery, GoldFynch*
Malware Analysis	<i>On File</i>
Mobile Device Management	Intune, Absolute Software
Professional Security Services	FireEye Mandiant / TrustedSec / Vestige / MS-ISAC / CIS
Web Application Security Testing	<i>On File</i>
Internal Network Scanning/Mapping	<i>On File</i>
Forensic Software	<i>On File</i>
Spam and Phishing Protection	<i>On File</i>
Linux Operating Systems	Ubuntu 22.04 LTS / SELinux
Secure Document Transfer	SFTP (w/ PGP), Microsoft Office 365 Encryption, ShareBase, Kno2 (Medical Examiners)
Secure Mail Service	Microsoft Office 365 Message Encryption* (OEM)
Security Operations Management, Incident Response, and Services	<i>On File</i>
Security Training/Education	KnowBe4*, SANS OnDemand*
Full Disk Encryption	Microsoft Bitlocker
Email Encryption	PGP / Office 365 Message Encryption* (OEM)
Encryption Algorithm for Sensitive Data, Storage, and Transit	AES256 / TLS 1.3+
Password Management	KeePass / 1Password* (IT)

Cuyahoga County IT Standards

Server / Client Patch Management	Microsoft, PatchMyPC
Vulnerability Scanning	Microsoft / DHS CISA / MS-ISAC
Wireless Security	WPA2 Enterprise / RADIUS

[See more in APPENDIX II – APPLICATION & SOFTWARE STANDARD DETAILS](#)

III. REVISION HISTORY

Revision Date	Description of changes
03/20/2012	Version 1.0, original standard
05/31/2012	Version 1.1
04/29/2014	Version 1.2
05/15/2015	Version 1.3
07/18/2016	Version 1.4
07/11/2017	Version 1.5
7/12/2018	Version 1.6 – updating with modifications since 2017
5/28/2020	Version 1.7 – updating with modification since 2018-19
2/26/2020	Version 2.0 – updating format and modifications since 2020
10/20/2022	Version 2.1 – updated software and minor re-formatting

IV. INQUIRIES

For information regarding Enterprise Technology, please contact:

Cuyahoga County Information Technology
 Deputy Chief Technology Officer (CTO)
 2079 East 9th Street, 6th Floor
 Cleveland, Ohio 44115-1807

Telephone: 216.443.8015

Cuyahoga County – Technical Advisory Committee
 Department of Information Technology
 2079 E. 9th St, Cleveland, Ohio 44115

Website: [Cuyahoga County Boards & Commissions - TAC](#)

Cuyahoga County IT Standards

Page intentionally left blank

Cuyahoga County IT Standards

APPENDIX I – HARDWARE STANDARD DETAILS

1.0 Purpose

This Cuyahoga County standard defines the hardware requirements and standard configurations for technologies purchased by County agencies for use by County employees. This County standard will be updated annually and can be amended at any time throughout the year.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted by Technical Advisory Committee (TAC).

3.0 IT Equipment Standards

Cuyahoga County agencies shall acquire client computers, servers, network equipment, and computer peripherals (monitors, webcams, keyboard/mouse, etc.) that conform to standard configurations, include mandatory security features, and meet environmental compliance defined by this IT standard. The technology shall meet or exceed the standard configurations defined within to this document.

The following sections describe the client computer categories for which there are published standard configurations and specifications. Agencies contemplating other categories, such as rugged notebooks, should contact the Deputy Chief Technology Officer (CTO) or their designee to determine the recommended standard configuration.

3.1 Desktop Standards

Standard Enterprise Desktop - This category is the most common desktop configuration which can be satisfied by a workstation or virtual equivalent. It intends to meet a wide range of County worker requirements, from occasional users to call center operators to case workers to researchers and knowledge workers.

3.2 Laptop/Notebook/Tablet Standard(s)

Standard Enterprise Laptop/Notebook - This category is the mobile workforce. The processor and hard drive are optimized for extended battery life.

3.3 MINI Desktop Standard

Space Efficient Desktop – This category defines a desktop optimized for space efficiency. Well suited for areas & offices that lack room for a typical SFF design. Those areas may include but are not limited to medical exam locations, training areas, and public kiosks. These units can be mounted under desk, on a wall, or behind the monitor.

3.4 Display Standard

Liquid-crystal Display (LCD) displays attached to client desktop technologies, used by County workers.

3.5 Web Camera Standard

Network printer standards include a wide range of products, from high-speed color Multi-functional Printers (MFPs) to black and white printers to scanners and fax machines.

Cuyahoga County IT Standards

3.6 Network Printer/Copier Standard

Network printer standards include a wide range of products, from high-speed color Multi-functional Printers (MFPs) to black and white printers to scanners and fax machines.

3.7 Enterprise Office Phone Standard

Network printer standards include a wide range of products, from high-speed color Multi-functional Printers (MFPs) to black and white printers to scanners and fax machines.

3.8 Enterprise Server Standard

Network printer standards include a wide range of products, from high-speed color Multi-functional Printers (MFPs) to black and white printers to scanners and fax machines.

3.9 Enterprise Storage Standards

Network printer standards include a wide range of products, from high-speed color Multi-functional Printers (MFPs) to black and white printers to scanners and fax machines.

