Commonwealth of Virginia

Enterprise Technical Architecture (ETA)

Desktop Productivity Tools Topic Report Platform Domain

Version 1.0, January 15, 2010

Prepared by:

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ETA Platform Domain Team

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Tables and Figures

Executive Summary

The purpose of this document is to identify Commonwealth policies, standards, and recommended practices for desktop productivity tools to meet the business needs of agencies.

In general, the document provides assistance to executive branch agencies and their platform service providers by addressing seven desktop productivity tool components:

- Office Suites

- Web Browsers

- PDF Authoring and Reading

- Desktop Publishing

- Desktop Project Management

- Diagramming

- File compression

The architectural guidance for desktop productivity tools consists of:

- Central control of the basic desktop tools used by Commonwealth knowledge workers (individuals who work with information or who develop and use knowledge in the workplace)

- Ensuring that all deployed desktop productivity tools have vendor or equivalent levels of support

- Continued use of existing desktop Microsoft solutions through the 2010 fiscal year

- Encouragement of more complete standardization on any de facto office productivity solutions that are used by most or multiple agencies

Desktop Productivity Tools Topic Report Updating and Review

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Publication Version Control

Desktop Productivity Tools Topic Report: Version History		
Version	**Date**	**Description**
1.0	1-15-2010	All of the desktop productivity tools content provided within version 2.0 of the Platform Domain Report was extracted to this separate Desktop Productivity Tools Topic Report and updated to enhance the updating and review process. Only the requirements, technology component standard tables and recommended practices that have been added, changed, or rescinded are flagged as changes within this topic report.
		New recommended practices: PLA-RP-42 through 45 have been added
		New requirements: PLA-R-42 and 43 have been added
		New technology component standard tables: PLA-S-17 through 23 have been added
		Recommended practices PLA-RP-05 and 11 have been deleted
		Requirement PLA-R-10 have been rescinded
		Technology component standard table PLA-S-07 have been rescinded
		The complete text of the rescinded requirements and technology component standard tables and deleted recommended practices can be found in Appendix A.

Identifying Changes in Principles, Requirements, Component Tables and Recommended Practices

- Take note of the Version Information Table entries above
- Take note of vertical lines in the left margin for changes in Principles (EXA-P-nn), Requirements (EXA-R-nn), and Recommended Practices (EXA-RP-nn). No vertical line will appear beside updated Component Tables. Here a revision is indicated by a date and an action in the title of the table.
- For requirements, the specific changes in wording are noted using italics and underlines. In addition, dates are provided for new or rescinded requirements. The following examples demonstrate how the reader may identify requirement updates, and changes:

  EXA-R-01   Technology Standard Example with No Change – The text is the same. The text is the same. The text is the same.

  EXA-R-02   Technology Standard Example with Revision – The text is the same. *A wording change, update or clarification is made in this text.*

  EXA-R-03   ~~Technology Standard Example of Deleted Standard –~~ ~~This standard was rescinded on mm/dd/yyyy.~~

  EXA-R-04   *Technology Standard Example of New Standard –* *This standard is new.*

- Examples of Technology Component Standard Table changes:

Table EXA-S-01: Example Table Change Technology Component Standard *Updated: [date]*
Strategic:
No change. No Change. *This is a change. This is a clarification.* This is an addition.
Emerging:
No change in this bullet and second bullet moved to strategic
Transitional/Contained:
No change
Obsolescent/Rejected:
No Change

Table EXA-S-02: Example Table No Change Technology Component Standard *Reviewed: [date]*
Strategic:
No change
Emerging:
No change
Transitional/Contained:
No change
Obsolescent/Rejected:
No Change

<table>
<tr><td colspan="2" align="center">Table EXA-S-03: Example Table Rescinded
Technology Component Standard
<i>Rescinded: [date]</i></td></tr>
</table>

■	**Strategic:**
	~~Rescinded standards~~
■	**Emerging:**
	~~Rescinded standards~~
■	**Transitional/Contained:**
	~~Rescinded standards~~
■	**Obsolescent/Rejected:**
	~~Rescinded standards~~

<table>
<tr><td colspan="2" align="center">Table EXA-S-04: Example New Table
Technology Component Standard
<i>New: [date]</i></td></tr>
</table>

■	**Strategic:**
	New standards
■	**Emerging:**
	New standards
■	**Transitional/Contained:**
	New standards
■	**Obsolescent/Rejected:**
	New standards

Review Process

VITA Information Technology Investment and Enterprise Solutions Directorate Review

This topic report was reviewed and approved by Chuck Tyger, the Director of the Policy, Practice and Architecture Division.

Online Review

Online review is provided for agencies and other interested parties via the Online Review and Comment Application (ORCA).

Background

The Commonwealth's Enterprise Architecture is a strategic asset used to manage and align the Commonwealth's business processes and Information Technology (IT) infrastructure/solutions with the State's overall strategy.

The Enterprise Architecture is also a comprehensive framework and repository which defines:
- the models that specify the current ("as-is") and target ("to-be") architecture environments,
- the information necessary to perform the Commonwealth's mission,
- the technologies necessary to perform that mission, and
- the processes necessary for implementing new technologies in response to the Commonwealth's changing business needs.

The Enterprise Architecture contains four components as shown in the model in Figure 1.

