CLOUD STORAGE WITH "SKYDRIVE"

by Francis Chao
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Web location for this presentation:
http://aztcs.org
Click on “Meeting Notes”
SUMMARY
You can use "SkyDrive" cloud storage to protect yourself from the losing data files and to access your data files on multiple computers, cell phones, and computing devices.
Live Demo of Microsoft's SkyDrive
SkyDrive's Server Farms

• Approximately 1 million servers for Microsoft services such as SkyDrive, Outlook.com, Skype, etc.

• Server farms located in
  Santa Clara, California
  Chicago (Northlake), Illinois
  West Des Moines, Iowa
  San Antonio, Texas
  Boydton, Virginia
  Ashburn, Virginia
  Quincy, Washington
  Dublin, Ireland
SkyDrive's Server Farms

• All data files and folders that you store at the SkyDrive cluster of data farms will be stored in two locations for redundancy.
FY10 MS Online Data Centers and Markets

- Data Center location will be based on ship-to address during the purchase process
- Data will reside in 2 Data Centers to provide redundancy

Current market

Coming in April 2010

Virginia with backup in Washington+
1. United States
2. Canada
3. Mexico
4. Puerto Rico
5. Brazil+
6. Chile+
7. Colombia

+ In FY11 we will launch a co-lo in Brazil that will serve Brazil, Chile, and some other LATAM countries. Until then Brazil and Chile will use Virginia which has acceptable latency rates

Dublin with backup in Amsterdam
1. Austria
2. Belgium
3. Czech Republic
4. Denmark
5. Finland
6. France
7. Germany
8. Greece
9. Hungary
10. Ireland
11. Italy
12. Austria
13. Israel
14. Netherlands
15. Norway
16. Poland
17. Portugal
18. Romania
19. Spain
20. Sweden
21. Switzerland
22. UK

Singapore with backup in Hong Kong++
1. Australia
2. Hong Kong
3. India (sales in Nov ‘09)
4. Japan
5. Malaysia
6. New Zealand
7. Singapore (sales in Nov ‘09)
8. South Korea (sales July ‘10)
9. Taiwan (sales July ‘10)

++ Hong Kong will go-live in Oct 2009. APAC data will be backed up in the US until then
An aerial view of the Microsoft data center in Quincy, Washington

After years of operating in third-party facilities, Microsoft began building its own data centers in 2007 as it ramped up its battle with Google in the online services arena. Its first in-house project was a huge data center in the small Washington town of Quincy, where Microsoft invested $550 million in building a 470,000 square foot data center supported by hydro-electric power from nearby dams on the Columbia River. A year later it unveiled a
An aerial view of the 470,000 square foot Microsoft data center in San Antonio.
6. MICROSOFT DATA CENTER, DUBLIN, 550,000 SF
5. MICROSOFT CHICAGO DATA CENTER, Chicago 700,000 SF
# REPORT CARD FOR "SKYDRIVE"

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMOUNT OF FREE STORAGE?</strong></td>
<td>7 GB</td>
</tr>
<tr>
<td><strong>UPLOAD AND DOWNLOAD ENTIRE FOLDERS?</strong></td>
<td>Yes: You can upload data folders with &quot;Windows Explorer&quot; if the &quot;SkyDrive Desktop App for &quot;Windows&quot; is installed. You can download entire folders as zip files when you access skydrive.com with a Web browser.</td>
</tr>
<tr>
<td><strong>NO KNOWN DATA SECURITY COMPROMISES?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>ONLINE VIEW AND EDIT OF DOCUMENTS AND PHOTOS?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>&quot;WINDOWS STORE APP&quot; FOR USE IN THE &quot;START&quot; SCREEN OF &quot;WINDOWS 8&quot;?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>
Server Farms Operated by Microsoft Contain Servers for "SkyDrive"

Your Computer, Tablet, PDA, or Cell Phone

Web Browser to skydrive.com
No Web browser add-on is provided by "Microsoft" since they use HTML uploads and downloads

