PCWorld

SEPTEMBER 2015

WINDOWS 10: SUPERGUIDE

Everything you need to know about the new OS

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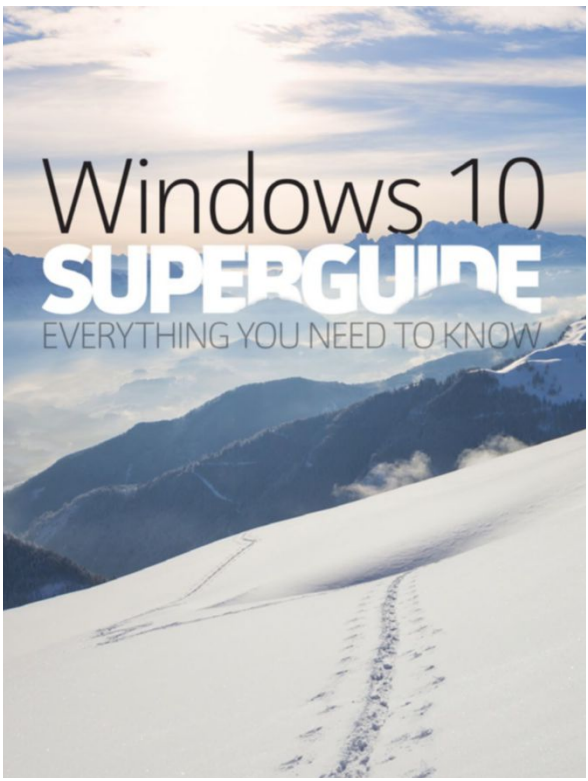

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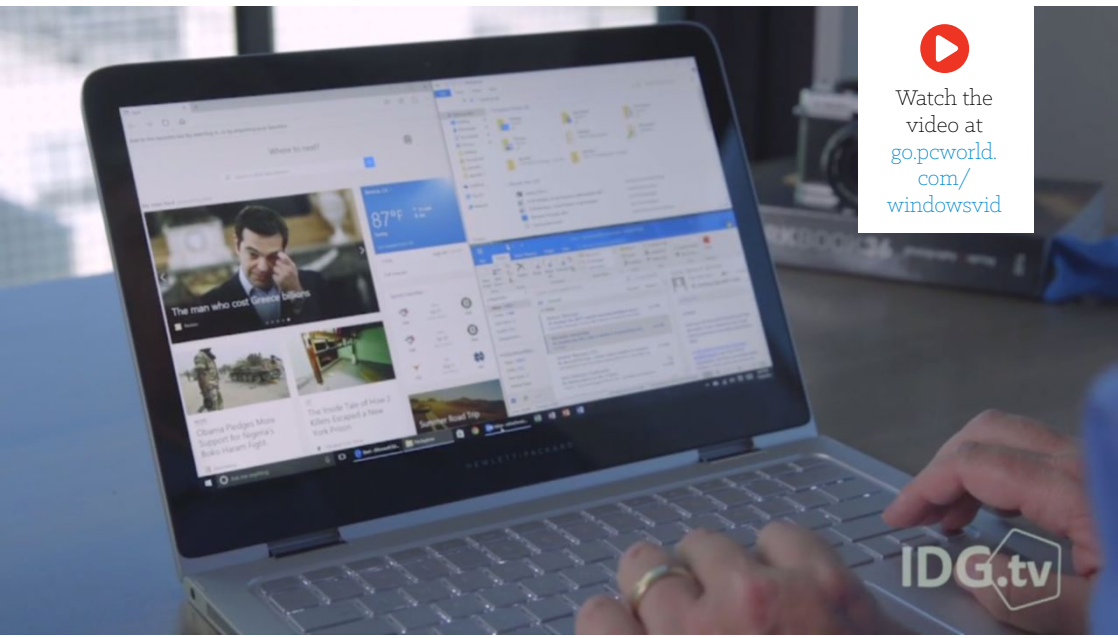


Watch the video at go.pcworld.com/windowsvid

Windows 10: It's familiar, it's powerful, but the Edge browser falls short

Microsoft has listened, and Windows 10 debuts with compelling new features—Cortana, Task View, a familiar Start menu—well worth the upgrade.

