Enterprise Standards and Approved Products

February, 2011

Enterprise Standards and Products Key Word Index (search all domains by key word).
Additions/Modifications to the Enterprise Architecture and Standards request form.
Exceptions to Enterprise Architecture and Standards request form.

1000 - Hardware Domain

Category	Enterprise Standard	Product(s)	Date
1100 Video Conferencing	**SEE 3440 - Network Domain – Video Conferencing**		**Revised:** 01/19/2011
1200 Scanners – Digital Imaging	▪ ANSI/AIM MS 44-1988 revised 1993 Recommended Practice for Quality Control. ▪ Capable of Scanning resolutions between 300 & 9600 depending on the application ▪ Use at least 256 levels of grey or 48 bit color ▪ Compliance with CCITT Group III or IV **See also Standard 1610 – Multifunction Devices (MFD)**	▪ **Bowe Bell and Howell** ▪ **Fujitsu** ▪ **Hewlett Packard** ▪ **Kodak**	**Revised:** 01/19/2011 **Effective:** 07/01/1997
1310 Servers – Remote Access	▪ PPP access ▪ CHAP/PAP Authentication ▪ Radius Authentication ▪ Analog/ISDN support	▪ **Remote Access Services (RAS)** to the state's network are provided by COT via the Kentucky Information Highway (KIH2) contract. ▪ **VPN** ▪ **WebEx (Cisco)** Remote access represents a risk for all network users, and should never be implemented without written COT approval.	**Revised:** 01/19/2011 **Effective:** 07/01/1997
1320 Servers - Application/Database	Must be able to run either z/OS (previously known as OS/390), the UNIX operating system, or Windows Server operating system. **See also Standard 1330 - Servers - Workgroup Servers (for Wintel).**	▪ **IBM iSeries** (formerly AS/400 series. Approved for "upgrade only" for agencies previously designated as strategic AS/400 users) ▪ **IBM pSeries** (formerly known as the RS/6000 series, for UNIX) ▪ **IBM xSeries servers** for Windows and Linux ▪ **IBM zSeries servers for z/OS** ▪ **Sun Enterprise and Sunfire servers** (for UNIX) ▪ **Wintel servers** running the Microsoft Windows Server OS	**Revised:** 01/19/2011 **Effective:** 07/01/1997

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1330 Servers – Workgroup Servers	**Single-Processor Wintel Server:** Minimum Configuration: One 3-GHz processor installed, 1 GB RAM. **SMP Wintel Server:** Minimum Configuration: Two 3-GHz processors installed, 1 GB RAM. **SMP Servers:** The minimum configuration of a server should reflect the resource requirements of the application. Initial application resource requirements plus at least one year of growth both in memory and processor capacity should reflect the minimum configuration requirement. Consideration for the type of storage should also reflect the application criticality. For example: RAID 1 (mirroring of physical disk) versus RAID 5 (striping of data across multiple disks with parity being striped for recoverability). COT's Operating Systems Branch should be contacted for servers that will reside at the Commonwealth Data Center, 101 Cold Harbor Drive facility for configuration assistance. Fault tolerant hardware RAID 5 disk storage with hot swap drives. Digital Audio Tape (DAT) tape backup, Digital Linear Tape (DLT) backup, newer high density tapes are SDLT and LTO Ultrium. 8 mm tape device – **see Standard 1800 Tape Back-Up Units** (or Storage Area Network). Redundant power supplies.	• **Dell** • **HP/Compaq** • **IBM**	**Reviewed:** 01/19/2011 **Revised:** 03/20/2009 **Effective:** 07/01/1997
1350 Servers – Internet / Intranet	**RISC or Wintel multiple-processor platform.**	**See Standards:** **1320 Servers – Application/Database** **1330 Servers – Workgroup Servers**	**Reviewed:** 01/19/2011 **Revised:** 06/01/2006 **Effective:** 07/01/1997