SkyDrive Desktop App for "Windows.." or Mac "OS X 10.7+

"SkyDrive App" for "Windows 8" ("Start Screen")

Internet Connection
Ethernet or WiFi Adapter
Your Computer, Tablet, PDA, or Cell Phone accessing SKYDRIVE

Web Browser to access skydrive.com

No Web browser add-on is provided by "Microsoft" since skydrive.com uses HTML uploads and downloads

"SkyDrive Desktop App for Windows Vista, Windows 7, Windows 8, or Mac OS X 10.7+

Upload upload entire folders or single files
Cannot upload entire folders

Upload or download single files
Cannot upload or download entire folders

"SkyDrive App" for "Windows 8" (for the "Start Screen")

Upload or download single files
Download entire folders as zip files
Cannot upload entire folders

Ethernet or WiFi Adapter
"SKYDRIVE DESKTOP APP FOR WINDOWS" ALLOWS UPLOADS OF LOCAL FOLDERS AND FILES TO THE "SKYDRIVE" SERVER FARM BY USING "WINDOWS EXPLORER" TO DRAG FOLDERS AND FILES TO C: \ Users \ <User Profile> \ SkyDrive
Microsoft SkyDrive

Settings | Choose folders | About

General
- Start SkyDrive automatically when I sign in to Windows
- Let me use SkyDrive to fetch any of my files on this PC
  More info

Help improve SkyDrive
- Automatically send log files to SkyDrive when I experience a problem

Unlink SkyDrive
By unlinking SkyDrive, your files will no longer be kept up-to-date with SkyDrive.com, and you won't be able to fetch files that are on this PC. To continue using SkyDrive, you will have to reconfigure SkyDrive on this PC.

Unlink SkyDrive

OK | Cancel
Your folders syncing on this PC

If you don't want to keep everything on your SkyDrive on this PC, you can choose to sync only some folders by clicking "Choose folders."

Choose folders
Sync only what you want

If you don't want to download everything on your SkyDrive to this PC, you can choose to sync only some folders.

- All files and folders on my SkyDrive
  Everything but files shared with you will sync on this PC.

- Choose folders to sync
  - Files not in a folder
  - 2012-05-28
  - Archive of GSBUG Newsletters
  - Favorites
  - Online Training Hyperlinks in Folders
  - Public
  - Test Folder 2013-02-13

OK  Cancel
Report Card for "SkyDrive" (continued)

- If you drag a local file or folder into C:\Users\<User Profile>\SkyDrive\, then the "SkyDrive Desktop App for Windows" will upload a copy of the file or folder to the SkyDrive server farm.
Report Card for "SkyDrive" (continued)

• If you delete a synchronized file or folder from the C:\Users\<User Profile>\SkyDrive\ then "SkyDrive Desktop App for Windows" will delete the corresponding file or folder from the SkyDrive server farm.
Report Card for "SkyDrive" (continued)

- For uploading, Start screen Internet Explorer 10 (= "Metro IE10" = "Windows Store App IE10") does not allow the upload of a folder: You can only upload a single file at a time.

- For uploading, the "Start screen" app called "SkyDrive" does not allow upload of a folder: You can only upload a single file at a time.
Boston Globe - At three positions, Red Sox can't afford question marks
Report Card for "SkyDrive" (continued)

• Failure to display 3-character file extensions for data files (at the "skydrive.live.com" Web site) can confuse the end-user:
• Using a Web browser, you can download files or entire folders that are stored at the SkyDrive server farm.
• Using a Web browser, you can upload single files to the SkyDrive server farm but you cannot upload an entire folder.
From the Desktop of "Windows XP", "Windows Vista", "Windows XP", "Windows 7", or the legacy Desktop of "Windows 8", the main way to access your 7 Gigabytes of free storage at Microsoft's SkyDrive is by using a Web browser such as "Internet Explorer" or "FireFox":
Edit in PowerPoint Web App
Make quick changes right here in your browser.
This is a test of the civil defense system!!!!???????????
This is a test of the civil defense system!!!
This is a test of the civil defense system!!!!???????????