BY MARK HACHMAN

Windows 10 will keep evolving

WE MAY AS well refer to Windows 10 as a date, or an hour, as much as an operating system. It's a moment in time. A month from now, it will have changed, evolved, improved. But right now? Microsoft has shipped an operating system that was meticulously planned and executed with panache, but whose coat of fresh paint hides some

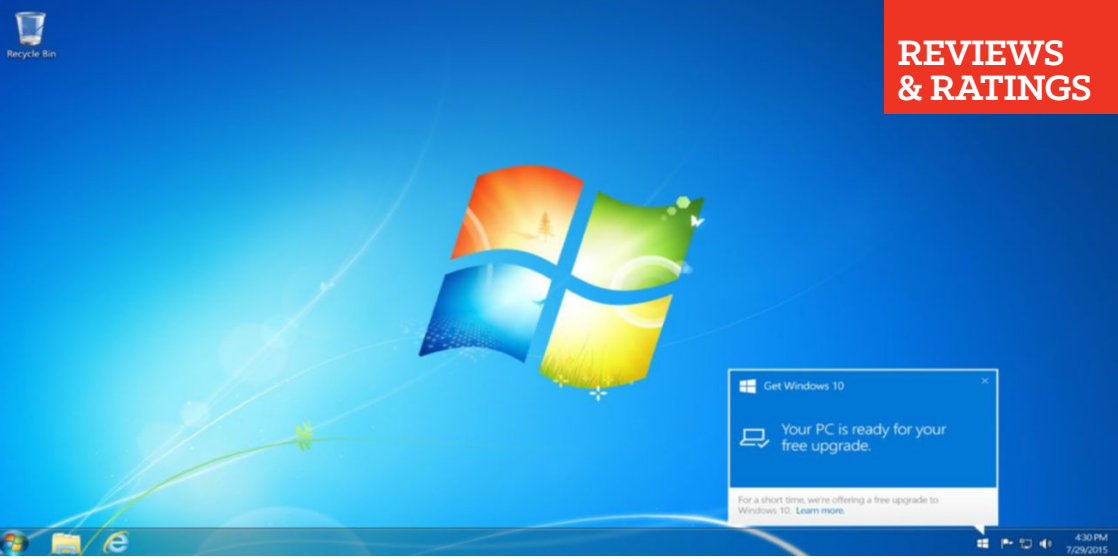
sticks and baling wire. There's a lot to cover, so feel free to dive in. Note that this review is not, and will never be, the review of the *final version* of Windows 10. Microsoft may have frozen its core operating system in advance of the July 29 launch, but the OS and its apps will be updated continually over their lifespan—which, in the case of Windows 10 itself, will be 10 years. We received multiple assurances, however, that what we reviewed was what existing Windows users received starting July 29 (remember, the rollout will be in phases), and what will be installed on new PCs from a vendor like Lenovo or Dell. And this review also reflects updates that we made after testing against the July 29 "release" code.

Let's emphasize this, Microsoft is busy fixing bugs, hour by hour. Several issues in a draft of this review were resolved by final edit. We expect this to continue.

Let's emphasize this—there is an *incredible* amount of activity going on right now. Microsoft is busy fixing bugs, hour by hour. Several issues which we noticed in a draft of this review were resolved by the time the final draft was edited. We expect this will continue.

Windows 10 is designed to welcome most Windows users. It will be a free upgrade for users of both Windows 7 and Windows 8/8.1, assuming they switch within a year's time. Don't dilly-dally; it's worth it.