4.0 IT Operation Standards

4.1 Enterprise Equipment Refresh Cycle

- Desktop/Workstations/Laptops – 5 years
- Servers – 7 years

5.0 Revisions & Exceptions

5.1 Revision to this Standard

The Deputy Chief Technology Officer or their designee shall ensure that the client computer hardware standard is regularly updated and published to reflect changes in technology, market trends, agency requirements and state policies.

5.2 Exceptions to this Standard

Agencies requesting to procure client computers and LCDs not in conformance with this County IT standard shall provide sufficient business justification to document why a standard configuration does not satisfy their business requirements. In general, no exceptions will be granted to the mandatory security features and environmental compliance and labeling.

6.0 References

5.1 Cuyahoga County Code Section 202.15 (Ordinance No. O2012-0012): The Cuyahoga County Executive empowers the County Chief Information Officer or designee to establish County IT standards as they relate to the acquisition and use of information technology by County agencies, including, but not limited to, hardware, software, technology services, and security.

Cuyahoga County IT Standards

7.0 Definitions

IT or DoIT – Department of IT
CTO – Deputy Chief Information Officer
CIO – Chief Information Officer
TAC – Technical Advisory Committee
LCD – Liquid-crystal Display
MCF – Multi-functional Printer

8.0 Related Resources

TAC Policy – [TAC - Cuyahoga County Boards & Commissions](#)
Section 202.15 – [Chapter 202- County Executive and Departments](#)
Ordinance 2012-0012 – [O2012-0012.pdf \(cuyahogacounty.us\)](#)

9.0 Attachments

A – Enterprise Desktop Standard – *Section 3.1*
B – Enterprise Laptop/Tablet Standard – *Section 3.2*
C – Small Form Factor (SFF) Desktop Standard – *Section 3.3*
D – Display Standard – *Section 3.4*
E – Web Cameras Standard – *Section 3.5*
F – Network Printer/Copier Standard – *Section 3.6*
G – Enterprise Office Phone – *Section 3.7*

10.0 Special Attachments (IT Specific Equipment & Operation Standards)

A – Enterprise Server Standard – *Section 3.8*
B – Enterprise Storage Standard – *Section 3.9*
C – Enterprise Equipment Refresh Cycle – *Section*

Cuyahoga County IT Standards

9.0 Attachment A - Department of Information Technology IT Standard

Standard:	Enterprise Desktop/Workstation
-----------	--------------------------------

Profile for Standard Business Class Workstations	
Category Description	This category is the most common workstation configuration and is intended to meet a wide range of County worker requirements, from occasional users to call center operators to case workers to researchers and knowledge workers. It offers the capacity and resources needed to do the job for most of the County government workforce.
Category Use Cases	<ul style="list-style-type: none"> County workers who use word processing, spreadsheets, presentations, e-mail, Web applications and Web browsing. Remote staff, mobile workers and other non-desk-based workers who share a computer for administrative and other purposes. Classroom and training room computers without an assigned county worker as a full-time user. Knowledge workers, analysts or researchers who work with large documents, complex presentations, database applications and third-party applications. <p>NOTE: THE COUNTY IS TRANSITIONING ALL DEPARTMENTS TO LAPTOPS IF FESABILE.</p>
Planned Service Life	Workstations in the category are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. Systems are expected to be acquired with a minimum three years on-site, next-business-day warranty from the manufacturer unless that model is supported by the County's workstation warm swap program.
Manageability	Workstations that conform to this category are capable of being well-managed and will be locked down to achieve optimal total cost of ownership. A factory-installed software image is available as an option. These workstations will be centrally managed, remotely supported and diagnosed by DoIT. Non-authorized software will be disabled and/or removed.

Minimum Specification for Standard Business Class Workstation	
Product	HP Z Series Windows SFF Workstation or Virtual Equivalent
Processor	Intel Core i7 Processor (3.2 GHz, up to 4.6 GHz 12 MB Cache) (or higher)
Memory	16 GB RAM (or higher)
Storage	256 GB SATA 2.5" SSD (or higher)
Keyboard	HP USB Keyboard
Mouse	HP USB Optical Mouse
Back Panel Connectors	2+ DisplayPort (DP 1.2) outputs from Intel HD graphics (available on specific processors only); 2 USB 3.0 ports, 4 USB 2.0 ports, 2 serial ports (1 standard, 1 optional), 1 parallel port (optional), 2 PS/2, RJ-45 (LoM), 1 Audio Line-in, and 1 Audio Line-out; 2 IEEE 1394b ports (optional).
USB Ports	4 USB 3.0 and 6 USB 2.0
Operating System	Windows 10 Enterprise (64 bit) (or higher)
Warranty	HP 3/3/3 SFF Warranty (Ex: 3-year parts/3-year labor/3-year On-Site)
Security Software	Absolute DDS Professional and Microsoft Defender

Options Allowed for Standard Business Class Workstation	
Warranty Upgrades	HP 4/4/4 and HP 5/5/5 Warranty (Ex: 4-year parts/4-year labor/4-year On-Site)
Options	See HP quick specs for more details
Factory Services	See HP quick specs for more details

