Microsoft Windows 8: Here's What We Know So Far

 Details about [Windows 8](), Microsoft's newest operating system expected in 2012, have been leaking out thanks largely to Microsoft previews and a stream of blog posts on the company's [Building Windows 8]() blog.

The new OS is said to be Microsoft's biggest Windows refresh since Windows 95, when desktop PCs reigned supreme and most laptops cost nearly $3000. Now, Microsoft wants to update Windows for a consumer technology world that is obsessed with online services and touch-centric devices such as the iPad and Android smartphones.

Windows 8: TL;DR* (*Too Long; Didn't Read)

So far, Microsoft has detailed a brand new touch interface for Windows 8 with the traditional desktop UI hiding underneath. The new OS also will run on both [ARM and Intel processors](), opening up a range of Windows 8-powered devices such as desktops, laptops, and tablets.

Windows 8 also is expected to have an [OS X-style]() [Mac App Store](), and should include further integration with Microsoft's growing range of online services such as [SkyDrive](), Office 365, and the free Office Web apps. Other improvements include [USB 3.0 support]() and an [overhauled version of Explorer](), Windows' file management tool.

Here's a look at everything we know so far about Window 8.

Get in Touch With Windows 8

The most dramatic change for Windows 8 is Microsoft's emphasis on a new [Windows Phone 7-inspired touch interface](). Windows 8's new start screen has large panels that are ideal for touchscreens, but that also can be manipulated by a mouse.

The Microsoft Windows 8 start screenThe traditional Windows interface with the start button, task bar, and desktop is still available and will come up any time you load a legacy app such as Microsoft Excel 2010. You can also run new Windows 8 touchable apps alongside traditional Windows apps. Microsoft said HTML and JavaScript will be the primary development language for new Windows 8 apps.

ARM and Intel

Windows 8's touch-centric interface may give traditional mouse-and-keyboard desktop fans the chills, but the new UI could help Microsoft compete in the tablet arena. Starting with Windows 8, Microsoft will design its operating system to work not only with Intel's x86 chip architecture, but also with ARM processors. ARM chips are very popular in the mobile device market and should help Microsoft's partners put Windows 8 on a range of so-called post-PC devices such as tablets.

An ARM processorThe big question, however, is whether people will be willing to give ARM-based Windows devices a chance. Apple's iPad is the most dominant device in the new generation of one-panel touch tablets. And the consensus among critics and device makers is that people are looking for slates running mobile operating systems such as iOS, Android, and the QNX-based OS on the Blackberry PlayBook. Can Microsoft succeed in the tablet arena by offering Windows with a new touch overlay? I guess we'll find out in 2012.

App Store

You can expect to see an integrated [app store in Windows 8](#) that should let you download new software for your device with just one click. Earlier in August, Microsoft revealed on the [Building Windows 8 blog](#) the details of various engineering teams working on the new OS, and the list included an "App Store" team. It's not clear what the app store team is working on, but chances are it will be a product similar to the [Mac App Store](#) available for Mac PCs running OS X 10.6 (Snow Leopard) and 10.7 (Lion).

App Preview

Speaking of Apps, some Microsoft partners are already hard at work designing [touch-based apps for Windows 8](#) tablets. [ZDNet](#) uncovered a purported early design for a USA Today Windows 8 app that has a very Metro UI look and feel to it.