Several innovations sell Windows 10 by themselves. The new Start menu blends Windows 7 and Windows 8 for maximum comfort. Cortana, Microsoft's digital assistant, serves up relevant information. A new set of reminders and updates slide in from the side, then vanish. A few quietly powerful apps, like Photos, show you the potential of Microsoft's new "Universal" mission. Task View, a somewhat obscure feature that creates virtual desktops, could become a sleeper hit beyond the power users for whom it's intended.



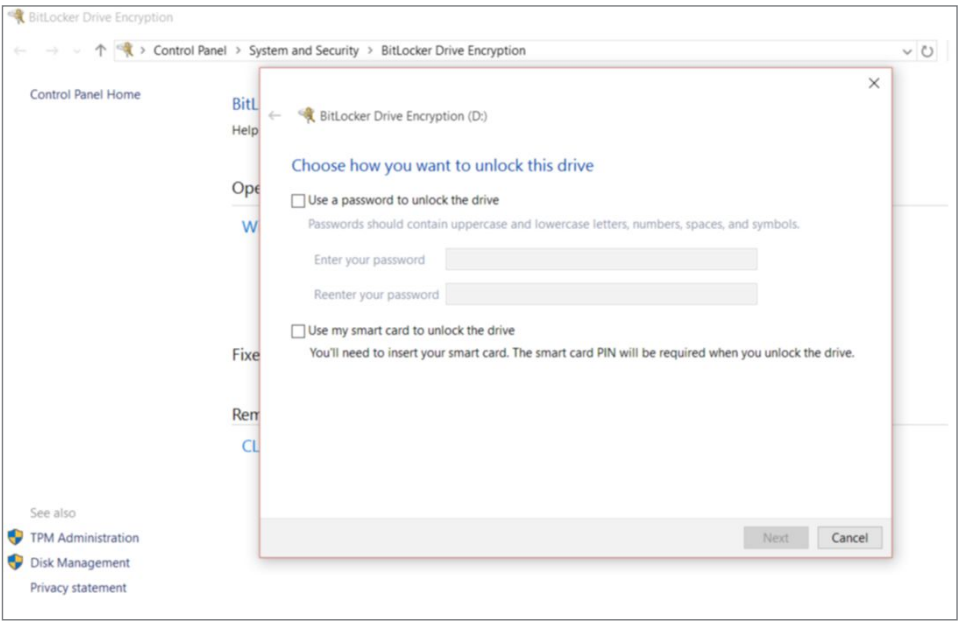
In an ideal world, Windows 10 could have baked a little longer. Quite a bit of the operating system ably demonstrates the care Microsoft took to listen to users and make substantive improvements. The UI designers also seem to have gone out of their way to make Windows 10 less in-your-face than Windows 8 was, though arguably it's swung a bit too far in the direction of blah. But then there's the ragged Edge browser. It could use a livelier palette, but its real flaws are functional. Microsoft promised Edge would be our browser for the modern web, and it's not—at least, not yet.

Which Windows 10? Home vs. Professional

The first two questions you should ask yourself are this: Which version of Windows 10 is available for my computer? And which do I need?

The first question is relatively easy to answer: if you're upgrading from Windows 7 Home or the basic version of Windows 8, you'll receive a free upgrade to Windows 10 Home (officially priced at $119). If you own a Surface Pro or a business PC, chances are you'll upgrade to Windows 10 Professional ($199). I tested both flavors of Windows 10, using a Microsoft Surface Pro 2 with a version of Windows 10 Professional installed on it, as well as an HP Spectre x360 with the consumer version of Windows 10.

Microsoft's professional version of Windows 10 differs from the



consumer version in many ways, but three really matter: BitLocker encryption, Remote Access, and the ability to run Hyper-V virtualization on your PC. BitLocker encrypts entire storage volumes with your hard drive and a password, with the option to print or save a recovery key to your OneDrive folder in case you forget it or are eaten by a grue. Remote Access allows you to take control of other PCs—such as those owned by relatives seeking tech support, for example—with the appropriate permissions and passwords. Hyper-V lets you create virtual partitions to test out future builds of Windows 10 (or other software), without the risk of borking your system.