Cuyahoga County IT Standards

9.0 Attachment B - Department of Information Technology IT Standard

Standard:	Enterprise Laptop/Tablet
-----------	---------------------------------

Profile for Standard Laptop/Tablets	
Category Description	This category is the mobile workforce. The processor and hard drive are optimized for extended battery life. These workers may use their Laptop/Tablet in a variety of non-office environments, including hotels, airports, client, and customer sites.
Category Use Cases	Staff who travel extensively and require a longer battery life due to the length of time the system is disconnected from a power source. NOTE: THE COUNTY IS TRANSITIONING ALL DEPARTMENTS TO LAPTOPS IF FESABLE.
Planned Service Life	Laptop/Tablets in this category are expected to have a planned service life of three years, and agencies acquiring this category should estimate the total cost of ownership over a three-year period. Systems are expected to be acquired with three-year parts and labor warranty from the manufacturer. Options are available for upgrading the warranty to onsite, next-business-day and for extending the warranty to four and five years. An extended warranty is recommended for agencies that do not have any other maintenance strategy for out-of-warranty desktops.
Manageability	Laptop/Tablets that conform to this category can be well-managed and locked down to achieve optimal total cost of ownership. These Laptop/Tablets have a <u>factory-installed software image</u> . They must be centrally managed and remotely supported and diagnosed by DoIT. Non-authorized software will be disabled and/or removed.

Minimum Specification for Standard Laptop	
Product	HP EliteBook or ZBook Series
Processor	Intel Core i7 Processor (or higher)
Memory	16GB RAM (or higher)
Display	15.6-inch LED HD SVA Anti-Glare (1366x768) for built-in webcam
Networking	Intel I218LM GbE platform LAN connect networking controller Wireless LAN - Intel 7260AN 802.11 a/b/g/n (2x2) + Bluetooth 4.0
Hard Drive	Internal Storage – 128 GB to 320 GB (PCIe NVMe M.2 SSD or 7200 rpm SATA hard drive) (or higher)
Optical Drive	DVD±RW SuperMulti DL Drive (optional standalone)
USB Ports	5 USB 3.0 (650) ports for fast data transfer from devices (1 charging)
Security	Absolute DDS Professional - Subscription License - 1 License - 5 Year and Microsoft Defender
Battery	54Wh or 78.5Wh Lithium-Ion Battery
Weight	Starting at 2.9 lb (1.32 kg) with weight saver (weight will vary by configuration)
Operating System	Window 10 Enterprise (64 bit) (or higher)

Options Allowed for Standard Laptop	
Graphics Upgrade	AMD Radeon™ R7 M465 (2GB DDR5 Dedicated)
Display Upgrade	15.6" diagonal LED backlit FHD anti-glare SVA slim (1920 x 1080)
Storage Upgrades	Contact the Department of IT
Battery Upgrade	N/A
Warranty Upgrades	HP Care Pack - 5 Year - Service - 9 x 5 - On-site - 100 148.00 14,800.00 Maintenance - Parts & Labor - Physical Service - 9 x 5 - On-site - Maintenance - Parts & Labor - Physical Service
Accessories	Contact the Department of IT

Minimum Specification for Mobile Tablet	
Product	Microsoft Surface Pro 7+
Processor	Intel Core i5 (or higher)
Memory	8GB or 16GB LPDDR4x RAM
Display	12.3" (2736 x 1824)
Networking	Wireless, Ethernet, Broadband

Cuyahoga County IT Standards

Hard Drive	128 GB SSD (or higher)
Optical Drive	N/A
USB Ports	1 (USB-A) and 1 (USB-C)
Security	HP Absolute DDS Professional - Subscription License - 1 License - 5 Year and Microsoft Defender
Battery	2 Cell lithium polymers
Weight	1.7 lbs (775 g)
Operating System (64 bit)	Windows 10 Enterprise (or higher)

Cuyahoga County IT Standards

9.0 Attachment C - Department of Information Technology IT Standard

Standard:	Small Form Factor (SFF) Desktop
-----------	--

Profile for Small Form Factor (SFF) Desktop	
Category Description	This category defines a desktop optimized for space efficiency. Well suited for areas & offices that lack room for a typical SFF design. These units can mount under desk, on wall or behind the monitor.
Category Use Cases	Those areas may include but are not limited to medical examiners locations, training areas, and public kiosks. NOTE: THE COUNTY IS TRANSITIONING ALL DEPARTMENTS TO LAPTOPS IF FESABLE.
Planned Service Life	Technologies listed this category are expected to have a planned service life of three years, and agencies acquiring this category should estimate the total cost of ownership over a three-year period. Systems are expected to be acquired with three-year parts and labor warranty from the manufacturer.
Manageability	Devices that conform to this category may be in widely accessed areas and will be able to be well-managed and locked down to achieve optimal total cost of ownership. These Small Form Factor Desktop can have a factory-installed software image. They can be centrally managed and remotely supported and diagnosed by Department of I.T. Non-authorized software will be disabled and/or removed.