A mock-up of a Windows 8 appAnother Windows 8 mock-up shows an app presumably designed with in-flight entertainment consoles in mind that offers access to news, weather, and videos.
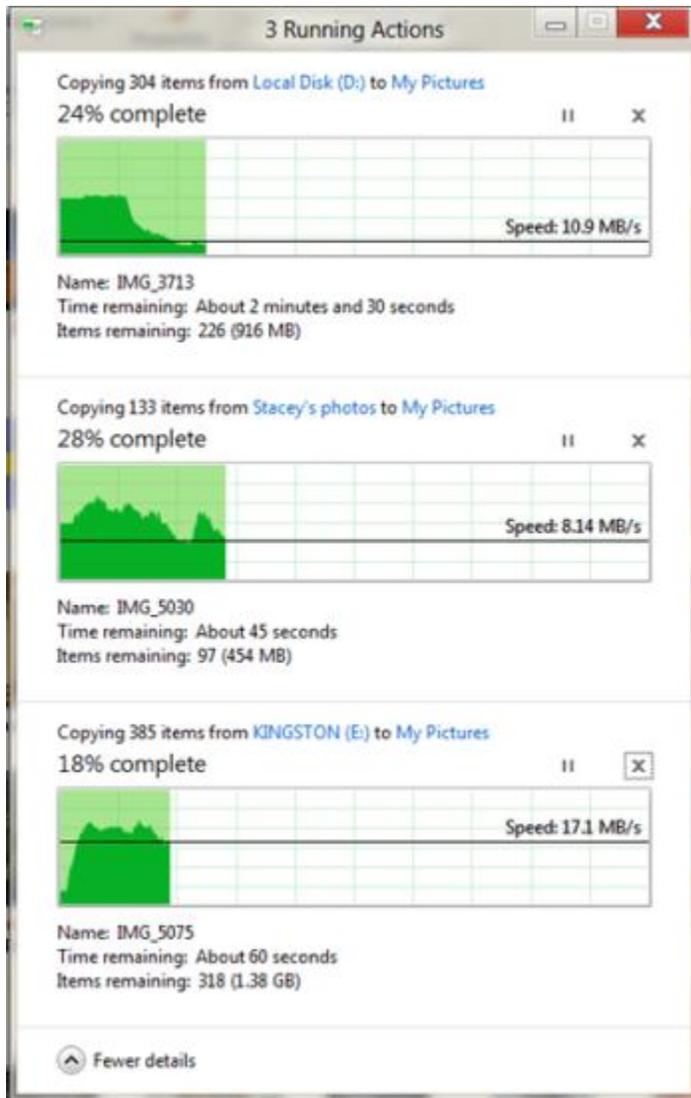
Clouds in Windows 8

Also part of Microsoft's list of Windows 8 engineering teams was a group called "Windows Online." It's not clear what that team might be doing, but there are a large number of online services that Microsoft could integrate into Windows 8, such as Office 365, Office Web Apps, Windows Live and [Azure](#). Some integration with these so-called cloud services already exists, but there are still annoying shortcomings in Windows such as an easy way to mount your SkyDrive as a local drive accessible via Windows Explorer. Dropbox can do it, so why can't Microsoft?

USB 3.0 Support

USB 3.0 promises data transfer speeds that are up to 10 times faster than the current USB 2.0 standard, and USB 3.0 also uses less power than its predecessor. You can already take advantage of speedier USB 3.0 ports in Windows 7 thanks to third-party drivers. But starting with Windows 8, Microsoft plans on including native support for USB 3.0.