Windows 10 Professional and Windows 10 Home are very similar, but BitLocker drive encryption is one of the value-added features of Windows 10 Pro.

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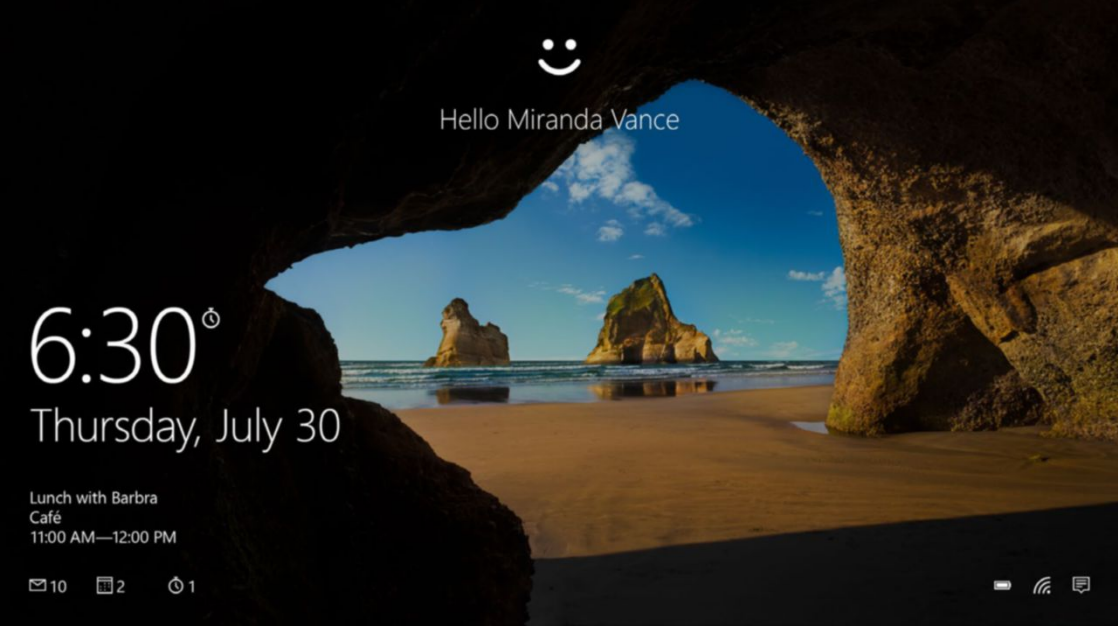