Saving...
Requirements for the "SkyDrive Desktop App" for "Windows.." or Mac "OS X"
SkyDrive system requirements

SkyDrive requires the following:

- **Operating system:** 32- or 64-bit version of either Windows 8, Windows 7, or Windows Vista with Service Pack 2 and the Platform Update for Windows Vista. Windows Server 2008 R2 or Windows Server 2008 with Service Pack 2 and the Platform Update for Windows Server 2008. Mac OS X 10.7 (Lion) or Mac OS X Mountain Lion.

- **Processor:** 1.6 GHz or higher, or Intel-based Mac computer.

- **Memory:** 1 GB of RAM or higher.

- **Resolution:** 1024 x 576 minimum.

- **Internet connection:** High-speed Internet access is recommended.
If you are running "Windows XP", your computer cannot run with "SkyDrive Desktop App for Windows" which means that you can only upload one file at a time using a Web browser: **Advice**: If you have a "Windows XP" computer, use "Google Drive" or "Box" instead since they support folder uploading both in the browser and in their "Windows.." desktop programs for "Windows XP" computers.
Wait, there's a desktop app?
Easily upload larger files with the SkyDrive desktop app.

Download now
The SkyDrive app comes with Windows 8 and Windows RT. With it, you can view and browse the files you've saved to SkyDrive.com.

If you also want to automatically sync your files across your computers, install the free desktop app* on them—including Windows 7, Windows Vista, and Mac OS X Lion computers. You'll be able to access your photos and files from almost anywhere, store them, and easily share them. You can also try SkyDrive on the go with the SkyDrive mobile app.

Download SkyDrive

View system requirements. Clicking the download button means you agree to the Microsoft service agreement and privacy statement. This software might also download and install its updates automatically.

*Note: The SkyDrive desktop app isn’t available for Windows RT, Which Windows operating system am I running?
automatically.

*Note: The SkyDrive desktop app isn’t available for Windows RT. Which Windows operating system am I running?
Microsoft SkyDrive

Settings

General
- Start SkyDrive automatically when I sign in to Windows
- Let me use SkyDrive to fetch any of my files on this PC (More info)

Help improve SkyDrive
- Automatically send log files to SkyDrive when I experience a problem

Unlink SkyDrive
This option is unavailable because you’re signed in on this PC with a Microsoft account. If you want to use a different account with SkyDrive, sign in on this PC with a different Microsoft account or add an account on this PC with the email address you want to use.

Unlink SkyDrive

[OK] [Cancel]
If you don't want to keep everything on your SkyDrive on this PC, you can choose to sync only some folders by clicking "Choose folders."
Sync only what you want

If you don't want to download everything on your SkyDrive to this PC, you can choose to sync only some folders.

- All files and folders on my SkyDrive
  Everything but files shared with you will sync on this PC.

- Choose folders to sync
  - Files not in a folder
  - 2012-05-28
  - Archive of GSBUG Newsletters
  - Favorites
  - Notes for VirtualBox 4 on 12-17-2011
  - Online Training Hyperlinks in Folders
  - Public
  - Sandbox
  - Test Folder 2013-02-13
  - Tucson Computer Society documentation

[OK]  [Cancel]
Sync only what you want

If you don't want to download everything on your SkyDrive to this PC, you can choose to sync only some folders.

- All files and folders on my SkyDrive
  Everything but files shared with you will sync on this PC.