Minimum Specification for Small Form Factor (SFF) Desktop	
Form Factor	Mini HP Z2 MINI G4+ (or higher)
Processor	Intel® i5 (or higher)
Size	17.5 x 17.7 x 3.4 cm
Memory	4 GB 1600 MHz DDR3 SDRAM (1 x 4 GB) 2 SODIMM or better
Video Graphics	Intel HD Graphics (2.6 GHz, 3 MB cache, 2 cores)
Hard Drive	500 GB 7200 rpm SATA
Network Adapter	Intel I217LM gigabit network connection
Integrated speakers	Optional
Max Power Rating	19V DC 3.3 Amps 230 VAC 89% efficient, active PFC
Video Connectors	Display port
USB Ports	(4) USB 3.0 / (2) USB 2.0
Security	Absolute DDS Professional - Subscription License - 1 License - 5 Year and Microsoft Defender

Cuyahoga County IT Standards

9.0 Attachment D - Department of Information Technology IT Standard	
Standard Number:	Standard Display Monitors
Effective Date:	<i>This standard configuration is subject to change within 6 months of its effective date.</i>

Profile for Standard LCD Monitors	
Category Description	LCD displays attached to client computers, including desktops and notebooks, used by County workers.
Category Use Cases	<ul style="list-style-type: none"> County workers who perform typical job functions in County government. Applies to all use cases defined by standard configurations for client computer hardware.
Planned Service Life	LCDs are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. It is recommended that the LCD manufacturer warranty match the period of the desktop or notebook manufacturer when purchased at the same time.
Manageability	Not applicable.

Minimum Specification for Standard LCD Monitors	
Monitors	HP ProDisplay P221 21 inch LCD Backlit Monitor or better
Size (diagonal)	21.5 – 27 inch
Native Resolutions	1080p
Response rate	60hz response time
Integrated speakers	Optional
Anti-Glare and Anti-Static	Anti-Glare: Yes
Anti-Static	No
Input Signals	Display port ; DVI with HDCP support
Contrast ratio	1000:1 Contrast Ratio
Brightness (typical)	250 nits
Tilt	Tilt: -5° to +25°
Height adjustability range	None
Pivot rotation	None
Horizontal/Vertical viewing angle (typical)	170/160 degrees
Max Power Rating	31 Watts
Video Connectors	Display port
Environmental Compliance	ISO 14001 certified

Allowed Optional Items for Standard LCD Monitors	
Warranty	Protected by HP 3-year parts, 3-year labor, 3-year onsite limited warranty. Next business day exchange available.
Warranty Upgrades	4/4/4 and 5/5/5 (Ex: 4-year parts, 4-year labor, 4-year onsite limited warranty). Next business day exchange available.
Sound	HP LCD Speaker Bar – Part number NQ576AA Powered directly by the connected PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP flat panel monitors. Features include dual speakers with full sound range and dual external headphone jacks. Sold separately. For more information, refer to the product's Quick Specs.
Display Extender	USB Graphics Adapter - Part Number NL571AA Enables connection of up to six simultaneous displays to help you boost productivity and multi-task across several open applications.

Cuyahoga County IT Standards

9.0 Attachment E - Department of Information Technology IT Standard	
Standard:	Web Camera Hardware Standard
Logitech C925E Webcam	Mfg. part # 960-001075
Logitech C930e Webcam	Mfg. part # 960-000971
Logitech BRIO Webcam	Mfg. part # 960-001105
Microsoft LifeCam Studio	Mfg. part # Q2F-00013
Microsoft LifeCam HD-3000	Mfg. part # T3H-00011
Microsoft Teams or Cisco Complaint Device	Various

9.0 Attachment F - Department of Information Technology IT Standard	
Standard:	Network Printer/Copier Standard

Profile for Network Printer/Copier Standard	
Category Description	Konica Minolta network printer/copier standards include a wide range of products, from high-speed color MFPs to super-efficient black and white printers to scanners and fax machines networked to client computers, including desktops and notebooks, used by County workers. Specific items are identified based on business requirements and selected from the Konica Minolta catalog included in the contract.
Category Use Cases	<ul style="list-style-type: none"> County Departments of Division that require large printing, copying, e-filing functionality – usually one MFP per area or floor. Specific County users or Departments that require private or customized print services.
Planned Service Life	Konica Minolta network printer/copiers are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. It is recommended that the manufacturer warranty period of the printer/copier manufacturer when purchased.
Manageability	Not applicable.

Magnetic Ink Character Recognition (MICR)	
E-13-B CHARACTERS:	NUMERALS 1 2 3 4 5 6 7 8 9 0 TRANSIT NO. SYMBOL I: ON-US SYMBOL II' DASH SYMBOL'''
PRINTING THE MAG LINE:	The E-13-B characters must be printed as shown to the left, within a bank 1/4" wide spaced as above. The exact sequence of characters is illustrated. The Mag Line will be printed with approved magnetic ink in accordance with specifications outlined in ANSI
NNNN SEQUENTIAL NUMBER	Indicate position for M.I.C.R. Sequential Numbering when applicable
COMPONENTS OF A CHECK	<ol style="list-style-type: none"> 1. Check or Serial Number 2. Fractional Routing Transit No. 3. Date 4. Payee 5. Convenience Amount of Check 6. Legal Amount of Check 7. Drawee Institution 8. Memo Line 9. Signatures 10. Clear MICR Band

Cuyahoga County IT Standards

9.0 Attachment G - Department of Information Technology	
Standard:	Desktop Phone Hardware Standard

1.0 Purpose

This County standard defines the desktop phone hardware requirements and standard.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted.