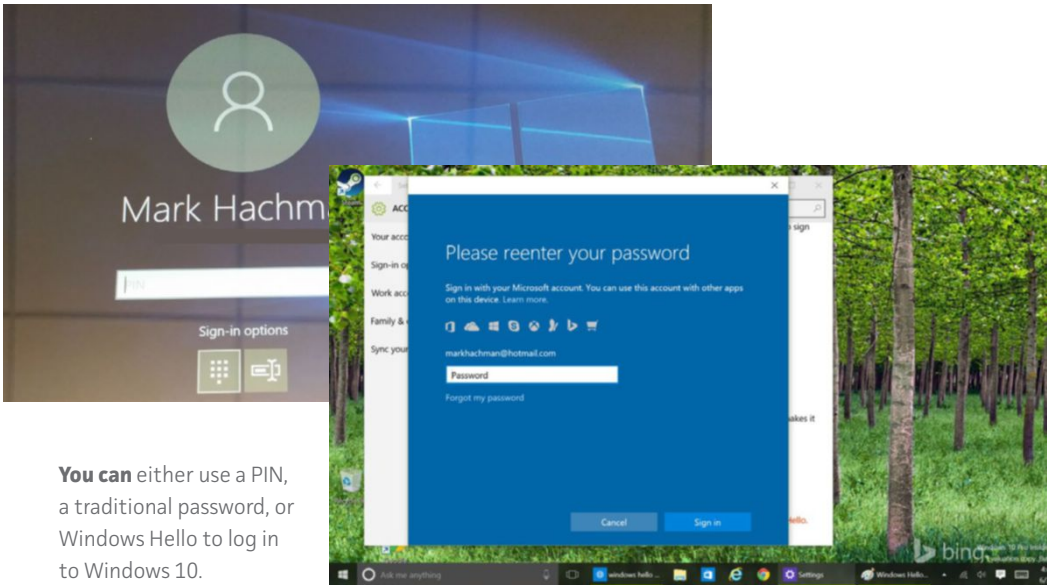
WINDOWS 10 REVIEW

Hello: The new way to log in to Windows 10

MICROSOFT BEGAN INSISTING on a login password with Windows 8, as an additional safeguard against losing your data. With Windows 10, Microsoft is raising the bar.

During the installation process, you'll be asked for your Microsoft username and password, the key that unlocks your data within Microsoft's ecosystem. But instead of using that password to log in every session, Microsoft will encourage you to use a 4-digit PIN—treating your PC, essentially, as a credit card. You'll still have the option of using a password, but a PIN is a much simpler option.

A second option, Microsoft Hello, is both simpler *and* more secure. Using biometric security—either a fingerprint or your face—Hello will log you in, automatically. Fingerprint readers are fairly rare outside corporate machines, but the depth cameras needed for face recognition are rarer still, found only in new PCs.



You can either use a PIN, a traditional password, or Windows Hello to log in to Windows 10.

Still, Microsoft's making Hello one of the features of their first Windows 10 ads, and it's not hard to see why. Windows Hello asks you to put your face in its camera range for a few seconds to train it, with your glasses on and off if necessary. After that, logging in is as simple as approaching the PC with the camera active. If the camera can see your face (with a Surface docking station, you may need to lean down a bit) you'll be launched into Windows 10, without pushing a button.

We've tested Hello fairly extensively, and are convinced that this is going to be one of Windows 10's highlights, if you can find a PC with Hello hardware installed. Setting up Hello and training it can be done in less than a minute, and the login process is nearly instantaneous. I did find that after taking a shower, dressing, and sitting down at my PC, Hello failed to recognize me. It did one other time, as well. If this happens, however, you can default to either a PIN or password and proceed normally.

I tried snapping a selfie and holding it near the camera to try and

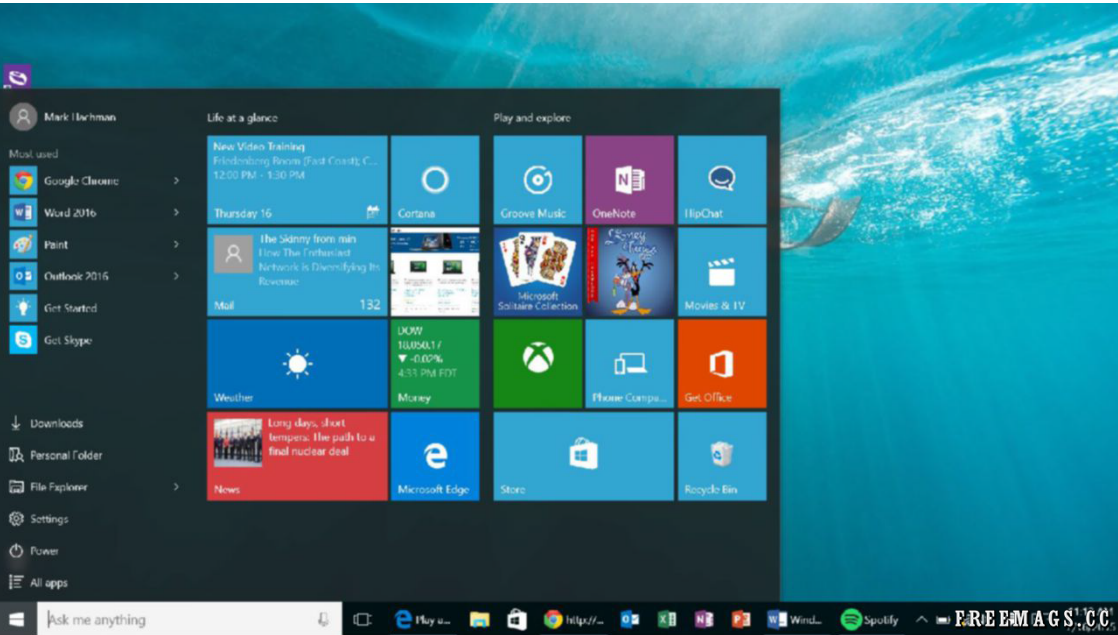
fool it, but that didn't work. I'm not going to say that Hello is foolproof and utterly secure, but I suspect you're going to need some sort of a mask to beat it.