Category	Enterprise Standard	Product(s)	Date
1410 Desktop Computers	**Desktop Base Configuration:** ▪ Processor: Intel Dual Core E5300 2.6Ghz processor with 1 GB RAM ▪ Hard Drive: 160 GB hard drive ▪ Video: 64 MB Video Card or integrated ▪ Monitor: 17" Flat Panel Display, or 19" Flat Panel Display ▪ Optical Drive: DVD-ROM drive ▪ Network Card: 10/100/1000 MB Ethernet card ▪ Ports: Eight (8) USB 2.0 Ports, 1 Serial, 1 eSATA ▪ Keyboard: Standard keyboard, or Ergonomic keyboard	**Dell**	**Reviewed:** 01/19/2011 **Revised:** 03/17/2010 **Effective:** 07/01/1997
1420 Workstation Computers	**Workstation Base Configuration:** • Processor: Intel X58, Dual Core Processor 2.40GHz, 4M, L2, 4.8GT/s • Hard Drive: 320GB SATA 3.0Gb/s with NCQ and 16MB DataBurst Cache • Video: 2GB Dual Output Display Port, DVI Capable • Power: Minimum 525 watts power supply • Ports: Eleven (11) USB 2.0, eSATA, One (1) serial, One (1) parallel, Two (2) PS/2, One (1) RJ-45, Stereo line-in, headphone line-out, and Microphone connectors. • Network Card: Gigabit Ethernet controller • Optical Drive: 16X DVD+/-RW • Monitor: Two (2) Widescreen 22in Viewable Image Size, VGA/DVI, Client/ENT** • Keyboard: USB Standard or ergonomic keyboard • Mouse: USB 2 button optical mouse • Memory: 6GB, DDR3 ECC SDRAM Memory 1333MHz, 3X2GB (in 6 DIMM slots) • Bays: Two (2) internal 3.5" HDD bays, Two (2) external 5.25" optical bays, One (1) external 3.5" flex bay • Slots: Two (2) PCI-e x8 slot wired as x4 (1/2-length), Two (2) PCI-e x16 Gen 2 graphics slots (full length), Two (2) PCI slots (1/2-length) • OS: Windows 7 Enterprise, No Media, 64-bit Fixed Precision, English NOTES: *There will be unique situations such as intensive 3D graphics or video editing that will demand customization of the base configuration. **Monitors will be a separate purchase in order to simplify inventory and/or management	**Dell**	**Revised:** 12/15/2010 **Effective:** 07/01/1997

Category		Enterprise Standard	Product(s)	Date
1430	**Desktop - Power User**	**SEE 1420 – Workstation Computers**		**Revised:** 01/19/2011
1460	**Notebook / Laptop Computers**	**Base Notebook/Laptop Configuration:** ▪ Processor: Intel 2.0 GHz Core 2 Duo processor ▪ Memory: 2 GB RAM ▪ Display: 14.1" WXGA ▪ Video: 64 MB Video Card or integrated ▪ Hard Drive: 80 GB hard drive ▪ Optical Drive: CD-ROM drive, or DVD+/-RW drive ▪ Network Card: 10/100/1000 MB wired Ethernet card ▪ Modem: PCMCIA V.90 56Kbps modem ▪ Ports: Four (4) USB 2.0 Ports ▪ Optional: WLAN 802.11 b/g wireless network adapter, external keyboard (standard or ergonomic), external monitor (17" or 19" flat panel LCD), port replicator, docking station, standard laptop case	**Dell**	**Reviewed:** 01/19/2011 **Revised:** 03/17/2010 **Effective:** 07/01/1997
1480	**Notebook / Laptop Small Form Factor**	**SEE 1460 Notebook/Laptop Computers**		**Reviewed:** 01/19/2011 **Revised:** 03/20/2009
1600	**Printers**	▪ Network printers must be Ethernet ready ▪ SNMP Support ▪ Support Postscript 2 functionality ▪ Support PCL Level 5 or higher ▪ Laser ▪ Duplex Capable	**Lexmark**	**Reviewed:** 01/19/2011 **Revised:** 03/20/2009 **Effective:** 07/01/1997
1610	**Multifunction Devices (MFD)**	Minimum acceptable configuration: ▪ Standard 3200 Network Protocol - TCP/IP ▪ Standard 3200 Network Protocol - Ethernet ▪ Standard 3600 Network Management - SNMP capable ▪ Standard 1600 Printers - Must support Postscript Level 2 and include PCL Level 5 or higher support. ▪ Fax Modem - 56 Kbps	Contract details are available through each agency's Procurement personnel from eMARS. Current contract vendors and numbers: ▪ **Kip America** 758-1000000071 ▪ **Konica Minolta** 758-1000000078 ▪ **Oce Imagistics** 758-1000000077 ▪ **Ricoh** 758-0900004649 ▪ **Sharp Electronics** 758-1000000074 ▪ **Toshiba America** 758-1000000075 ▪ **Xerox** 758-0900004653	**Revised:** 01/19/2011 **Effective:** 12/20/1999