3.0 Standard

The county standard for desktop phones is defined:

3.1 Hardware Categories

Standard Desktop Phones – The Standard Desktop phone categories are

Desktop Phones	
-Standard user	Cisco 8811 – IP Phone
-Multi-line Required	Cisco 8851 – IP Phone (<i>optional sidecar</i>)
-Camera Phone	Cisco 8845 – IP Phone
-Single Line Phone	Cisco 7811 – IP Phone
Conference Room Phones	
-Standard Conference Phone	Cisco 8832 – IP Conference Phone <i>optional wireless microphones</i>
-Wireless Conference Phone	Cisco 8831 with wireless microphones
Video Conferencing Mobile Unit	Display: 40"-65" LED display-digital-signage-full HD (1080p), direct lit LED, onsite warranty
- Universal Mounting Bracket	
- Adjustable Height Shelf	
- Wire Management (in rear)	
- 37" to 65" Plasma / LCD Screen	
- Adjustable Camera Platform	
- Power Module	
Camera	Logitech C930e Webcam (Polycom Cisco SX10-20, DX70/80, Cisco Room Kits, Cisco Room 55

4.0 Attachments

None.

Cuyahoga County IT Standards

10.0 Attachment A - Department of Information Technology

Standard:

Enterprise Server Hardware

1.0 Purpose

This County standard defines the hardware requirements and standard configurations for x86 based server computers purchased by County agencies for use as virtual server hosts. Server virtualization is strongly encouraged to make the best use of county resources. When virtualization is not possible, requirements will be reviewed and configurations for physical servers will be prepared by the Cuyahoga County Department of Information Technology Infrastructure and Operations (Network Engineering Team). This County standard will be updated annually and can be amended at any time throughout the year.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted. Exemptions need to be approved by the Deputy Chief Information Officer with review by the Office of Security and Research and the Technical Advisory Committee.

3.0 Standard

The County standard for servers is defined and dictated by the server purpose. Virtual servers are strongly encouraged and will be hosted on the county standard VMware or Hyper-V virtualization platform. When an application requires physical servers, the requirements will be reviewed, and configurations prepared by the Cuyahoga County Department of Information Technology Network Engineering staff. Servers will follow either the County HP standard platform or Cisco UCS.

Server Categories

3.1 Standard Configuration Server – The Standard Configuration Server category is the most common configuration and is intended to meet a wide range of agency virtualization requirements. A standard server offers the capacity and resources needed to support at least 20 virtualized machines (VMs).

3.2 Large Configuration Server – The Large Configuration Server category is distinguished from the Standard Server based on specific requirements for large virtualization projects in agencies. This category offers significant capacity and resources needed to support more than 20 VMs.

4.0 Revisions & Exceptions

4.1 Revisions to this Standard

The Deputy Chief Technology Officer or their designee shall ensure that the Enterprise x86 Server Hardware for Virtual Server Hosts standard is regularly updated and published to reflect changes in technology, market trends, agency requirements and state policies.

Cuyahoga County IT Standards

4.2 Exceptions to this Standard

Agencies requesting to procure servers not in conformance with this County IT standard shall provide sufficient business justification to document why a standard configuration does not satisfy their business requirements. Any exceptions may affect the level of support the Department of IT can provide.

5.0 References

None

6.0 Definitions

None.

7.0 Attachments

A – Standard Configuration Server

B – Large Configuration Server

7.0 Attachment A - Department of Information Technology IT Standard

Standard:	Standard Server Configuration
------------------	--------------------------------------

Profile for Standard Configuration Server

Category Description	This category is the most common configuration and is intended to meet a wide range of agency requirements for servers that will be virtualized as well as for some physical servers.
Category Use Cases	<ul style="list-style-type: none"> This standard offers the capacity and resources to support at least 20 VMs. The Department of IT may apply this standard to servers that will not be virtualized.
Planned Service Life	Servers in this category are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. Systems are required to be acquired with a five-year onsite, next-business-day warranty. Options are available for extending the warranty to onsite four-hour response. An extended service agreement is required for agencies that need service and support beyond five years.

Minimum Specification for Standard Configuration Server

Processor	2 Socket Server with 1 Intel Gold 6142 Processor or better
Memory	64GB (1x64GB) Quad Rank
Network Adapter	Integrated Dual 1 Gigabit controller or Integrated Dual 10 Gigabit Controller
Hard Drive	Optional
Power Supply	Dual Hot Swap Power Supply

Conforming Server Models

Standard Configuration Servers			
Brand	Rack	Blade	Tower
HP	DL380 G10 or better	BL460C G10 or better	ML370 G10 or better
Cisco UCS	Cisco	Cisco	Cisco

Options Allowed for Standard Configuration Servers

Additional Processors, Additional Memory, DVD Drive, Secondary Raid Controllers, Secondary Network Interface Adapters, Fiber Channel Controllers, Remote Management Software, Remote Management Hardware, Keyboard & Mouse, Flash/USB Media, and Media Retention Services.