Figure 1: Commonwealth of Virginia Enterprise Architecture Model
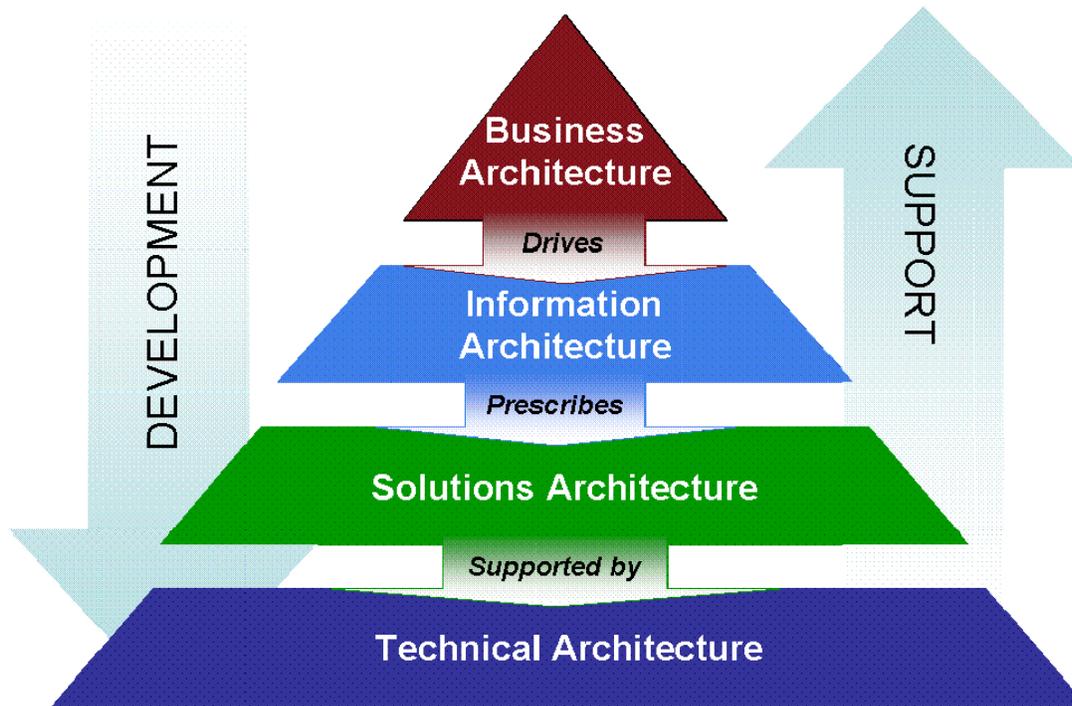
The Business Architecture drives the Information Architecture which prescribes the Solutions Architecture that is supported by the Technical (technology) Architecture.

The Enterprise Technical Architecture (ETA) shown in Figure 2 consists of eight technical domains that provide direction, recommendations and requirements for supporting the Solutions Architecture and for implementing the ETA. The ETA guides the development and support of an organization's information systems and technology infrastructure.

Figure 2: ETA Relationship to the Enterprise Architecture

Enterprise Architecture Model

The Enterprise Technical Architecture (ETA) consists of eight technical domains that provide direction, recommendations, and requirements for supporting the Enterprise Solutions Architecture.
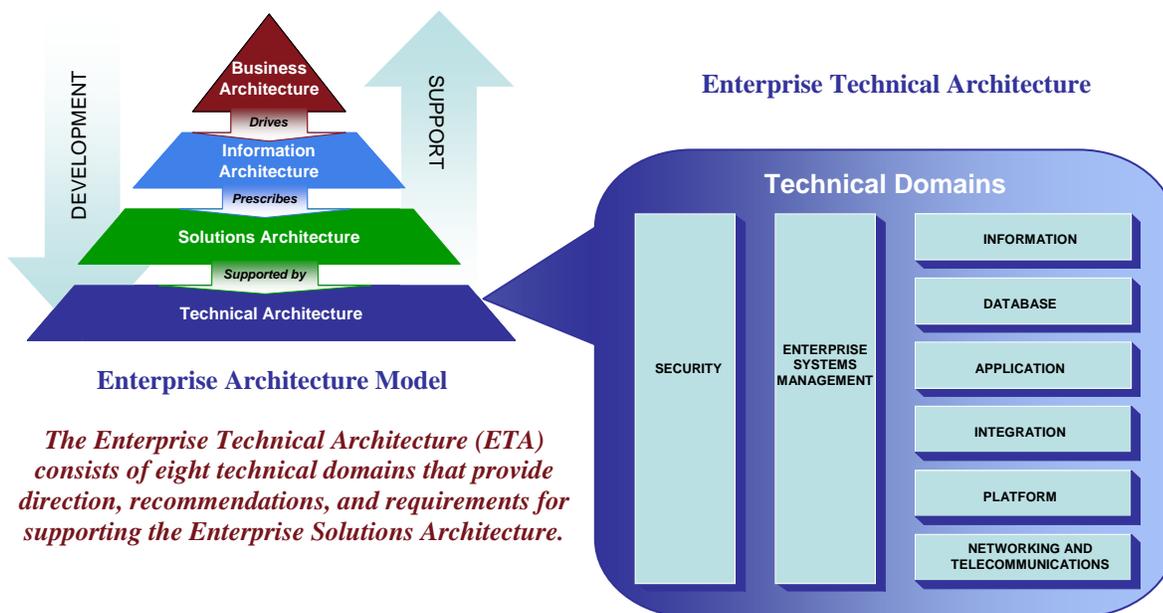
Each of the domains is a critical piece of the overall ETA. The Networking and Telecommunications and Platform Domains address the infrastructure base and provide the foundation for distributed computing. The Enterprise Systems Management, Database, Application, and Information Domains address the business functionality and management of the technical architecture. The Integration Domain addresses the interfacing of disparate platforms, systems, databases and applications in a distributed environment. The Security Domain addresses approaches for establishing, maintaining, and enhancing information security across the ETA.

