Microsoft Office 2010 Web Apps

Support Impact to Middlebury

August 24, 2010

Executive Summary

This document addresses five key questions relating to the support of Microsoft's Office 2010 Web Apps at Middlebury College. Each of the five sections will describe the overall support options and concerns relating to the variety of possible implementation methods. The [first question](#) addresses what the differences will be for LIS staff and the community at large. This question explores [desktop support](#), [mobile device support](#), [usability concerns](#) and [storage](#) options. The next question looks at the [differences in document creation and access](#). This section will explore the uploading, sharing and collaboration enhancements in Office 2010. Question 3 addresses [Office 2010 training](#) and how this training would be delivered to our user community. Question 4 tries to address the many concerns and differences in how the Helpdesk will deal with [crisis management of Web Apps issues](#). This section also speaks to a concern the Helpdesk and IT Enterprise Group will need to deal with in regards to the acceptable deployment and usage of Office 2010 on campus. The final question examined addresses the [administration of Office 2010 Web Apps](#) and what options are available to delegate administrative functions.

Microsoft Office 2010 Web Apps will deliver a great deal of resource to our average user of Office and will introduce to the campus new ways to share and collaborate with Office documents. The support aspects of such an implementation on campus will scale to how we as an institution decide to implement and use these products. As stated in section 4 of this document there are quite a few variances to how a user could leverage the online and desktop versions of Office 2010 together in conjunction with Skydrive and Microsoft 2010 SharePoint Server. If we control the implementation and clearly agree on what would be supported and what would not we can manage the support pieces of Office 2010. If we let our users dictate the topology and use all of the available resources provided online and on the desktop the Helpdesk would certainly be pressed to meet the support demands of our users as we are current structured today.

Question #1 – Live "High-Touch" support – What will be different for LIS staff and community members when they ask for help?

There are two hosting methods that can be used with Microsoft's 2010 Office Web Apps. One method is using the online Office Suite version which is built for everyone; (such an implementation is often referred to as "public cloud computing.") The second hosting method is to deploy a private cloud instance of Microsoft Office 2010 Web Apps on a Microsoft Enterprise SharePoint Server hosted and controlled by an institution; such as Middlebury College. Each method will provide the same level of functionality and available web-based applications, but choosing the hosting method will dictate what will be in Middlebury's control versus what will be in Microsoft's control. The hosting method chosen will have a direct impact on the support model used within our Middlebury community of users and how our end users will receive their support.

Breaking-out the main support categories:

Desktop Support

> Office Web Apps require an appropriate Internet connection, supported web browser, and either Microsoft SharePoint Foundation 2010 for business or, for personal use, a free Windows Live ID to access Office Web Apps on Windows Live SkyDrive.

> Microsoft's 2010 Office Web Apps are designed to work within an Internet browser. Microsoft has targeted Internet Explorer (IE) as the primary supported browser however; there are several other browsers which can support the Web Apps without any additional software or plug-ins. Currently Microsoft Office 2010 Web Apps are supported by the following browser platforms:

> Microsoft Internet Explorer 7.0 and 8.0
> Mozilla's Firefox 3.5 or higher (Windows, Mac and Linux)
> Safari 4 on Mac (note: the version of Safari on an iPad is not supported at this time)
> Note: Google Chrome (seems to work, but is not officially supported by Microsoft at this time)

> See Appendix A for platform comparison

> The Office 2010 Web Apps are stripped-down versions of the four popular Office products: Excel, Word, PowerPoint and OneNote. Although there is less functionality provided in Excel and Word, there are additional new features in PowerPoint and OneNote which did not exist in Office 2003 or 2007 versions. The amount of functionality desired will dictate whether or not the Office 2003 or higher desktop (local) versions are installed. It will be likely that the local Office applications will remain on the desktops for some time while ramping-up to utilize the online version of Office. If we choose to go fully online, we also currently have the Outlook Web App available to render our email off from our Exchange 2010 server.

Advantages to users when using Web Apps over the desktop applications[i]:

  No software installation and updating
  Access to application from anywhere via the Internet
  Data is stored remotely
  Cross-Platform compatibility
  Better suited to low-end computers and requires little disk space
  Client computer is better protected from viruses since the application is hosted within the browser.

Disadvantages to using Web Apps over desktop applications are centered on two primary areas: poor user experience because of performance problems along with browser limitations and network connection requirements.