Cuyahoga County IT Standards

7.0 Attachment B - Department of Information Technology IT Standard

Standard:	Large Server Configuration
------------------	-----------------------------------

Profile for Large Configuration Server	
Category Description	This Large Configuration Server category is distinguished from the Standard Configuration Server category based on specific requirements for large virtualization projects in agencies. This category offers significant capacity and resources required to support more than 20 VMs.
Category Use Cases	<ul style="list-style-type: none"> A Large Configuration Server offers the capacity and resources to support more than 20 VMs. DoIT may apply this standard to servers that will not be virtualized.
Planned Service Life	Servers in this category are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. Systems are required to be acquired with a five-year onsite, next-business-day warranty. Options are available for extending the warranty to onsite four-hour response. An extended service agreement is required for agencies that need service and support beyond five years.

Minimum Specification for Large Configuration Server	
Processor	4 Socket Server with 2 Intel Platinum 8256 Processors or equivalent
Memory	64GB (1x64GB) Quad Rank x4 DDR4 or better
Network Adapter	Integrated Dual 1 Gigabit controller or Integrated Dual 10 Gigabit Controller
Hard Drive	Optional
Power Supply	Dual Hot Swap Power Supply

Conforming Server Models			
Large Configuration Servers			
Brand	Rack	Blade	Tower
HP	DL380 G10 or better	BL460C G10 or better	ML370 G10 or better
Cisco UCS	Cisco	Cisco	Cisco

Options Allowed for Large Configuration Servers
Additional Processors, Additional Memory, DVD Drive, Secondary Raid Controllers, Secondary Network Interface Adapters, Fiber Channel Controllers, Remote Management Software, Remote Management Hardware, Keyboard & Mouse, Flash/USB Media, and Media Retention Services.

Cuyahoga County IT Standards

10.0 Attachment C - Department of Information Technology IT Standard

Standard:

Enterprise Storage

1.0 Purpose

This County standard defines the hardware requirements and standard configurations for x86 based server computers purchased by County agencies for use as virtual server hosts. Server virtualization is strongly encouraged to make the best use of county resources. When virtualization is not possible, requirements will be reviewed and configurations for physical servers will be prepared by the Cuyahoga County Department of Information Technology. This County standard will be updated annually and can be amended at any time throughout the year.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted. Exemptions need to be approved by the CTO with review by the Office of Security and research.

3.0 Minimum Standard

The county standard for servers is defined and dictated by the server purpose. Enterprise Storage servers are strongly encouraged and will be hosted on the county standard platform. When an application requires physical servers and storage, the requirements will be reviewed, and configurations prepared by the Cuyahoga County Department of Information Technology engineering staff. Enterprise Storage servers will follow either the County HP standard platform, or Cisco UCS.

Server Categories

3.1 Standard Enterprise Storage NetApp/Nimble – The Standard Enterprise Storage uses NetApp and is intended to meet a wide range of agency requirements. Nimble, a flash storage solution is the standard data storage array that uses the iSCSI protocol and includes data backup features for agency departments. This category offers significant capacity and resources.

3.2 Standard Enterprise Back-up – The Enterprise Back-up Configuration category is distinguished from the Standard Server based on specific requirements for projects in agencies. This category offers significant capacity and resources.

4.0 Revision & Exceptions

4.1 Revision to this Standard

The Chief Technology Officer or their designee shall ensure that the Enterprise Storage Server Hardware and back-up Appliance standard is regularly updated and published to reflect changes in technology, market trends, agency requirements and state policies. The Office of Security and Research will also review any revision to ensure security configurations, policies, and availability are met.

Cuyahoga County IT Standards

4.2 Exceptions to this Standard

Agencies requesting to procure servers not in conformance with this County IT standard shall provide sufficient business justification to document why a standard configuration does not satisfy their business requirements. Exceptions need to be approved by the CTO with review by the Office of Security and research. Any exceptions may affect the level of support the Department of IT can provide.

5.0 References

None.

6.0 Definitions

None.

7.0 Attachments

A – Enterprise Storage Standard

7.0 Attachment A - Department of Information Technology IT Standard	
Standard:	Enterprise Storage Standard

Profile for Enterprise Storage Server	
Category Description	This Enterprise Storage Server category is distinguished from the Standard Configuration Server category based on specific requirements for projects in agencies. This category offers significant capacity and resources.
Category Use Cases	<ul style="list-style-type: none">• An Enterprise Server significant capacity and resources• Department of IT may apply this standard to servers that will not be virtualized.
Planned Service Life	Enterprise Storage Servers in this category are expected to have a planned service life of five years. Agencies acquiring this category should estimate the total cost of ownership over a five-year period. Systems are required to be acquired with a five-year onsite, next-business-day warranty. Options are available for extending the warranty to onsite four-hour response. An extended service agreement is required for agencies that need service and support beyond five years.

Options Allowed for Large Configuration Servers
Additional Processors, Additional Memory, DVD Drive, Secondary Raid Controllers, Secondary Network Interface Adapters, Fiber Channel Controllers, Remote Management Software, Remote Management Hardware, Keyboard & Mouse, Flash/USB Media, and Media Retention Services.