Windows Explorer: File Management Basics

The new interface for file copy information in Windows 8Microsoft has spent a fair amount of time recently talking about its overhauls to Windows Explorer for the next iteration of Windows. The new Windows Explorer will improve its file management basics such as copy, move, rename, and delete functions, which make up 50 percent of Explorer's usage in Windows 7.
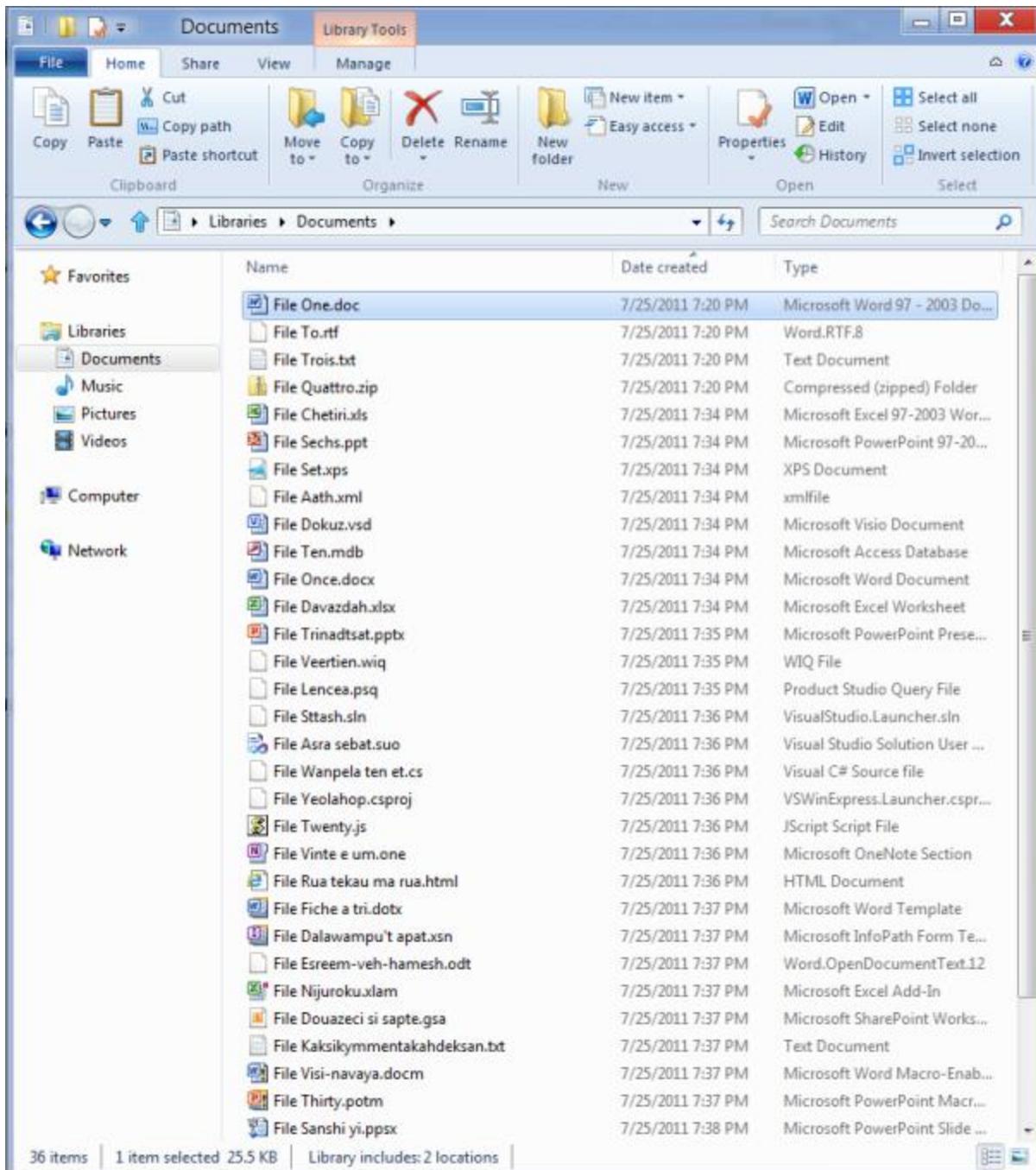
The new interface puts all your basic file management functions into one window instead of having separate windows for each function. This will make it easier and more efficient to handle moving around several large files at once, such as photos and videos.

If you're copying or moving files, you can also get an expanded view to see throughput graphs and how many bits have already been transferred. Microsoft also claims its time estimates to completion will be more accurate in Windows 8.

Finally, Microsoft has improved the filename collision dialog to make it easier to figure out which files you'll be overwriting when a new file has the same name as a file already sitting in your destination folder.

Exploring Ribbons

The Windows 8 version of Explorer is also getting Microsoft's ribbon interface in a bid to make the file management tool more touch friendly, efficient, expose useful commands, and to reintroduce popular Explorer features from Windows XP. Microsoft has also optimized the new Explorer for widescreen displays and will add about 200 keyboard shortcuts for power users.

Explorer gets the ribbon interface in Windows 8.The new Windows 8 Explorer will have three main tabs--Home, Share, and View--along with a File menu on the far left side. Explorer's primary Home tab in Windows 8 includes 84 percent of the commands users employ most often, Microsoft says, such as "Move to" and "Copy to" for moving and copying files. Microsoft has also exposed the command "Copy path" for people who want to paste a file path into another Explorer window to access a file quickly or email a link to a file sitting on a corporate server.

The Share tab offers one-click access to the "Email" and "Zip" commands, as well as other options such as "Burn to disc," print and, in a nod to the 1990s, fax. The new Explorer will also show you who has access to a currently selected file on your HomeGroup or enterprise network.

Explorer's new File menu gives power users quick access to the command prompt as well as an option to open the command prompt as an administrator. Both options open a C prompt with the file path set to your currently selected folder such as My Documents or Desktop.