Windows Live Office Web Apps provides access to a Windows Live Solution Center accessible via a link off the main Windows Live portal page. Much of the content in this support area seems to focus on collaboration tools such as Messenger, Profiles, Spaces, Groups and Skydrive. Also detailed are other product services like Hotmail, Mail, Calendaring and Windows Live ID support. There are guidance and how-to documents and short threads which help the user perform the task in question.   This documentation is online and will be used as the central documentation repository when it comes to application specific help.

Desktop Support (highlights)

From a desktop support perspective there are a few highlights which need to be noted.

1. Web Apps functionality versus desktop application functionality – an additional understanding of what is provided by each version of the application will need to be acquired by Helpdesk staff and Middlebury end-users. Since the user Interface and "Ribbon" functionality are similar between the two varieties, the desktop differences will be negligible. An additional support component is that there is a likelihood that both varieties of Office applications will reside on the desktop for some time to come.
2. Additional browser support – Although the user interface (UI) should be the same across browser platforms, the actual presentation of UI components may not be the same based on the client browser used. The end user and Helpdesk will need to learn those differences and be able to retrieve help and support on those browser versions.
3. Web Apps "Help" is now available online where each end user will be able to seek an answer to their question. This context specific help will provide instant help resource to our end users, which will be an improvement over searching to find help resource within our many content providers on campus.
4. Since there is one user interface across browser platforms (for the most part), there will be more standardization of the tools and less impact by what else is installed and configured on the desktop. Microsoft updates, critical security patches, vendor updates and other such changes to the desktop should have less of an impact on accessing and using the Office Web Apps.
5. End users will find it confusing at first when switching between the two varieties of

> Office applications, especially since there are differences in available functionality.
> 6. From a functional desktop support perspective, the collaborative model of Office 2010 Web Apps may be foreign to many users and the Helpdesk will need to prepare and educate a large section of our campus population.

Mobile Device Support:

Mobile devices such as the iPod, iTouch, Android, and other mobile devices which allow for browser-based support may have access to the Microsoft Office 2010 Web Apps. The mobile device browsers that are supported include:

Internet Explorer on Windows Mobile 5/6/6.1/6.5
Safari 4 on iPhone 3G and 3GS
BlackBerry 4.x and later
Nokia S60
NetFront 3.4, 3.5, and later
Opera Mobile 8.65 and later
and Openwave 6.2, 7.0 and later

See Appendix A for platform comparison

In testing some of these browsers on particular mobile devices, we found that the actual rendering of the applications differed from device browser type. Another observation was that the rendering of documents was much slower over cell receiver versus Wi-Fi. Last, we discovered the Apple iPad could not render the Windows Live web site properly. We make note of this fact based on the interest in and expected proliferation of the iPad on campus.

An obvious support issue for both the user and the Helpdesk will be to learn these various browser types and know what is and is not supported on an ongoing basis. As iOS, Android and other operating systems evolve, the challenge will be on the Helpdesk to stay current and update our documentation and training materials.

Usability

The Ribbon Toolbar is also provided in Office Web Apps and should represent the same, if not fewer, options than currently available in the full desktop application. This should help ease the transition between the two versions.
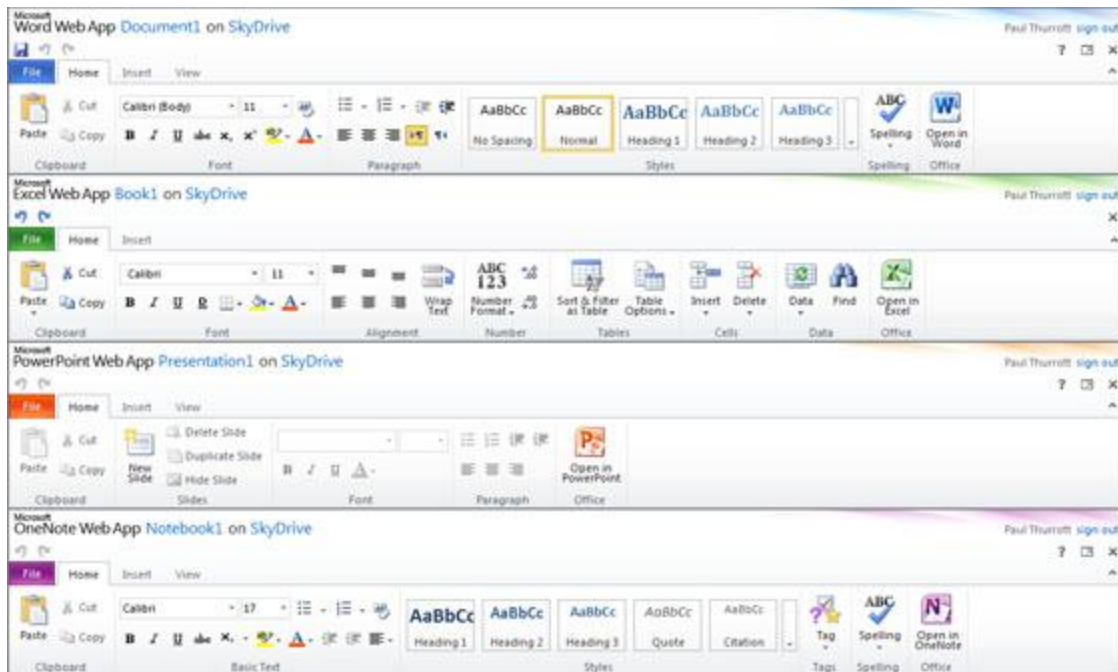
Comparing Office 2010 Web Apps Word ribbon to the desktop client version shows a great deal of similarity:

Transition to the Web Apps UI should not be a large transition for our end users.

A document in the Word Web App, PowerPoint Web App, or Excel Web App can be edited in the browser or can be opened for editing in the associated Office client application. If while viewing or working in a Web app a user clicks the **Edit in Browser** button on the Home tab of the toolbar, the user can perform light editing tasks in the browser. A notebook in the OneNote Web App can be edited in the browser natively without having to click the **Edit in Browser** button or it can be opened for editing in the OneNote client application by clicking **Open in OneNote**.

If while in a Web app a user clicks the **Open in Word**, **Open in PowerPoint**, **Open in Excel**, or **Open in OneNote** button on the toolbar, the document will open in the associated Office client application if it is installed on the client computer.

If SharePoint is used to deploy the Office Web Apps the "Default open behavior for browser enabled documents" setting is established at the server to default to which type of Office application (local or online) should be used to open the document.

Microsoft Office Web Apps seem to be more for sharing and displaying documents then creating and editing them, although Office Web Apps have that ability. Many articles make reference to using the Office Web Apps to display and share your information and using the desktop local Office applications to create and edit that information. This is because the Web Apps have limitations to editing documents. The Web Apps are a lite version of their local desktop counterpart. Although the interface between the two versions of Office applications is almost identical, there are many features which are not represented in the Web Apps version.

A support concern at Middlebury would be the file type (format) used. As we have today with file format (Office 2003, 2007 and now 2010) compatibility, we would continue to have similar issues with uploaded 2010/2007 formats being edited in a 2003 version. Although there is backwards compatibility, on campus we do have the situation of three versions of Office formats. For example, if we share a document in a new 2010 format then people who have earlier Office Suite versions would have problems loading the document into an editor. If the 2010 document was for display only, then there would not be an issue.   If we went to Office 2010 Web Apps we would likely want to upgrade all users to 2010. At the time of this report the Mac version of Office 2010 did not have an official release date.

Silverlight[ii]

Silverlight is a free plugin that can provide richer Web experiences for many browsers. The Silverlight plugin is not required to be installed on the client browser to use Office Web Apps. However, having the Silverlight plugin installed on the browser can provide the following benefits:

> When using the Word Web App on browsers with the Silverlight plugin installed, users can experience faster page loading, improved text viewing at full zoom, ClearType tuner settings support, and improved accuracy in location of search string instances when using the find on this page feature.

> When using the PowerPoint Web App on browsers with the Silverlight plugin installed, users can experience faster page loading, animations will appear smoother than without, and presentation slides will scale with the browser window size.

> Note: Having Silverlight installed on the client browser does not provide any additional benefits in Excel Web App and OneNote Web App.

Even though Silverlight is an integral part of some Office Web Apps, it will not be entirely required. It will be used for rendering zooming in and out on documents and animations in slideshows, but will only be used if it is detected on the user's PC. It would be likely we will want to load this software on each desktop to enhance the performance and experience of the Web Apps. We will need to occasionally update this software on both PC and Apple computers. We may also want to know if this software will interfere with any Middlebury applications before it is fully embraced on our standard Middlebury computer image.