- Choose folders to sync

  - Files not in a folder
  - 2012-05-28
  - Archive of GSBUG Newsletters
  - Favorites
  - Notes for VirtualBox 4 on 12-17-2011
  - Online Training Hyperlinks in Folders
  - Public
  - Sandbox
  - Test Folder 2013-02-13
  - Tucson Computer Society documentation
• If you use the "SkyDrive Desktop App for Windows" in your C: \ Users\ <Name of User Profile> \ Skydrive folder (if you are running "Windows Vista with Service Pack 2", "Windows 7", or "Windows 8") SkyDrive will delete the files/folders from the "SkyDrive" folder on your C: drive without deleting them from your online storage at the SkyDrive Web site.
From the new-fangled "Start" screen of "Windows 8", you can access the SkyDrive Web site in three ways:

- Install and use Microsoft's "Skydrive Windows Store App" (which will put a tile on the "Start" screen).
- Use "Start" screen version of Internet Explorer 10 to go to skydrive.live.com (from the address bar in the bottom "App bar" or as a favorite from the top "App bar"
- Create and use a "Pinned Site" tile on the "Start" screen
SkyDrive

Globe - Celtics hold on for win over Bulls
<table>
<thead>
<tr>
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<td>3</td>
</tr>
<tr>
<td>1/19/2011</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When you either start up "Windows 8" for the first time or if you create a new user in "Windows 8" and specify a Microsoft account for the username, the "Start" screen version of "SkyDrive" is automatically installed for you.
SkyDrive (continued)

- Use the notification area icon of "SkyDrive" to select which files and folders up at the skydrive.live.com site are to be synchronized to your C:\Documents and Settings\<userprofile>\SkyDrive\ folder for "Windows XP" computers.
Storage Plans for "SkyDrive"

- See
<table>
<thead>
<tr>
<th>Paid storage options (annual price)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free storage</td>
</tr>
<tr>
<td>Add 20 GB</td>
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<tr>
<td>Add 50 GB</td>
</tr>
<tr>
<td>Add 100 GB</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>SkyDrive from Web Browser</strong></td>
</tr>
<tr>
<td><strong>SkyDrive from SkyDrive folder of SkyDrive Desktop App</strong></td>
</tr>
<tr>
<td><strong>SkyDrive from &quot;Start&quot; screen of &quot;Windows 8&quot;</strong></td>
</tr>
</tbody>
</table>

Access "SkyDrive" from Desktop IE10 or Start Screen IE 10

Cannot use Web browser reliably, must use "SkyDrive for Android"
SkyDrive (continued)

- Use the notification area icon of "SkyDrive" to select which files and folders up at the skydrive.live.com Web site are to be synchronized to your C:\Users\<userprofile>\Google Drive\ folder for "Windows Vista" or "Windows 7" or "Windows 8"
SkyDrive (continued)

- If you access an Adobe Acrobat PDF file using the "SkyDrive" Windows Store App (on the "Start screen" of "Windows 8"), the PDF file will open in "Reader" which is a "Start screen" app:
Francis Chao's Presentations for the APCUG Speakers Bureau

Francis Chao is prepared to present any of the following programs to your User Group:

- **Secure Web Access Using a Two-Router Demilitarized Zone (DMZ) and a "VMware" Virtual Machine (B)**

  From inside a "VMware" virtual machine that connects with a USB-to-Gigabit Ethernet adapter to a two-router "De-Militarized Zone" (DMZ), you can access the Internet with the maximum amount of protection from malware.

  This unique virtual machine configuration resolves two problems:
  - **Problem 1:**
    When you add a real or virtual "Windows.." computer to an existing local area network, "Windows.." automatically defaults to file sharing and homegroups. File sharing and homegroups provides an "attack vector" for some of the malware that finds its way into your computer by way of the Internet.
  - **Problem 2:**
SkyDrive (continued)

• For viewing and editing:

• If you access SkyDrive from Windows 8's Start screen-based "Internet Explorer 10", PDF files result in the following notice:
Unable to display "fc" in this browser

Check your browser settings to see if you have a PDF plugin installed and enabled.