Cuyahoga County IT Standards

10.0 Attachment C - Department of Information Technology IT Standard

Standard:

Hardware Refresh Cycle Standard

1.0 Purpose

The purpose of the standard hardware refresh cycle is to provide coordinated and centralized hardware purchase and refresh cycle process to reduce their overall cost to the county while maintaining adequate information technology that meets existing business needs. This County standard defines the hardware refresh cycle requirements and standard for Client Computer, Server, Storage and Back-up hardware.

2.0 Scope

All Cuyahoga County owned standard workstation computers, mobile devices (laptop/smartphone/tablet) computers, network infrastructure, and agency servers including storage and back-up appliances.

3.0 Standard

County owned Standard Hardware will be refreshed every 5 years unless specified below.

3.1 Desktop, Notebook Hardware Refresh

The county standard for the refresh cycle is 5 years personal computers and laptops/notebooks/tablets. A standard refresh cycle reduces life-cycle cost by optimizing support costs will be the most effective and cost-efficient strategy.

3.2 Server Refresh

The county standard for the refresh cycle is 5 years. Although server refresh may be critical for agencies to replace servers at optimal times, dependent upon their application, utilization, and business requirements.

3.3 Storage Hardware and Back-up Appliance Refresh

The county standard for the refresh cycle is 5 years.

3.4 Smartphone and/or Tablet

The county standard for the refresh cycle is 2 years.

3.5 Network Infrastructure

The county standard for the refresh cycle is 5-7 years. Exemption can be approved by the Deputy CTO and CIO.

4.0 Revisions & Exceptions

The County Department of Information Technology (DoIT) reserves the right to modify, amend, or terminate the refresh cycle standard at any time. Given the ever-changing landscape of hardware, the hardware refresh standard will be reviewed annually.

Cuyahoga County IT Standards

Cuyahoga County IT Standards

APPENDIX II – APPLICATION & SOFTWARE STANDARD DETAILS

Department of Information Technology IT Standard	
Standard:	Desktop Software Standard

1.0 Purpose

This County standard defines the desktop software requirements and standard.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted. Exemptions need to be approved by the CTO with review by the Office of Security and Research.

3.0 Standard

The county standard for desktop software is defined.

3.1 Software Categories

Standard Desktop Software

Office Productivity	Office 365 Suite
Email	Microsoft Office 365
Messaging – Conference - Collaboration	Microsoft Office 365 Teams
Browser (Base)	Edge / Chrome
PDF Reader	Edge Browser, Nitro Reader
Anti-Virus	Microsoft Windows Defender
Password Storage and Management	KeePass
Fax Software	Rightfax

3.2 Software Categories

Department Specific Desktop Software

Any Department (per Request) – PDF Editor	Nitro PDF
Any Department (per Request) – Diagram/Flowchart	Visio – Engineering SmartDraw – All lines of business Others – requires CTO approval
Any Department (per Request) – Project Tracking	SmartSheet, Microsoft Projects
Any Department (per Request) – FTP / SFTP	WS_FTP
Any Department (per Request) – VPN	F5 Big-IP (APM), Cisco AnyConnect (ASA)
Fiscal – Oracle Client	11g/12g/12c
Public Safety (NEORFC) Application	Kaseware, ClearView
Public Safety Application - CAD	AutoDesk
Public Safety EMA – Drone Software	Kitty Hawk

Cuyahoga County IT Standards

Sheriff Application - JMS	IMACS
Sheriff	Thomson Reuters
Public Works Application	Granite XP sewer camera truck software
Public Works Application	Autodesk AutoCAD Software, Raster Design, Civil 3D, and Infrastructure Design Suite Premium.
Public Works Application	Autodesk Revit Architecture Software
Public Works Application	Bentley STAAD.Pro, StormCad, SewerCad, FlowMaster and Microstation.
Public Works Application	Brass Culvert Engineering Software.
Public Works Application	Asshtoware BridgeWare Virtis Software
Public Works Application	PSBeam
Public Works Application	Alldata
Public Works Application	FleetMax
Public Works Application – Animal Shelter	Donor Perfect Online*
Fiscal – Weights & Measures	WinWAN
Geographic Information Systems (GIS)	Esri ArcGIS, ArcMap, ArcPro, ArcGIS Online
Department of IT – Image Editing	Adobe Creative Cloud
Department of IT - Collaboration	Slack
Department of IT System Monitoring	SolarWinds
Department of IT Telecommunications Dept. /Mobile phone preparation S/W for deployment	Cellebrite
ADA Compliant Software	Monsido
ADA Services	Sight Center

Cuyahoga County IT Standards

Department of Information Technology IT Standard	
Standard:	Server Software Standard

1.0 Purpose

This County standard defines the server software requirements and standard.

2.0 Scope

This County IT standard is applicable to all offices and agencies of Cuyahoga County except for those specifically exempted. Exemptions need to be approved by the CTO with review by the Office of Security and research.