Storage

Windows Live provides the SkyDrive for online data storage. This is a central repository setup by a third-party vendor for Microsoft. There are many data centers across the world which provides this online file storage service for personal use. The SkyDrive also allows you to share your personal data/information online and collaborate with others whom you bring into your circle as friends and colleagues; through their Windows Live ID. The SkyDrive service currently has a 25GB limitation. If the Web Apps are deployed through a private SharePoint server this limit can be increased.

A challenge to support will be the ongoing education of our users that online storage is safe and reliable. In Web Apps worlds an additional Windows Live ID will be used to access the user's information. With the installation of a small ActiveX component plug-in (Microsoft IE and Firefox only) a user can actually drag and drop files onto the browser to upload them.

Question #2: Documents – what will be different for our community members and LIS staff when producing or accessing documentation?

Creating and accessing documents with Microsoft Office Web Apps will have its challenges for the new user. All documents will be stored in one of two places depending on whether or not Middlebury creates its own instance of Web Apps;. Both locations would be hosted on a file share accessible via an Internet browser.

Skydrive is Microsoft's public Office Live storage solution which provides 25GB of online storage for documents. Microsoft's SharePoint 2010 server instance of Office Web Apps would control the online storage and would be located and controlled within the Middlebury campus network.

If a typical Middlebury user wants to store their document they would upload their document to the online storage service provided. This is a departure from simply saving your document to your local hard drive. The Helpdesk strongly recommends MIDDFILES storage although we continue to find users who refuse to use MIDDFILES. Those users who do not easily embrace change will have additional challenges to learn new methods of storage and retrieval for their personal and business data/information.

The real impact of Office Web Apps is its ability to deliver information in a collaborative way. The file format in this new version of Office is not changing, but rather the way files are shared through business and social networks will change. This will be another significant change for users who are not currently familiar with social networks and integrated tools for sharing and collaborating on information. The Skydrive as well as the SharePoint 2010 Foundation will provide tools to setup social networks; create groups, share profiles and, most importantly, share documents for the purpose of viewing and editing in a group dynamic. These concepts, much like the iGoogle and Facebook portals, are transforming the way we share information. The culture at Middlebury would need to embrace this new technology and method to collaborate. The support of this collaborative model would fall on the Helpdesk to provide guidance and best practice use of the Office Web Apps and its associated tools (called *Essentials*).