If you have a PDF viewing application, you can download the file and open it from your computer.
SkyDrive (continued)

- For viewing and editing:
  - .DOC files open in "Microsoft Word Web App" at the SkyDrive Web site
  - .XLS files open in "Microsoft Excel Web App" at the SkyDrive Web site
  - .PPT files open in "Microsoft PowerPoint Web App" at the SkyDrive Web site. However, if you make changes, you are forced to "Save As.." the file to .PPTX format
SkyDrive (continued)

- For viewing and editing:
  - .PPTX files open in "Microsoft PowerPoint Web App" at the SkyDrive Web site.
  - Copy and paste does not work so you have to use the Windows "Snipping Tool" to create a .PNG file and the use the "Insert"/"Picture" function on the Ribbon Bar.
SkyDrive (continued)

• For viewing and editing:
  o .TXT text files cannot be edited in place up at "Skydrive": you have to download them, edit them, delete it from SkyDrive (to avoid duplicate copies), and then upload them back to Skydrive.
SkyDrive (continued)

- When you set up Windows 8 to log in with an online Microsoft account, cannot use netplwiz to bypass the login screen--must log in after bootup or restart.
SkyDrive (continued)

• "Fetch Files On Your PC"

"SkyDrive" lets you "fetch" any file on your computer from any other Internet-connected computer in the world. See

Microsoft SkyDrive

Settings  Choose folders  About

**General**

- Start SkyDrive automatically when I sign in to Windows
- Let me use SkyDrive to fetch any of my files on this PC
  [More info]

**Help improve SkyDrive**

- Automatically send log files to SkyDrive when I experience a problem

**Unlink SkyDrive**

This option is unavailable because you're signed in on this PC with a Microsoft account. If you want to use a different account with SkyDrive, sign in on this PC with a different Microsoft account or add an account on this PC with the email address you want to use.

[Unlink SkyDrive]
Wait, there's a desktop app?
Easily upload larger files with the SkyDrive desktop app.

Download now

Microsoft account What's this?
someone@example.com
Password

Keep me signed in

Sign in

Can't access your account?
Sign in with a single-use code

Don't have a Microsoft account? Sign up now
Security check!

To connect to this PC, we need you to enter a security code. This extra step only takes a minute and will help protect your computer from unauthorized access.

Sign in with a security code
Help us protect your account
To continue, check your email and enter the code we just sent you.

fchao2@yahoo.com

7372056

I didn’t get the code

Remember me on this device.

Submit
SkyDrive (continued)

- SkyDrive Apps for Mac OS X, iPad and iPhone (iOS), and Android phones and tables
For requirements, see http://windows.microsoft.com/en-us/skydrive/system-requirements
SkyDrive (continued)

- The SkyDrive Desktop App for Mac OS X will run in Mac OS X 10.8 "Mountain Lion" and OS X 10.7 "Lion". However it will not install into Mac OS X 10.6 Snow Leopard" or any version of OS X prior to 10.6. This means that you cannot upload a data folder into a Mac that does not have OS X 10.7 or OS X 10.8.
SkyDrive (continued)

- **Collaboration with File Versioning**

"SkyDrive" lets you share files with others. You can give them the ability to edit the files using "Office Web Apps". If you do so, "SkyDrive" will keep versions of the files that others edit so that you can see what changes that they have made to a file.
SkyDrive (continued)

• Collaboration with File Versioning (continued)

See

SkyDrive (continued)

- Privacy Issues with SkyDrive

See

http://www.pcworld.com/article/2013809/windows-8-deep-dive-get-to-know-your-skydrive-app.html
Also, don't forget that everything you store on SkyDrive is subject to the Code of Conduct for Microsoft services, and that you can have your Microsoft account suspended for uploading anything that Microsoft believes to be in breach of that code. Microsoft frowns upon (among other things) material that depicts full or partial nudity, vulgarity, and gratuitous violence. Your SkyDrive account will be monitored for potential violations, and if Microsoft chooses to suspend your account, you will lose access to everything tied to your Microsoft account. That includes (but is not limited to) your SkyDrive account, your Xbox Live account, and the Windows Store.
SkyDrive (continued)

- Privacy Issues with SkyDrive