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1800 Tape Back-up Units	Any server compatible hardware, which supports either Direct Audio Tape (DAT), Digital Linear Tape (DLT) or SCSI devices.	Compatible with approved operating systems: Windows and Unix Must support approved tape backup software in **EAS Category 6100 Backup and Recovery**. Direct Audio Tape (DAT) or Digital Linear Tape (DLT): Any server compatible peripheral hardware which supports SCSI devices. These units may be internal, external, single or tape library configuration depending on the backup requirements. Exabyte M2– 8mm tape format Note: All servers at the Commonwealth Data Center will utilize Tivoli Storage Manager (TSM) software for backup purposes.	**Revised:** 01/19/2011 **Effective:** 07/01/1997
1910 Smartphone	A smartphone is a mobile phone that offers more advanced computing ability and connectivity than a contemporary basic feature phone. Smartphones and feature phones may be thought of as handheld computers integrated with a mobile telephone, but while most feature phones are able to run applications based on platforms such as Java ME, a smartphone usually allows the user to install and run more advanced applications. Smartphones run complete operating system software proving a platform for application developers. All wireless phone devices are required to be password protected to prevent unauthorized access to wireless voicemail through Caller ID "spoofing". Please see "**EAS Best Practice Recommendations**" on page 6 of this document.	• **Appalachian Wireless** 758-0800003348 • **AT&T Wireless** 758-0700002372 Contact Agency Wireless Coordinator for additional products.	**Revised:** 02/16/2011 **Effective:** 06/01/2006

Enterprise Architecture and Standards Best Practice Recommendations

1910 – Smartphone:
Web-based companies may provide methods of gaining unauthorized access to wireless voicemail through Caller ID "spoofing". Technology exists that can make the call appear as if it is coming from a number specified by the "spoofer" coming from the wireless device itself. It is therefore recommend adding a password to the voicemail box to resolve this issue.

Voicemail is set up for fast access and does not normally require a password when checking messages from the wireless device; however, creating a password that has to be entered when checking voicemail from the device will block this type of spoofing.

When setting up a voicemail box initially, the user sets a password. That password is used when accessing their voicemail box from a landline phone or any phone other than the wireless device. The password instructions below are for creating a password that has to be entered when accessing voicemail from the wireless device. The same password can be used for both (access from the wireless device and access from any other handset) but both need to be enabled.

Instructions to Enable/Change a Voicemail Password:

To Enable a Password for your Wireless Device:

- Press * to open the Voicemail Main Menu
- Press 4 for Personal Options.
- Press 2 for Administrative Options.
- Press 1 for Passwords.
- Press 2 to Turn Password On
- If prompted, select any Random 4-15 Digit Password.

To Change the Password:

- Press * to open the Voicemail Main Menu
- Press 4 for Personal Options.
- Press 2 for Administrative Options.
- Press 1 for Passwords.

Following these steps will help secure voicemail service from unauthorized access.