Figure 3: Desktop Productivity Tools Topic Relationship to the ETA Platform Domain
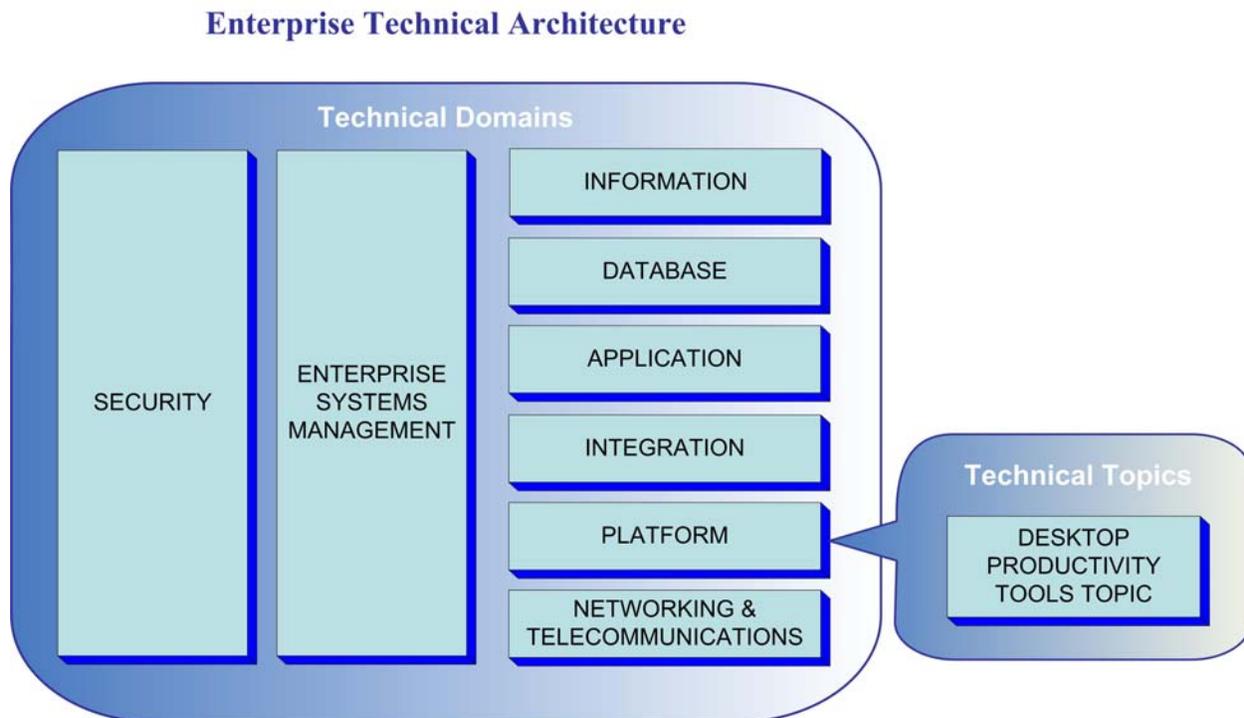
The Commonwealth's *ETA Platform Domain* is further decomposed to include the desktop productivity tools topic.

Definition of Key Terms

This topic report presents three forms of architecture direction for agencies that are planning or making changes or additions to their information technology:

- **Requirements** – statements that provide mandatory Enterprise Architecture direction.
- **Technology Component Standard Tables** – tables that indicate what technologies or products agencies may acquire at a particular point in time. The requirements are mandatory when acquiring a new or replacing an existing technology or product.
- **Recommended Practices**—statements that provide guidance, which is not mandatory.

The following definitions are applicable to the technology component standard tables presented in this report:

Technology Component Standard
Definitions
■ Strategic:
This technology is considered a strategic component of the Commonwealth's Enterprise Architecture. Strategic technologies define the desired "to-be" state of the Commonwealth.
Before any updated or new Strategic technology can be deployed it must complete a formal operational review. As part of this review, agencies or vendors that provide the services needed to deploy, maintain and/or support that technology must:
• Perform the appropriate testing
• Establish the needed technical support
• Follow a formal Change Management process
• Develop any required images
• Obtain the appropriate operational reviews and approvals
In addition to the operational review, customer agencies should also:
• Perform additional testing on impact to agency specific applications
• Assess impact on business processes
• Assess training needs
The decision to deploy a Strategic technology is a business decision that is made by the agencies or vendors that provide the services needed to deploy, maintain and/or support that technology and the customer agencies. Input from the operational and customer reviews should also be included when creating implementation plans for new or updated Strategic technologies.
■ Emerging:
This technology requires additional evaluation in government and university settings. This technology may be used for evaluative or pilot testing deployments or in a higher education research environment. Any use, deployment or procurement of this technology beyond higher education research environments requires an approved Commonwealth Enterprise Architecture Exception. The results of an evaluation or pilot test deployment should be submitted to VITA's Policy, Practice and Architecture Division for consideration in the next review of the Enterprise Architecture for that technology.
■ Transitional/Contained:
This technology is not consistent with the Commonwealth's Enterprise Architecture strategic direction. Agencies may use this technology only as a transitional strategy for moving to a strategic technology. Agencies currently using this technology should migrate to a strategic technology as soon as practical. A migration or replacement plan should be included as part of the Agency's IT Strategic Plan. New deployments or procurements of this technology require an approved Commonwealth Enterprise Architecture Exception.
■ Obsolescent/Rejected:
This technology may be waning in use and support, and/or has been evaluated and found not to meet current Commonwealth Enterprise Architecture needs. Agencies shall not make any procurements or additional deployments of this technology. Agencies currently using this technology should plan for its replacement with strategic technology to avoid substantial risk. The migration or replacement plan must be included as part of the Agency's IT Strategic Plan.

Agency Exception Requests

Agencies that want to deviate from the requirements and/or technology standards related to the platform domain desktop productivity tools topic and contained in the COV ITRM Enterprise Architecture Standard may request an exception using the *Enterprise Architecture Change/Exception Request Form.* All exceptions must be approved prior to the agency pursuing procurements, deployments, or development activities related to technologies that are not compliant with the COV ITRM Enterprise Architecture Standard. The instructions for completing and submitting an exception request are contained in the current version of *COV ITRM Enterprise Architecture Policy*.

Desktop Productivity Tools Topic Report
This report addresses the desktop productivity tools topic of the Enterprise Technical Architecture Platform Domain.   Requirements and technology product standards introduced in this topic report will be incorporated into the COV ITRM Enterprise Architecture Standard and/or Policy. As appropriate, terms and definitions used in this document can be found in the COV ITRM IT Glossary which may be referenced on the ITRM Policies, Standards and Guidelines web page at http://www.vita.virginia.gov/library/default.aspx?id=537.

Overview

The desktop productivity tools topic includes:

- Overviews of seven technical components: Office Suites, Web Browsers, PDF Authoring and Reading, Desktop Publishing, Desktop Project Management, Diagramming, and File compression.

- Principles, requirements, recommended practices, and technology standards for executive branch agencies related to these components which apply to those organizations responsible for supplying, managing, procuring and maintaining IT hardware, infrastructure related software, and operating systems. These organizations are hereafter referred to in the document as "Agencies with responsibilities for providing IT infrastructure".

Local governments and other public bodies

This architecture was designed with the intent of encouraging its use in state and local service provision efforts. While they are not required to comply with a requirement unless the requirement is a prerequisite for using a VITA service or for participating in other state-provided service programs, their consideration of relevant requirements is highly recommended.

Methodology

The initial efforts related to desktop productivity tools focused on how those tools interfaced with other technical architecture domains, the present and future directions for desktop productivity tools, and how often the information provided in this document is to be updated. The team also reviewed input from publications and individuals with specialized knowledge. The results of the team's efforts and deliberations are provided throughout this document. Update efforts review this work and provide modifications, additions and deletions as needed.

Objectives

The desktop productivity tools topic objectives include:

- Providing comprehensive coverage of trends, issues, and critical information needs for desktop productivity tools to guide service providers and agency decision makers

- Providing a minimal set of tools that meet the needs of knowledge workers

- Supporting requirements that will simplify and standardize desktop productivity approaches in Commonwealth executive branch agencies

- Providing a long-term architectural vision with opportunities for short-term payoffs

- Providing recommended practices to support desktop productivity tools decisions for enterprise and agency efforts

Desktop Productivity Tools Components

The desktop productivity tools topic addresses the following technical components:

- Office Suite
  - Word Processing
  - Spreadsheet
  - Presentation
  - E-mail Client & Calendaring
  - Personal Database
- Web Browser
- PDF Authoring and Reading
- Desktop Publishing
- Desktop Project Management
- Diagramming
- File compression

The desktop productivity tools software deployed on Commonwealth desktops and notebooks has been fairly consistent over time. In addition to office suite software, Internet Explorer, Outlook Express, Antivirus, CD/DVD assistance software, and Adobe's Acrobat Reader are commonly deployed[1]. Most knowledge workers and business staff use their computers for writing and editing documents, email and Internet research. Virginia knowledge workers use three Microsoft products extensively, Word, Internet Explorer, and Outlook. Additional software including PowerPoint and Excel are only used by a small portion of the workforce whose use varies from rarely to daily. Commonwealth agencies presently employ several Microsoft products in sufficient numbers for Microsoft to be considered the de facto standard for several desktop productivity tools.

Extended Support

One important issue related to establishing the schedule of updating desktop productivity tools is the need to understand the difference between Microsoft software "mainstream" and "extended" support. During "mainstream" support, Microsoft provides: incident support, security update support and the ability to request non-security hotfixes. During extended support, the customers would have to pay for any requested fixing of bugs (hotfixes) that may be necessary for a particular agency application development effort. However, if a security patch is needed, Microsoft will still provide it at no charge as part of extended support. In essence, expanded support means that Microsoft has moved its development team over to support new products. Overall, there is little or no risk with going on "extended" support. Microsoft products including

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[1] Software data from the Due Diligence Database for FY 2002; the VITA Inventory Database for FY 2006; and Northrop Grumman partial inventory data for FY 2009.

Windows and Office have an "extended" support of five years after the five year "mainstream" support is completed.

Base Images

Agencies with responsibilities for providing IT infrastructure now centrally manage a portion of desktop productivity tool software as part of the base image for new desktops and notebooks. These base images should include the operating system, word processing, web browser, presentation, spreadsheet, antivirus, PDF reader, and accessories (e.g., calculator and media player). In general, personal database, desktop project management, diagramming, PDF writer and similar high-end tools should not be included in the standard base image. These high-end tools may be added as extensions to the base image to support business unit or departmental needs. Overall, full product installs are preferred for the products that are in the base image.

Office Suite

An office suite is a collection of programs intended to be used by typical knowledge workers. These programs are distributed together, have a consistent user interface and can interact with each other. Office suites can include the following types of software to meet knowledge worker needs:

- Word Processing
- Spreadsheet
- Presentation
- E-mail Client & Calendaring
- Personal Database

The most often used office suites are currently Microsoft Office, OpenOffice.org (free ware), Sun's StarOffice, and Google offerings.

Word Processing

Word processing program is used for the composition, editing, formatting, and printing of documents. It is the most used software for knowledge workers in government, with most workers only using the basic software features.

Spreadsheet

A spreadsheet program displays multiple cells that make up a grid consisting of rows and columns. Each cell can contain alphanumeric text, numeric values or a formula that defines how the content of that cell is to be calculated from the contents of any other cell (or combination of cells). Spreadsheets are frequently used for financial analysis because of their ability to re-calculate the entire sheet automatically after a change to a single cell is made.

Presentation

A presentation program is used to display information, normally in the form of a slide show. It typically includes three major functions: text editing, support of graphic images and a slide-show capability to display the presentation content.

E-mail Client & Calendaring

An e-mail program manages electronic mail for a worker. The e-mail program may be on the desktop (client) or it may also be a web application. A calendaring program provides users with an electronic version of a calendar and may provide the following features:

- Address book – a list of contacts

- Appointments:

    o Calendar – a list of appointments and the attendees for the appointments

    o Attachments – the attachment can also be shared other appointment participants

    o Reminders – automatic reminder upcoming appointment

- o Availability sharing –allows sharing availability with others

- o Collaborative scheduling – can check proposed participant schedules and propose meeting times

- o Group Calendar – a calendar showing group appointments

- Exporting – can export to varies file formats

- Web-based interface – allows access to calendars from home PC

Personal Database

Office suites usually contain a single-user relational database that is targeted to knowledge workers whose data management needs exceed the abilities of a spreadsheet. For more information on databases, please see the ETA Database Domain report.

Microsoft Office

Microsoft Office is the current office suite standard for executive branch agencies and will probably remain so for the next several years. Microsoft Office includes: Word, Excel, PowerPoint and Outlook.

The Professional suite version also includes Access which is the most popular Windows desktop database application. Relatively few knowledge workers really need database software and even fewer are able to use it effectively. Because of this, it may be worthwhile to consider the savings potential of buying and installing Microsoft Access separately whenever licensing options permit a savings. In most cases, spreadsheets (Excel) will suffice as an alternative to personal databases in meeting the needs of non-technical data gatherers and reporters.

Access can also be used as a front-end to server-based strategic relational databases. However, desktop database products such as Microsoft Access, Lotus Approach, or Paradox, shall not be used as a multi-user database (i.e. supporting an application where the personal database supports multiple users simultaneously).

Updating to Office 2007 has agency-side costs that are considerable in comparison with previous version changes due to the introduction of a new user interface. Training of agency staff, modifying integrated business software, and long staff learning curves for high-end users will all contribute to added agency costs which may not be anticipated by many agencies. Agencies need to plan adequately for application testing, changes and user training.

Microsoft Office Viewers

Microsoft Office Viewers are standalone freeware programs that allow knowledge workers who do not have Microsoft Office to view and print files that were created by Microsoft Office programs:

- Microsoft Word Viewer can view and print documents that were created by Microsoft Office Word

- Microsoft Excel Viewer can view and print spreadsheets that were created by Microsoft Office Excel

- Microsoft PowerPoint Viewer can watch and print PowerPoint presentations that were created in Microsoft Office PowerPoint

Evaluating Alternatives to Microsoft Office

According to Gartner and others, changing from one office productivity suite to another will result in costs related to training for the workforce and support staff and opportunity costs related to time lost during the learning curve that can outweigh any likely savings that might be gained from making a switch. Still others indicate a total cost of ownership for open system alternatives that is 25 to 50 percent less than that of Microsoft.

There are no good government studies at this time showing any conclusive evidence of a cost-effective alternative to using the Microsoft Office suite of products. In the future, the Commonwealth may want to establish a team to evaluate and determine the feasibility of alternative office suites.

Recommended Practices

The following are recommended practices for the Office Suite component.

PLA-RP-42   *Evaluation of Microsoft Office Suite Releases –* Agencies with responsibilities for providing IT infrastructure who provide Microsoft Office Suite software to customers should formally evaluate releases well in advance of offering the software to customers

Implications:
This evaluation should include the pros and cons of upgrading, the impact of upgrading, the costs associated with upgrading, costs associated with not upgrading, and the timing related issues involved in upgrading. One key component for completing the evaluation is having early access to Microsoft information that is available as part of an Enterprise Agreement.

PLA-RP-43   *Agency Evaluation of Microsoft Office Suite Releases –* Agencies should evaluate new Office Suite software releases prior to their being accepted for use at their agency. The evaluation should include testing agency solutions that are integrated with Office Suite components and accessing knowledge worker training needs.

Rationale:
The business impact of a new Office Suite can be significant. Agency applications that are integrated with the Office Suite can fail and productivity can be decreased until the knowledge worker is familiar with the new software.

Requirements

The following is a requirement for the Office Suite component.

PLA-R-42   *Personal Database Products –* Personal or desktop database products such as Microsoft Access, Lotus Approach, or Paradox, are considered desktop productivity tools which shall not be used as a

database for multi-user applications. They may be used as a front-end for strategic technology relational databases.

Implications:

Agencies that currently have multi-user applications using personal database products as a database should plan for modifying, replacing, or eliminating the application to avoid substantial risk. A migration or replacement plan must be included as part of the Agency's IT Strategic Plan.

Technology Component Standards

The following is a technology component standard for Office Suites.

Table PLA-S-17: Office Suite Technology Component Standard *New: January 15, 2010*
■ **Strategic:**
Microsoft Office 2003 with appropriate service packs and including the Office Compatibility Pack from Microsoft
Microsoft Office 2007 with appropriate service packs
Word, Excel and PowerPoint Viewers (highest version evaluated and tested for the environment and earlier versions that still have Microsoft Office mainstream support)
E-mail for Colleges and Universities
Google mail, Microsoft Mail, and Yahoo Mail are strategic for those Colleges and Universities that wish to provide email for students. Considerable caution should be exercised for non-student use.
Note: Microsoft Office includes: Word, Excel, PowerPoint and Outlook. The Professional suite version also includes Access.
■ **Emerging:**
Microsoft Office 2010 began beta testing in November, 2009 and is scheduled for general release in June 2010
■ **Transitional/Contained:**
Microsoft Office Professional XP (extended support ends July 12, 2011). EA Exception required only for installation on a new PC.
Word, Excel and PowerPoint Viewer versions that Microsoft Office is in its extended (security hotfixes still available) support life cycle
■ **Obsolescent/Rejected:**
All Microsoft Office versions that no longer have Microsoft extended support (beyond support life cycle)
Word, Excel and PowerPoint Viewer versions that no longer have Microsoft Office extended support (beyond support life cycle)

Web Browser

A web browser is an application for retrieving, presenting, and traversing information resources on the World Wide Web. Information resources may be a web page, image, video, or other piece of content and are identified by a Uniform Resource Identifier (URI). Although browsers are primarily intended to access the Internet, they can also be used to access information provided by private networks or files. The major web browsers are Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, Google Chrome, and Opera.

Technology Component Standards

The following is a technology component standard for Web Browsers.

Table PLA-S-18: Web Browsers **Technology Component Standard** *New: January 15, 2010*
■ **Strategic:**
Microsoft Internet Explorer (highest version evaluated and tested for the environment and earlier versions that still have full vendor or equivalent support)
Mozilla Firefox 3.0.11 or a later well-tested, non-beta version
■ **Emerging:**
Mozilla Firefox 3.5 (at time of writing)
Open Source Browsers (e.g., Safari, Chrome, Opera 9.6, Opera Mini 4.2, and other Opera products)
■ **Transitional/Contained:**
All versions of Internet Explorer and Firefox that are in their extended (security hotfixes still available) support life cycle
■ **Obsolescent/Rejected:**
All versions of Internet Explorer and Firefox that are beyond their support life cycle (no longer have vendor or equivalent support)

PDF Authoring and Reading

Portable Document Format (PDF) is a file format created by Adobe Systems for document exchange. PDF is used for representing documents independently of application software, hardware, or operating system. PDF was officially released as an open standard in 2008. Commonwealth knowledge workers can use Adobe Reader to view, search, digitally sign, verify, print, and collaborate on PDF documents. Knowledge workers can use Adobe Acrobat or other approved freeware PDF Authoring solutions to create PDF documents including data collection forms.

Recommended Practices

The following is a recommended practice for the PDF Authoring and Reading component.

> ### PLA-RP-44   *Agency Evaluation of PDF Authoring Solutions – Agencies should consider approved freeware PDF Authoring alternatives to Adobe Acrobat.*
>
> ### *Rationale:*
> *Tools that are available to most Commonwealth knowledge workers without any additional costs may represent best value solutions. These solutions still should have vendor or equivalent levels of support.*

Technology Component Standards

The following is a technology component standard for PDF Authoring and Reading.

Table PLA-S-19: PDF Authoring and Reading Technology Component Standard *New: January 15, 2010*
Strategic:
Adobe Reader, Adobe Acrobat and plug-ins (highest version evaluated and tested for the environment and earlier versions that still have full vendor or equivalent support)
Approved freeware PDF Authoring solutions: PrimoPDF, CutePDF, Bullzip PDF Printer, PDFCreator, PDF 995 (highest version evaluated and tested for the environment and earlier versions that still have full vendor or equivalent support)
Emerging:
Transitional/Contained:
All versions of Adobe Reader, Adobe Acrobat and plug-ins, and other PDF Authoring and Reading products that are in their extended (security hotfixes still available) support life cycle
Non-approved PDF Authoring freeware solutions that still have full vendor or equivalent support
Obsolescent/Rejected:
All versions of Adobe Reader, Adobe Acrobat and plug-ins, and other PDF Authoring and Reading products that are beyond their support life cycle (no longer have vendor or equivalent support)

Desktop Publishing

Desktop publishing allows knowledge workers to create "what you see is what you get" (WYSIWYG) publication quality documents for both large scale publishing and for small scale local multifunction output and distribution. Historically, Commonwealth knowledge workers have used multiple desktop publishing solutions.

Recommended Practices

The following is a recommended practice for the Desktop Publishing component.

> ### PLA-RP-45   *Agency Evaluation of Desktop Publishing Solutions –* *Agencies should evaluate Microsoft Office Publisher as a Desktop Publishing solution before spending funds on alternatives.*
>
> *Rationale:*
> *Microsoft Office Publisher was added to Microsoft Office Professional starting in version 2000 to provide desktop publishing functionality. This tool is available to most Commonwealth knowledge workers without any additional costs.*

Technology Component Standards

The following is a technology component standard for Desktop Publishing.

Table PLA-S-20: Desktop Publishing Technology Component Standard *New: January 15, 2010*
■ **Strategic:**
Microsoft Office Publisher (and Viewer) versions: 2003 and 2007 (included In Microsoft Office)
Adobe InDesign, Adobe Acrobat and plug-ins, and QuarkXPress from Quark, Inc. (highest version evaluated and tested for the environment and earlier versions that still have full vendor or equivalent support)
■ **Emerging:**
■ **Transitional/Contained:**
All Microsoft Publisher/Office versions that are in their extended (security hotfixes still available) support life cycle
All versions of Adobe InDesign, Adobe Acrobat and plug-ins, and QuarkXPress that are in their extended (security hotfixes still available) support life cycle
Adobe PageMaker
■ **Obsolescent/Rejected:**
All Microsoft Publisher/Office versions that no longer have Microsoft extended support (beyond support life cycle)
All versions of Adobe InDesign, Adobe PageMaker, Adobe Acrobat and plug-ins, and QuarkXPress that are beyond their support life cycle (no longer have vendor or equivalent support)

Desktop Project Management

Project management software assists project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets, analyzing workloads and documentation of projects.

Microsoft Office Project (Standard and Professional) is used by many project managers in the Commonwealth as a desktop project management productivity tool.

Microsoft Office Project Server is a server based tool that stores project information in a central database that supports project management across an organization. Managers can drill down into project details and can communicate project plans and distribute task assignments to team members. The team member can communicate status and changes to project manager by using Microsoft Office Project Web Access. Project Web Access is the thin web client (installed on the desktop) for Microsoft Office Project Server that can view, analyze, and report on information as well as create project proposals and activity plans.

Technology Component Standards

The following is a technology component standard for Desktop Project Management.

Table PLA-S-21: Desktop Project Management Technology Component Standard *New: January 15, 2010*
Strategic:
Microsoft Office Project Standard and Professional (highest version evaluated and tested for the environment and earlier versions that still have Microsoft mainstream support)
Microsoft Office Project Web Access (highest version evaluated and tested for the environment and earlier versions that still have Microsoft mainstream support)
Emerging:
Transitional/Contained:
All Microsoft Project and Project Web Access versions that are in their extended (security hotfixes still available) support life cycle
Obsolescent/Rejected:
All Microsoft Project and Project Web Access versions that no longer have Microsoft extended support (beyond support life cycle)

Diagramming

Knowledge workers can represent visual information in the form of diagrams such as flowcharts by using a diagramming program. Such programs are usually Graphical User Interface (GUI) based and feature WYSIWYG diagram editing.

Microsoft Office Visio is used by Commonwealth knowledge workers as a desktop productivity tool diagramming solution. Microsoft Visio is currently available in two editions: Standard and Professional. The Professional edition has additional templates for more advanced diagrams and functionality that allows users to connect their diagrams to a number of data sources. Knowledge workers who do not have Visio can use Microsoft Visio Viewer to view Visio drawings and diagrams using a web browser.

Technology Component Standards

The following is a technology component standard for Diagramming.

Table PLA-S-22: Diagramming **Technology Component Standard** *New: January 15, 2010*
Strategic:
Microsoft Office Visio: Standard and Professional editions (highest version evaluated and tested for the environment and earlier versions that still have Microsoft mainstream support) Microsoft Visio Viewer (highest version evaluated and tested for the environment and earlier versions that still have Microsoft Office Visio mainstream support)
Emerging:
Transitional/Contained:
All Microsoft Office Visio and Visio Viewer versions that Microsoft Office Visio is in its extended (security hotfixes still available) support life cycle
Obsolescent/Rejected:
All Microsoft Office Visio and Visio Viewer versions that no longer have Microsoft Office Visio extended support (beyond support life cycle)

File Compression

Compressing or "zipping" a file is a technique that can create a considerably smaller version of the original file. Zipped (.zip) versions of large files can have a reduced file size of up to 80 percent. Many zip utilities can create a self-extracting archive. These are archives that compress and package the files as an executable (.exe) file that when "clicked" to open will extract the files to re-produce the original files. Many zip utilities also allow you to encrypt files and protect sensitive data, especially when it is sent as an e-mail attachment. WinZip was commonly used by Commonwealth knowledge workers until Microsoft included a file compression/zip utility within Windows XP and subsequent versions.

Technology Component Standards

The following is a technology component standard for File Compression.

Table PLA-S-23: File Compression Technology Component Standard *New: January 15, 2010*
■ **Strategic:**
Microsoft Windows file compression (included with operating systems starting with Windows XP)
WinZip when used to encrypt data exchanges
■ **Emerging:**
■ **Transitional/Contained:**
■ **Obsolescent/Rejected:**
WinZip when not used to encrypt data exchanges

Topic-wide Principles, Recommended Practices and Requirements

Requirements

The following are topic-wide requirements for desktop productivity tools.

> ***PLA-R-11***   ***Minimum Productivity Software for Meeting Knowledge Worker Needs –*** *The Commonwealth's personal computing software architecture for new desktops and notebooks shall include: Microsoft Office, Internet Explorer, Visio Reader, and Adobe Reader. (Note: Access is not to be included in the minimum base image for most knowledge workers.)*
>
> ***PLA-R-43***   ***Desktop Productivity Tools Version/Release Levels.*** *The version/release levels of all desktop productivity tools included in the base images deployed by agencies that provide infrastructure services shall have vendor or equivalent level support. This support shall include security update and hotfix support.*

Appendix A: Rescinded Requirements and Technology Component Standard Tables and Deleted Recommended Practices

The following requirements were rescinded on January 15, 2010:

PLA-R-10   **Productivity Software Needs** – VITA shall assess the productivity software needs for agencies it supports (e.g., percentage of the workforce that requires various combinations of the individual office software offerings including word processing, presentation, spreadsheet, and database software based on a workforce sample). Needs information shall be gathered with the assistance of agencies and shall be used in estimating the costs of state-level personal computing alternatives (e.g., licensing with or without Access). The information shall be available to agencies for use in assessing the costs of modifying the desktop base image for those groups needing additional personal or agency-wide functionality.

The following technology component standard table was rescinded on January 15, 2010:

Table PLA-S-07: Productivity/Management Software Technology Component Standard *Rescinded: January 15, 2010*
Strategic:
Microsoft Office 2003 (for 4 and 5 year PC images through 9-2008) Internet Explorer (highest evaluated and tested for the environment); encourage exploratory use of a second browser such as Firefox Outlook (2002 with 2004 update or 2003) Adobe Acrobat Reader (and plug in—latest) Microsoft Access 2003 Centrally selected antivirus software (presently McAfee) for VITA-served agencies (when initial selection and later changes have been announced)
Emerging:
Office 2007 (note: email client no longer included) Outlook and Outlook Express 2007 StarOffice 8 (Currently available free for individuals at pack.google.com); StarSuite 8 OpenOffice.org Suite 2.3 (especially for document conversion if security response time is equivalent to that of Office 2003) Mozilla Firefox 2 (Note: Firefox 2 with security updates is pre-approved for pilot projects or research purposes. Exception requests are not required for pilot use.) Open Source Browsers (e.g., Opera, Opera Mini) Centrally managed services clients for VITA when announced
Transitional/Contained:
Microsoft Office 2000 (extended support ends July 14, 2009) Waiver required only on a new PC image Microsoft Office XP (extended support ends July 12, 2011) Waiver required only on a new PC image Access 2000 (expanded support ends July 14, 2009) Waiver required only on a new PC image Access XP (extended support ends July 12, 2011) Waiver required only on a new PC image
Obsolescent/Rejected:
Microsoft Office '95 with Outlook Microsoft Office '97 with Outlook WinZip (compression now in Windows XP) Microsoft Office 2001 with Outlook Express 5; Microsoft Office v.x (Mac)

The following recommended practices were deleted on January 15, 2010:

PLA-RP-05 ~~**Studies of Personal Computing Needs, Costs, and Benefits –** Virginia should know what its best alternatives would be if it were to change from present personal computing architectures. The set of alternatives should be based on research conducted in government settings. For example, the research might address the best alternative to Microsoft productivity products and the costs associated with changing. Information could be used to establish reasonable cost targets for future Microsoft product negotiations or reasonable alternatives if Microsoft prices were prohibitive.~~

PLA-RP-11 ~~**Office 12 –** VITA should begin an analysis of Office 12 immediately (in 2006) using its early access to information that is available as part of Enterprise Agreements and should report on the pros and cons of upgrading, the impact of upgrading, the costs associated with upgrading, costs associated with not upgrading, and the timing related issues involved in upgrading.~~