Uploading files, sharing files and downloading files are one small piece of the Web Apps feature set. Another change our users at Middlebury will notice is the change/addition of the **Backstage View**.
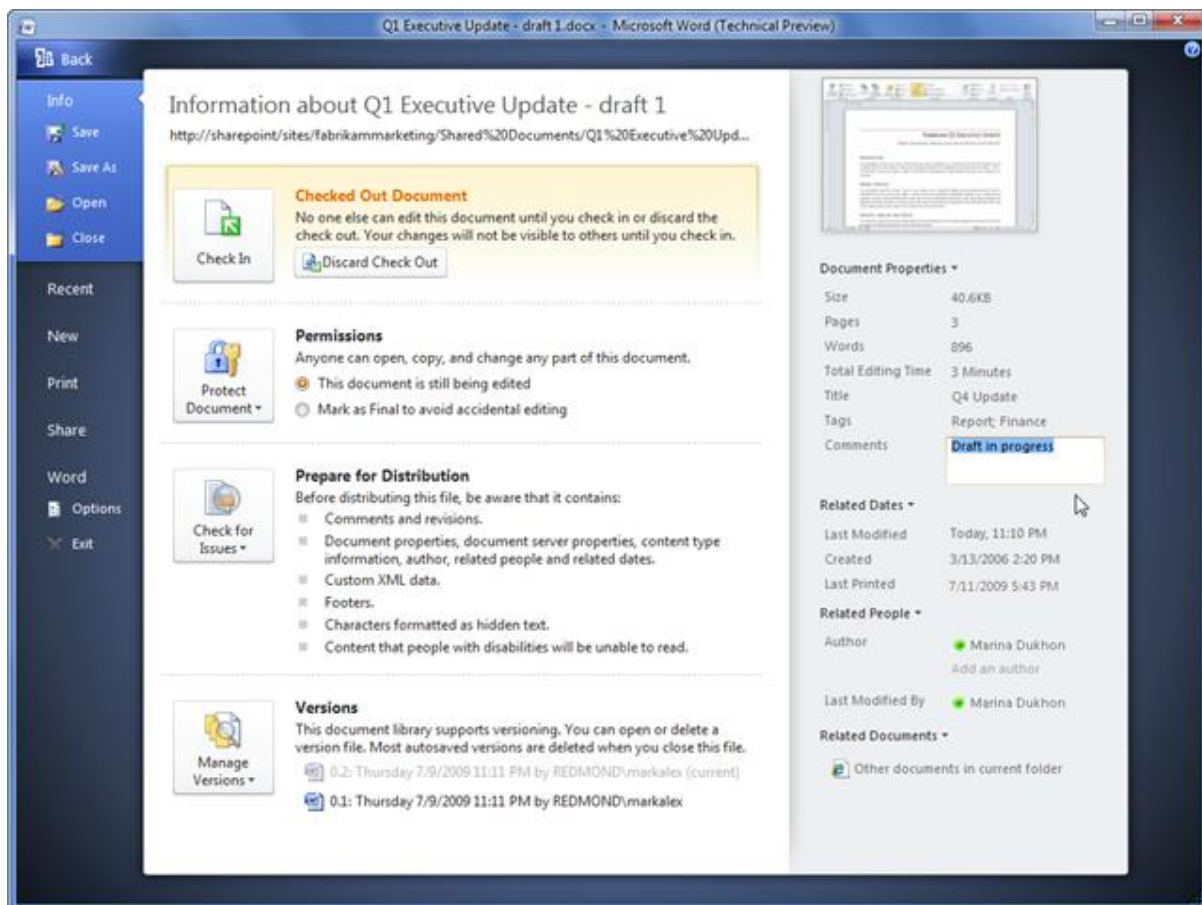
Backstage is an efficient area for managing documents; it's where you can choose, for example, who gets to open, copy or change a document. It's also where you'll find a Print tab showing the Print Preview and various options for setting margins, collating and so on. This is a welcome addition but a change to how our users will manage and share their information.

Question #3: Training – what will be different in how LIS delivers training and education, and in how community members learn to use services?

Currently we have a few training options for our Middlebury community to learn Microsoft Office 2007. Those options are: ElementK computer based training delivered through the web, and stand-up training sessions given by the Technology Helpdesk. The current stand-up training sessions are constructed by a member of the Technology Helpdesk by learning the application(s) and then conducting hands on workshops to interested members of the Middlebury community.

The departure from this training model in regards to Office 2010 Web Apps would be the obvious need to transfer the new collaborative methodologies to not just a subset of users, but to all Middlebury community members. Without a solid understanding of the collaborative model being leveraged by Microsoft Office 2010 Web Apps, the users would not fully understand nor embrace this new platform.

One significant change in our training offerings would be the need to perform a mass marketing campaign to sell the new Office platform to our community. Also we would need to target departments as a whole and deliver training to anyone that would be using the new Office Web Apps. A clear and concise training program should be created and communicated to our users so that our users would fully understand the move forward plan of the college.

There is a fairly substantial Help and Support delivery within all Web Apps. This is a context specific help which could assist end users needing a specific answer to a how-to question. Microsoft also provides a robust area on the web to learn and exploit the Web Apps. Assuming our environment would deploy the Web Apps in-house on our own SharePoint server the first place to visit as a deployment team would be the [Microsoft Office Web Apps Deployment](#) site. This site contains multiple areas to get started in the deployment within an organization of Office Web Apps. There is a complete training section on this site under the "Learn" category which is a rich online area with vast learning resource for all aspects of the Office Web Apps and collaborative model.

Another very important area to utilize is the "User Readiness and Training for Office 2010" site. The three main categories on this site are: Build Awareness, Train Users and Provide additional resources. I have stepped through these three categories and can safely state that all of our training content for Office 2010 Web Apps can be pulled from this site; there is even a self-paced training area.

It is a given that the Helpdesk must be fully versed and ready for Office 2010 Web Apps prior to the release to our community. Through targeted training, exploiting existing online training content and from preparing the support service points prior to roll-out will create a successful deployment and overall success of Office 2010 Web Apps.

Question #4: Crisis Management – what will be different when a community member needs immediate help to accomplish their work?

There should not be any additional delay in helping our end users navigate to the proper areas to perform their needed tasks. The functionality of both desktop and Web Apps versions do not stray too far apart for the basic user. What is different is that the Web Apps version does not contain all the tools that the desktop version contains. This will be the fundamental problem when a user will seek assistance to perform a function or task in the Web Apps and expecting the exact same functionality that is present in the full desktop version.

On the Home tab of the Word Web App, for instance, there is no Format Painter, Grow Font, Shrink Font, Change Case, Text Effects, Shading, and many others (see Ribbon compare). There are no Reviewing tools at all, no picture editing and many other reviewing tools that are present in the full desktop version. These missing tools make the Office Web Apps a lot less useful for intermediate to advanced users. The Helpdesk will need to create proper documentation to reflect what is present and not present in the two versions of Office 2010.

The challenge here at Middlebury will be to get all users to the Office 2010 platform prior to roll-out of the Office Web Apps version. This will create a standard platform to support and remove the UI differences between the multiple versions of Office currently on campus: Office 2003, Office 2004, Office 2007, Office 2008 and Office 2010.

Platform comparison chart

UI Differences in Office chart

There are many new enhancements with the Office 2010 Suite which will need to be highlighted in training and within our documentation set for end users.

Product and Feature Changes in Office 2010

There are a few scenarios which could be combined to leverage the desktop/web apps version with Skydrive/Sharepoint storage. Depending on how clear we are at deployment of Office Web Apps and what is acceptable versus not acceptable the Helpdesk could find itself dealing with flavors of configuration.

Examples[iii]:

1. **Office 2010 desktop applications + Windows Live SkyDrive.** In this scenario, you utilize a traditional Office application on your PC but access Microsoft's free cloud-based storage service for consumers. In a campus shutdown this configuration would not work if the user did not have a computer available in their remote location with Office 2010 loaded on it. However, the user would be able to create a personal account on the fly in WindowsLive and access the online document with the online Web Apps available. This would allow work to be done while off site.
2. **Office 2010 desktop applications + SharePoint 2010.** Here, business users use traditional, PC-based Office applications with an internally-hosted (on-premise) document repository. Again in

this situation a campus shutdown would not impact the user if they had a computer in their remote location that had Internet connection to the Middlebury network. In this configuration the remote desktop would need Office 2010 installed on the client computer and have VPN access to the Middlebury resources.

3. **Office 2010 desktop applications + SharePoint Online.** Here, business users use traditional, PC-based Office applications with a cloud-hosted document repository. In this situation a campus shutdown would not impact the user if they had a computer in their remote location that had Internet connection and the Office 2010 applications loaded on their remote desktop. This situation is almost identical to #1 above.

4. **Office Web Apps + Windows Live SkyDrive.** Consumers can access Microsoft's free (with advertisements), web-hosted versions of Word, Excel, OneNote, and PowerPoint via the Windows Live SkyDrive service. In the event of a campus shutdown this scenario would be the best solution which only requires an Internet connection from the remote desktop computer.

5. **Office Web Apps + SharePoint 2010.** Businesses can host both SharePoint and Office Web Apps internally, where Office Web Apps is basically installed as an add-on for SharePoint 2010. This option in the case of a campus shutdown would require both VPN access to Middlebury and an Internet connection.

For crisis management of issues that will undoubtedly be sent to the Helpdesk we will need to first be clear on the approved supportable model; what will we support versus not support. The configurations we will support must be fully tested and documented for our users. There also needs to be a distinction between functional, hardware and network infrastructure issues; each of these areas requires a different support mechanism. What we will need to do is create service level agreements between the Helpdesk and representatives of the various support workgroups for escalation of issues and timely response to our end users. What the user may experience that is different from today is that there may be service outages to the areas that provide the online content when the cloud is used to not only provide application services but storage services of information as well. These events would be few and hopefully far between, but they would affect our entire population of users! We will want to make sure within the process that broadcast messages/communications are sent-out to our users informing them of the enterprise-wide problem. We would also likely want to devote a page on our Drupal support site to Office 2010 Web Apps.

In the event of a campus-wide shutdown (from weather or other issues) the typical end user working from home would have the most success if Office 2010 Web Apps were utilized with online storage through the Internet. No other remote desktop requirements would be needed to continue working remotely with Office documents.

Question #5: Administration – what opportunities exist for delegated administration of these two models?

Administration in a **Windows Live** hosting model utilizing *Skydrive* is completely supplied by Microsoft and its hosting agents.