There are also contextual menus in Windows 8's Explorer that only show up when you are doing specific tasks. If you open up Explorer to look at photos, for example, under the "Manage" tab you'll see options to rotate the currently selected photo, start a slideshow, or set a photo as your background.

Opening up an Explorer window to look at your computer's connected drives will give you options to format, optimize, and clean up your hard drive, eject an external thumb drive, or activate Windows' Autoplay feature. Windows 8's Explorer will also include XP's 'Up' button that allows you to move backwards through your file directories.

That's all for now, but Microsoft is expected to reveal more details about Windows 8 during the company's BUILD conference that starts September 13 in Anaheim, CA. We'll keep an eye on Microsoft's blogs for more Windows 8 news.

Windows 8: What You Need to Know

Your questions about Microsoft's latest operating system, answered.

Microsoft showed its first public demo of Windows 8 on Wednesday, and it's not at all like the Windows operating systems you've come to know over the past 25 years. The next version of Microsoft's operating system ("Windows 8" is just a codename) is a radical departure, designed around touch screens.

If this revelation is making you weak in the knees, worry not. Here's a handy FAQ on the early Windows 8 build that Microsoft demonstrated:

What Windows 8 features did Microsoft demonstrate?

Essentially, Microsoft showed how Windows 8 will work on both tablets and traditional PCs. The operating system's home screen is filled with big, touchable panels, like the live tiles in Windows Phone 7, and from there you can tap and swipe your way to other touch-based

applications. But underneath that touchy layer is plain old Windows, with a task bar, file manager, app icons--everything.

Swipe across to multitask. (Click to Zoom) **How does the touch interface work?**
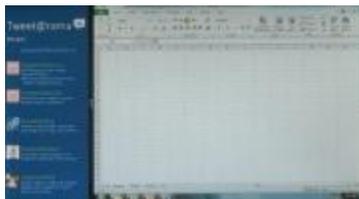
From the start menu, which shows basic information like time and unread e-mail counts, users swipe upwards to reveal the home screen and its tiles. As with Windows Phone 7, apps can show some information within the tiles--users needn't click on the weather app to see the current temperature, for example. Swiping from the right bezel brings up a menu that can take users from an app back to the home screen.

Users can multitask between open apps by swiping across from the left bezel. And therein lies the coolest-looking feature of Windows 8: When swiping in a new app, users can snap it in place next to the app that's currently running. This allows users to view two apps at the same time--something that no existing tablet OS can do.

Windows 8 Weather App (Click to Zoom) **How will Windows 8 apps work?**

Microsoft says it's created a new kind of app for Windows 8 using HTML5 and Javascript, and they're a lot like the apps you'd expect to find on a tablet. A weather app shows the five-day forecast. A news reader displays stories and thumbnail images in big, rectangular panes. Microsoft also showed off Internet Explorer 10, which is optimized for touch. Presumably Microsoft will distribute these apps through its own store--there's a "Store" tile in the version of Windows 8 that Microsoft demonstrated--but the company offered no details.

Legacy apps and new apps can run side by side (Click to Zoom) **What about existing Windows apps, such as Office and Photoshop?**

They'll still work. Loading one of these apps will bring up a more familiar version of Windows. According to All Things Digital, classic Windows apps will use "fuzzy hit targeting" to aid finger taps, but they won't be optimized for the touch screen like Windows 8's

HTML5/Javascript concoctions. Legacy apps can, however, run side by side with the new Windows 8 apps.

But what about Windows PCs running on ARM chips? Will legacy apps run on those devices?

It's conceivable that ARM-based Windows devices will be restricted to the touch-centric user interface in Windows 8, but Microsoft hasn't made any announcements on that front. In fact, Microsoft recently denied claims made by an Intel executive about which apps will run on ARM-based Windows machines. Intel's Renee James had said to expect at least four versions of Windows for ARM processors, and that none of these versions would be compatible with apps from Windows XP, Vista or 7. Microsoft said these statements were "factually inaccurate and unfortunately misleading," but didn't clarify the matter with any details. In other words, the question is still unanswered.

When's the Windows 8 release date?

Microsoft CEO Steve Ballmer has said that Windows 8 will launch in 2012, but the company hasn't been any more specific than that. Expect more details on Windows 8 in September, when Microsoft will hold the BUILD conference for developers. For now, check out Microsoft's first video of Windows 8 in action.