SAND2011-7981P

▷ Sandia's Desktop Common Operating Environment

The definition of current Common Operating Environment (COE) has roots in the initial hardware and software standards previously developed by our Computer Support Units (CSU) for **standardizing the computing environment** enterprise wide. The COE consists of current and future migration states for the enterprise. The definition was developed by the CSU Common Support and Help Desk organization's CSU Technology Development (TechDev) team. Its concepts are being applied across the **Windows, Macintosh, and Linux** platforms.

▷ Concepts of the Common Operating Environment

Common System Platform:

The Common System Platform (CSP) defines the computers that will be supported by the CSUs under the COE. There are three classes of desktop computers— Windows, Macintosh, and Linux—and four classes of mobile computers—Windows, Macintosh, Linux, and Personal Data Assistants (PDA). TechDev bases the Common System Platform loosely on the operating system developer's **recommended system requirements and TechDev's testing** of the various systems in a laboratory environment. This has lead to the development of a "Preferred Systems List" for the Windows, Macintosh, and PDA environments.

Common Software Environment:

The Common Software Environment (CSE) is divided into the following sections:

Collaborative Core Environment. This section of the CSE defines the applications and the configurations for those applications that will be installed onto all classes of desktops computers and most classes of mobile computers. This "Collaborative" section is exactly that, it allows for the ability of staff to collaborate easily between each other. When necessary, applications will be changed simultaneously corporation wide so as to maintain collaboration.

Desktop Core Environment. This represents the components of the CSE that are directly related to the operating system and any software necessary to maintaining the viability of the operating system. Updates to these components are on an "as needed" basis to maintain the integrity of the operating system.

Security Core Environment. This represents the components of the CSE that are responsible for maintaining the security of the desktop. This is accomplished by running applications, configuring the operating systems and their components, and/or installing patches to the applications and operating systems installed on the desktops. The purpose of these actions is to secure the desktop from unauthorized access. Additions to this area are driven by Computer Security requirement, coordinated with TechDev implementation.

Desktop COE Search | Go!

▶ Windows COE

The **Windows** COE is maintained by CSU Technology Development.

- ▶ What's on it?
- ▶ How can I get it?
- ▶ Windows COE Timelines

▶ Macintosh COE

The **Macintosh** COE is maintained by CSU Technology Development.

- ▶ What's on it?
- ▶ How can I get it?

▶ Linux COE

The **Linux** COE is maintained by CSU Special Projects. For more information regarding the Linux COE, please go to the Sandia Linux Common Operating Environment site.

Windows COE Software:

Desktop Core Environment
- Operating Systems
  - Windows XP Professional SP3 (32-bit)
  - Windows 7 Enterprise (32-bit)
  - Windows 7 Enterprise (64-bit)
- Disk Defragmentation Utility
  - Diskeeper 2007 Professional (XP)
- Desktop Management Software Utility
  - System Center Configuration Manager (SCCM)

Security Core Environment
- Antivirus Firewall Protection
  - Symantec Endpoint Protection
- Security Update
  - Legal Notice Banner
- Two Factor Authentication
  - Active Client
- Disk Wipe Utility
  - BCWipe

Collaborative Core Environment
- Office Products
  - Microsoft Office 2007--Word, Excel, PowerPoint, OneNote, InfoPath
- Email Client
  - Outlook 2007
- Instant Messenger Client (SRN only)
  - Microsoft Office Communicator
- Web Tools
  - Internet Explorer 8
  - Citrix XenApp Web Plugin
  - Adobe Acrobat Reader 9
  - Flash

Windows COE HardWare:

The hardware requirements for the COE are based on Sandia's Preferred Systems List. The Preferred Systems List was created to help standardize PC systems (desktops and laptops) within the Sandia computing environment as a way of **lowering the total cost of ownership** for Sandia. Sandia computing experts, along with industry standards professionals, judge that following a series of "best practices" reduces costs. One element of these best practices is computer standardization, which involves controlling the number of PC brands in a computing environment.

In Sandia's case, **standardization involves reducing the number of manufacturers and models the Computer Support Unit (CSU) must support and the length of time for that support**. Currently, the preferred systems manufacturers for Windows desktops are Dell and Hewlett Packard/Compaq and for Windows laptops it is Dell, Hewlett Packard/Compaq, and IBM. The support time is 3 years from the date that a system is

removed from Sandia's Preferred Systems List. These choices reflect a Sandia business decision that is revisited periodically.

The policy for standardization was approved by Executive Vice President Woodard in a memo dated August 21, 2000. The memo mandates that **all purchases of enterprise computers**—those supported by the CSU with indirect funds and normally used by employees and on-site contractors for email, office, and Web applications—be chosen from Sandia's Preferred Systems List & Query and that the systems have COE software installed.

MacIntosh:

Desktop Core Environment
- Operating Systems
  - Mac OS X 10.5 recommend
  - Mac OS X 10.4 supported
- File Compression Utility
  - Stuffit Expander 8.0.2
  - Dropstuff 8.0.2
- Desktop Management Software Utility
  - KBOX
  - Timbuktu Pro 8.7

Security Core Environment
- Antivirus Protection
  - Norton AntiVirus 11
- Personal Firewall
  - Apple Built-In Firewall (IPFW) -Sandia Configuration
- Disk Wipe Utility
  - Macintosh native Diskutil configured for a 7 pass wipe.
- Security Update
  - Legal Notice Banner - SF 2902-NTU (2-2009)

Collaborative Core Environment
- Office Products
  - Microsoft Office 2008
- Email Client
  - Entourage 2008
- Instant Messaging Client
  - Microsoft Messenger for Macintosh version 7
- Web Tools
  - FireFox 3 recommended
  - Citrix ICA 7.0 terminal server client
  - Macro Media Flash Player version 10
  - Flip4Mac version 2

Macintosh COE Hardware:

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In Sandia's case, standardization involves reducing the number of manufacturers and models the Computer Support Unit (CSU) must support. In the case of the Macintosh platform, the only manufacturer is Apple Computers and there are currently 6 models on the list. This choice reflects a Sandia business decision that is revisited periodically.

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