Administration in a SharePoint deployment of Office 2010 Web Apps does have many components to administration. Many if not all administrative functions of SharePoint deployed Web Apps are usually owned by the IT Enterprise group within the organization. The primary areas of configuration and administrative responsibility are broken down into six main categories within SharePoint:

Article	Description
Activate the Office Web Apps Feature on site collections	Provides information about how to activate or deactivate the Office Web Apps Feature on existing site collections.
Manage the Office Web Apps cache	Provides information about how to manage the Office Web Apps cache that is part of a SharePoint content database.
Configure the default open behavior for browser-enabled documents (Office Web Apps)	Provides information about how to configure how documents in SharePoint are opened after Office Web Apps is installed.
Configure PowerPoint service application settings	Provides information about how to configure settings for the PowerPoint service application.
Configure Word Viewing service settings	Provides information about how to configure settings for the Word Viewing service.
Configure Excel Services Application settings (Office Web Apps)	Provides information about how to configure settings for the Excel Services Application.

Other areas of administrative responsibility reside with server storage allocation and overall security and protection of privacy of uploaded documents.

See [Guide for IT Pros for Microsoft Office Web Apps](#) for more details.

Microsoft SharePoint 2010 Foundation server has a 'Delegated Administrator' feature. This feature allows other individuals to manage specific applications hosted within SharePoint. Areas that can be delegated on an application basis are: Application Management, Security, Monitoring, General Application Settings, System Settings, Backup and Restore and Upgrade and Migration.

Appendix A

Platform comparison overview

The following overview provides a summary comparison of capabilities when using Office Web Apps on SkyDrive, SharePoint 2010 installed in your organization, and SharePoint Online:

	SkyDrive	SharePoint 2010 installed in your organization	SharePoint Online
	For personal use	For business use	For business use
Storage space	25GB	Configurable by IT	Configurable by IT
File size limits	50MB per file for Word, PowerPoint, and OneNote; 2 MB for Excel.	Configurable by IT	Configurable by IT
Pricing	Free (w/ ads)	Office 2010 volume license	TBD
Ad supported	✓		
Hotmail integration	✓		
Backup and restore		✓	✓
Document lifecycle management		✓	✓
IT admin control		✓	✓
Ability to create new documents	✓	Configurable by IT if Microsoft Office desktop applications are not installed on the active computer.	Configurable by IT if Microsoft Office desktop applications are not installed on the active computer.
Browsers supported	Internet Explorer 7 or later for Windows, Safari 4 or later for Mac, Firefox 3.5 or later for Windows, Mac, or Linux, and Chrome 3 or later for Windows.	Internet Explorer 7 or later for Windows, Safari 4 or later for Mac, and Firefox 3.5 or later for Windows, Mac, or Linux.	Internet Explorer 7 or later for Windows, Safari 4 or later for Mac, and Firefox 3.5 or later for Windows, Mac, or Linux.
Mobile support	Word and PowerPoint Web Apps	Word, Excel, and PowerPoint Web Apps	Word, Excel, and PowerPoint Web Apps
Mobile browsers supported	Safari 4 on iPhone 3G and 3GS and Internet Explorer 7 on the upcoming Windows Phone 7	Internet Explorer on Windows Mobile 5 or later, Safari 4 on iPhone 3G or 3GS, BlackBerry 4.x and later, Nokia S60, NetFront 3.4, 3.5 and later, Opera Mobile 8.65 and later, and Openwave 6.2, 7.0 and later.	Internet Explorer on Windows Mobile 5 or later, Safari 4 on iPhone 3G or 3GS, BlackBerry 4.x and later, Nokia S60, NetFront 3.4, 3.5 and later, Opera Mobile 8.65 and later, and Openwave 6.2, 7.0 and later.

[i] "Web Apps versus Desktop Apps"; Valums, Andrew; 10-Feb-2010; Internet Resource: http://valums.com/web-apps/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+valums+%28Andrew+Valums%29

[ii] "Understanding Office Web Apps (Installed on SharePoint 2010 Products"; Microsoft TechNet; 12-May-2010; Internet source: http://technet.microsoft.com/en-us/library/ff431685.aspx

[iii] "Office 2010 Review Part 3: Office Web Apps", Thurrott, Paul; Supersite for Windows; 08-May-2010; Internet source: http://www.winsupersite.com/office/o2010_owa.asp