3.0 Standard

The county standard for Server software is defined

3.1 Server Software Categories

Standard Server Software – The Standard Server software category is

Server Standard	Software Standard
SQL Server Current Version	Microsoft .NET Framework Windows PowerShell NET 3.5 SP1 or newer NET Framework 4.1 or newer SQL Server Native Client SQL Server Setup support files
Windows	Windows Server 2016 or newer
Linux	Ubuntu 20.04 LTS or newer
SSL Certificates	EnTrust
Performance Monitor	Solarwinds
Web Deployment Application	RepliWeb
Media/Video Platform	Vbrick Systems
Geographic Information Systems (GIS)	Esri ArcGIS Enterprise Latitude Geographic's Geocortex Essentials GIS Software

4.0 Attachments

None.

Cuyahoga County IT Standards

Department of Information Technology IT Standard	
Standard:	BUSINESS SOLUTIONS/PLATFORMS

1.0 Purpose

The purpose of the business section is to provide the list of technology platforms that have been standardized by the County.

2.0 Scope

All Cuyahoga County contracted enterprise software systems. Solutions listed were reviewed and defined through the owning technology department.

3.0 Standard

County contracted enterprise software system will be reviewed and budgeted every budgeting cycle.

6.0 Business Software / Solutions

ERP	
HR	InfoR GHR (former SAP), TAM, LSM
Public Works (Asset Inventory)	InfoR EAM
Fiscal – OPD (Financials)	InfoR Lawson
Fiscal – OPD (Vendor Registration)	InfoR SSRP
Fiscal – Treasury (Check Processing)	MHC
Fiscal – OBM (Budget)	Sherpa (former BRASS)
Real Property	
Property Tax	MVP
Document Recording	Kofile
Document Management	
	OnBase
Case Management	
	OnBase
	Peerplace (HHS only)
Department of IT	
Virtual Server Infrastructure	VMWare VMWare Virtual Desktop Solution (HorizonView or re-branded equivalent)
Cherwell Service Management*	Cloud-hosted software solution for IT Service Management
Collaboration	Cisco Collaboration Suite* Microsoft Office 365 Collaboration Suite* Slack* (IT Only)
Content Management	Sitefinity (replacing Synapse)
Esri Enterprise GIS	Esri Enterprise Suite/Platform

Cuyahoga County IT Standards

Data Archiving	Solix* CDP
Business Intelligence	Tableau*, ArcGIS Insights
Sheriff	
Fingerprint Scanning/ID	CABIS (Thales Group)
HHS	
Mail processing machine at JFS and OCSS	OPEX
Accurint or Government software	Lexis/Nexis
Transportation routing & scheduling CFS	Workwave
Training room reservation software Westshore	Calendar Wiz
Mobile travel expense software	Triplog
Fingerprint & background check software	Biometric
Geocoding software	Google Maps API
Cloud application hosting services	Azure
Software development environment	Visual Studio (via MSDN Subscription)
Application Lifecycle Management System	JIRA
Collaboration workspace for JIRA projects	Confluence
Front-end web application development	SurveyJS
Chat Software for OCSS Website	Genesys Bold360
Misc	
Embarcadero Delphi Enterprise	Development Support Software (Delphi)
Fourwinds Digital Signage*	Visual Communications application
Scanning	Kodak Capture Pro
Data Reporting	Tableau*, Solix*, Microsoft SSRS, Cognos (EAM), Crystal Reports
Phone Call Recording	MediaSense
Cloud File Sharing	Microsoft OneDrive/SharePoint*, ShareBase*
E-mail	Microsoft Office 365*

APPENDIX III – NON-EXECUTIVE AGENCY STANDARDS

Cuyahoga County IT Standards

CUYAHOGA COUNTY COURTS

Common Pleas Court	
Court Management System	Proware
Backup	Unitrends
Juvenile Court	
Court Management System	CourtSmart
Probate Court	
None On-File	
Domestic Relations Court	
Internal Messaging	Big Ant
Oracle Client	11g/12g/12c

Additional Links:

OTHER COURTS

8th Court of Appeals	
None On-File	

Additional Links:

Cuyahoga County IT Standards

CUYAHOGA COUNTY PUBLIC DEFENDER'S OFFICE

Public Defender's Office	
None On-File	

Additional Links:

CUYAHOGA COUNTY PROSECUTORS OFFICE

Prosecutors Office	
Case and Document Management	Pointe Blank Justice Matters & DocuPointe
PDF Software	Fox-It
Various Media Storage	Various – Approval by Prosecutor CIO
Custom Workstations	Various – Approval by Prosecutor CIO

Additional Links:

Cuyahoga County IT Standards

BOARDS AND COMMISSIONS

Board of Elections	
Separate Standards On-File	See Additional Links Below

Additional Links: [IT Documentation Internal SharePoint – BOE IT Standards 2020.pdf](#)

Link preview: https://cuyahogacounty.sharepoint.com/:b:/s/DoITDocs/EUIvNn2vuVGmiYFXa0s30QBqo2v2o_XRpfjtJwsySP4OQ?e=dcUpVC

Board of Development Disabilities	
Internal Office Phone System	Cisco (County Provided)

Additional Links:

ADAMHS	
None On-File	

Additional Links:

OTHER

Additional Links: