

Proposal: Microsoft Windows Vista and Office 2007 Investigation

Adoption, Deployment, & Distribution

Microsoft's public release of Windows Vista and Office 2007 is scheduled for the end of January, 2007. The following is a proposed plan for the adoption, deployment and distribution of the new software here at UConn. The proposal includes a four step process: Testing, adoption as supported products, adoption as an *Option* on New HuskyPC, and Standardization as the default for all new HuskyPCs.

Adoption as Supported Products:

Prior to Adoption there should be a recommended configuration that integrates with the existing network and security structure at UConn. The TSS team and the Help Desk should be prepared to provide a minimum level of tech support for Vista and Office 2007. Users will need to be advised of any known issues and be willing to accept any limitations caused by upgrading to the new versions.

Requirements:

- Recommended upgrade configuration for network and security settings
- Minimum Husky PC hardware configuration
- Creation of a software upgrade procedure (check list)

Target Date for adoption – March 1, 2007

Offered as an Option on New HuskyPCs:

It is recommended that offering Vista and Office 2007 as an option for new HuskyPC purchases be delayed till after the end of the spring semester 2007 and to coincide with the new HuskyPC contract, scheduled to go into effect July 1, 2007. This would limit the number of images that need to be created and the number of hardware/software configurations that need to be supported at UConn.

Requirements:

- Compatibility with existing UConn systems (Exchange, PeopleSoft, WebCT, etc.).
- An established HuskyPC image with the new software.
- Compatibility with other Office Versions

Target Date for the OS option on new PC's – July 1, 2007

Standardization as the Default on all HuskyPCs:

Prior to standardization buyers will need to select their preferred operating system – Vista or XP – as an option. Once Vista and Office 2007 are designated as the UConn standard they would be offered as the default; XP with Office 2003 may remain available as an option.

Requirements:

- An established HuskyPC image with the new software.

Target Date for standardization on new PC's – June 2008

This schedule may seem either too aggressive to some or not aggressive enough to others. The intent is to provide a plan that will have the least negative impact on the entire UConn community and still move us forward with the effective adoption of new product. This proposal hopefully balances the needs of faculty, students, and staff with product release dates, UConn purchase contracts, semester schedules, and IT staff workloads.

Distribution

SLG currently distributes Office 2003 through three channels: as part of the HuskyPC image on new computers, as a download from the SLG, and as CD's from the SLG office. These channels should work with Office 2007 as well. Office 2007 requires Windows XP SP2 or later and additional hardware resources beyond those required for Office 2003. The download process should include either a screening process to see if the user's computer meets the system requirements or very obvious warnings about those requirements. The documentation included with the DVD purchase should include these warnings as well.

The upgrade process using either download or DVD purchase should also include information about the significant differences between Office 2007 and Office 2003. If the download website includes both information about the differences and screenshots of several of the programs, users will be able to prepare themselves for the differences they will see after the upgrade. The information should include an explanation of the new document format and potential problems with using old Access files with Access 2007. This information will again prepare users for issues that will arise after the upgrade.

Similarly, for Windows Vista the current distribution model (SLG through the UITS business office) should remain in place. As media is distributed, users should be made aware of minimum requirements which are tied to HuskyPC computers.

Testing

Testing is currently being done informally here at UConn. It is recommended that a formal process be developed and that SLG's Vista Ad-hoc committee be the collection point for all testing results. The formal testing community should be limited to those individuals and departments that can provide their own tech support and are willing to accept full responsibility for any issues created. Testing tasks should be assigned to appropriate individuals and units to insure all necessary testing is completed.

Goals for Vista/Office 2007 Testing:

- Designate Testing Project Team Lead and Team Members
- Team should meet to establish goals/guidelines/timeline for testing
- Team should establish a means of communication for users to be regularly updated on the testing status.
- Team should develop a checklist for each system and software app they will be testing. Applications and systems should be prioritized and divided up amongst the team members.

- Team should determine if it is possible to develop a base Vista image that can be quickly deployed in order to eliminate time lost installing the O/S. The image can be distributed amongst team members.
- Members should utilize the image and checklist to begin testing.
- All issues/experiences encountered should be documented in a central repository (Groove, web, etc.) accessible to all team members. Solutions/Workarounds should be clearly documented.
- After testing has been finalized the Testing Project Team should present their final findings and recommendations to the Software Licensing Group.

Testing should include but is not limited to:

- Usage and compatibility with existing UConn systems (Exchange, PeopleSoft, SLG Apps, etc.)
- Network integration and related security features and issues
- Installation on past and present HuskyPC hardware
- Compatibility with existing/licensed imaging tools
- Installation of current HuskyPC image software (including Office 2003 on Vista)

Target Date for completion – April 1, 2007 (to be established\confirmed by testing team)

Microsoft IT has set up the Windows Vista LOB Application Compatibility Testing Program and it is suggested that UConn use the same process. The specific details can be found here:

<http://www.microsoft.com/technet/itshowcase/content/appcompattcs.mspx>

Licensing

Office 2007 and Windows Vista Licensing

On July 1st 2004 UConn purchased a Microsoft Campus Plan which entitles the University to install the latest versions of Office and Windows on all University-owned computers. Although we are entitled to this software as part of our agreement, there are some underlying challenges that we may face in the “activation” of the software which may prohibit us from distributing it as we have done with other software in the past.

Office 2007 Enterprise

Office 2007 will use Microsoft Volume Activation 1.0, so we can distribute the media and license keys as we have in the past. When this key is used the software will skip the activation process.

Windows Vista Enterprise

Windows Vista will use Microsoft Volume Activation 2.0. This will require the computer to complete the activation process within the first 30 days of installation. If activation is not completed, the system will enter into Reduced Functionality Mode (RFM). To activate a computer the University has two options:

Multiple Activation Key (MAK)

MAK allows the University to provide a single key to all users that will work on a finite number of systems. Once the key is entered, the computer will verify the key with Microsoft and permanently activate the system. **Note:** Major hardware changes (such as replacing the motherboard or hard drive) could trigger the computer to need to be reactivated.

Another MAK option, available sometime in 2007 is the MAK proxy. With MAK proxy, a single key is provided to users, and an internal system collects all activation requests and sends them to Microsoft. The system receives activation information back and forwards it to requesting computers.

Key Management Service (KMS)

KMS allows the University to set up a server to handle all activation requests. Computers that need to activate would contact the KMS server to request activation and would then be activated for 180 days. Every 180 days the computer must reconnect to the KMS server in order to reactivate or else it will enter a 30 day grace period. At the end of the grace period, if the computer has still not contacted the KMS server then it will automatically enter Reduced Functionality Mode.

In order to locate the KMS servers, the computers can be set to **Auto-Discovery** which requires specific changes to DNS servers at UConn. The other option is **Direct Connection** where the System Administrator would specify the IP address or name of the KMS server as well as port.

Interoperability with existing user base

Microsoft provides a file format conversion utility that allows Office 2007 documents to be compatible with the following older versions of Office:

- Office XP
- Office 2003
- Office 2004 (Mac)

(Note: Office 2000 is only partially supported. Office 2000 users should be recommended to upgrade to either Office 2003 or XP.)

Currently, there is no conversion utility available for users of Office for Macintosh. A Mac converter has been promised some time before the arrival of Office 2008 for Mac. Because of this, anyone who works in a department that has a Macintosh in a critical path, (i.e., processing SIH grant submissions etc.) should not upgrade to Office 2007 until these converters are available and tested.

Testing has confirmed the ability to read/write simple documents however conversion errors could be possible when dealing with very complex documents containing headers, elaborate formatting, etc.

Support, Education, & Communication

Support:

- A support plan should be developed for our support personnel that includes an escalation plan to deal with expected support calls.
- A training plan should also be developed for our support personnel to ensure that they are trained to handle users' questions. Training should be completed just prior to the rollout of Windows Vista and Office 2007 (January, 2007).
- During the deployment support personnel may receive updates in the following forms (but not limited to):
 - Email communications
 - New articles for support issues
 - Regular meetings

User Education/Training:

It will be important to educate and train users of the software about the deployment process and new features and functionalities that promote productivity. In order for the training to be effective it must be tailored to a wide range of user needs and experience.

User education may come in the following forms (but not limited to):

- Internal Web Sites
- Feedback
- Online Self-Help
- Newsletter
- Enterprise Learning Framework
- Learning Tools from Microsoft
- Windows Online Help and Support
- Tips and Tricks for Vista from Microsoft
- Everyday Productivity Education
- Courses offered through the Center for Continuing Studies

Communication:

There should be a multifaceted communications approach to ensure that support personnel and end users receive the information and training they need. It's important to continue communications before, during and after deployment. The following groups should receive communications about the project at various times and in different formats.

- Management
 - It's important to have support and buy in from upper management. In order to achieve this there should be communication to them either by presentations, meetings, etc. before, during and after deployment.
- Project Deployment Team (a subcommittee of SLG)

- Each member should receive regular email and there should be a project Web site containing the latest project information. They should have regular status reports as well as regular meetings.
- Support Personnel
 - During the deployment support personnel should receive regular updates through email or newsletters. They should also be able to share/access information on a Web site which is updated regularly as well attend regular meetings.
- End Users
 - There should be initial email communications introducing the Windows Vista and Office 2007 deployment program to staff, faculty, and students. The emails should be tailored to these groups and should inform the users of the timelines of the deployment.
 - The deployment team must build awareness about the upcoming deployment among all participating personnel and must set the expectations with end users about what is required from each of them for the deployment.
 - Push and pull methods should be used when communicating with users. (i.e. send out a email or a newsletter with refers participants to pages on a web site)
 - After the initial email, users should receive a regular newsletter about the deployment.
 - During and after the deployment, end users should be able to receive regular updates.

Risks & Costs

Microsoft Office 2007

Risks

Office 2007 presents several challenges to the University's environment. The two largest risks are the redesigned interface and the new document format.

The new interface of each of the products in the Office suite means that training will be necessary for users. Training should be offered early as well as in various formats and times to ensure the greatest usefulness to our customer base.

In addition to the training needs the new interface may lead to a loss of productivity due to decreased efficiency. Using the new ribbon interface is drastically different than the previous ways of working with documents within the Office suite of products.

Users of the new Office product must be aware of the documents that are created with the product, especially when these documents will be shared with other users; particularly, users external to the organization and Macintosh users within and outside of the organization. Until Office 2007 is globally adopted among University users and their constituents, a conscious effort will need to be applied to the process of sharing work among colleagues. The biggest impact due to new file formats will be with Microsoft Access databases. Older databases will not be able to be converted to the new format and Access 2007 will not be able to save to the previous format.

Costs

In addition to loss of productivity that may be realized due to the redesigned interface of the Office product, the University may expect additional downtime and support for users. These indirect costs can be significant and must be weighed against the benefits of upgrading to the new product version. 3

Microsoft Windows Vista

Risks

The ramifications of the new Microsoft operating system are significant, and may be felt not only by the users of the system, but also by those that support it.

The concerns brought about by Windows Vista are mainly the new interface, the new licensing structure, and the additional and substantial hardware requirements (For example, the names of several components have changed enough to cause some confusion. 'My Computer' is now 'Computer' and when displayed it look like the hard disk utility program in Windows XP). Each of these will need to be planned for if a successful transition to Windows Vista is to happen at UConn.

The new interface of the operating system will mean that users will require training to navigate it in a meaningful and effective manner. Training should be geared for all levels of users and in a manner which assumes no prior experience of computer operating systems.

The new licensing structure will need to be planned for both in imaging computers and other methods of deployment. The new restrictions on licensing will require an investment by the University in its infrastructure, or a significant increase in overhead will most certainly be realized.

The hardware requirements of the new operating systems may pose a significant burden for departments wishing to use the operating system but unable to invest in additional hardware resources.

Costs

Microsoft Windows Vista will impose both direct and indirect costs to the University. The direct costs will be realized from the additional infrastructure needed to support the new licensing scheme required by Windows, as well as the personnel needed to manage the infrastructure. The indirect costs will be seen in the increased support needed to manage the use of the operating system, including application incompatibility, navigation and usage issues.

Committee Members:

George Assard, Mick DiGrazia, Ed D'Agata, Gary Hendrickson, Mark Newall, Brett Paulson, Tim Ruggieri, Karen Skudlarek