Keep in mind that Hello is always looking out for you. To keep your PC from watching constantly, turn Hello off in the Settings menu.

Meet the new-old Start menu

Windows 10 newcomers, Microsoft has a treat for you. Click the Windows icon in the lower left corner, or tap the Windows key on the keyboard. The new Start experience appears, combining elements of both Windows 7 and Windows 8. You'll find a list of your most frequently used apps to the left, along with the tile-based Windows 8 approach to the right. The live tiles periodically rotate, refreshing themselves with new updates. It's a motif that was a little overwhelming in Windows 8, but seems more appropriate in this context.

Right-clicking and pinning apps to the Start menu will be intuitive for Windows 8 users, but it's going to feel a little strange for longtime



The new Windows 10 Start screen: For some Windows 8 users, it will justify the upgrade all by itself.

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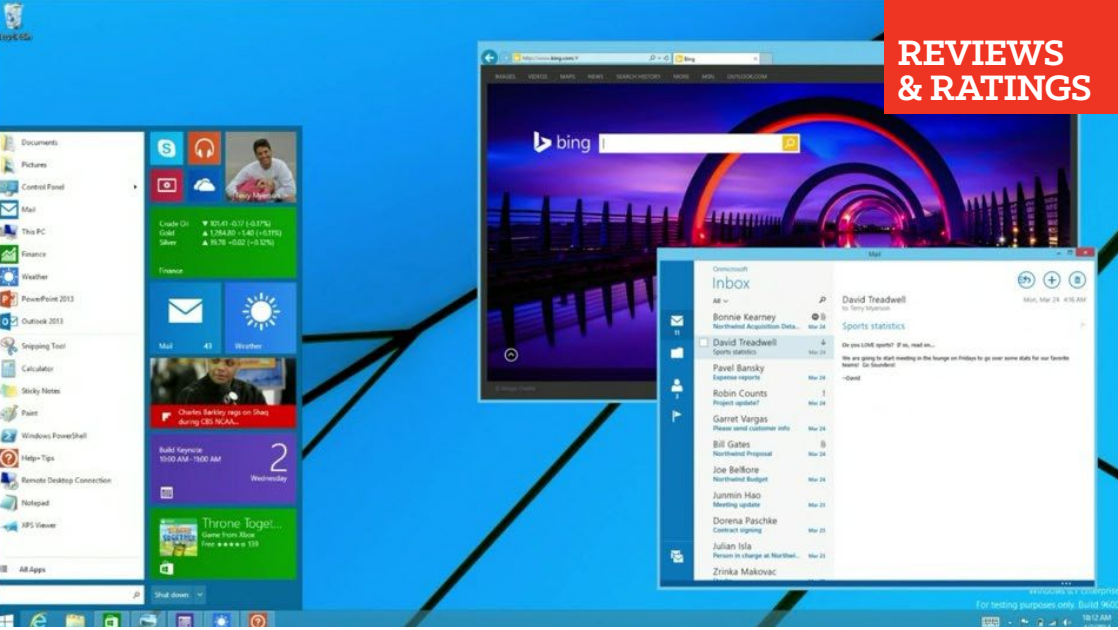


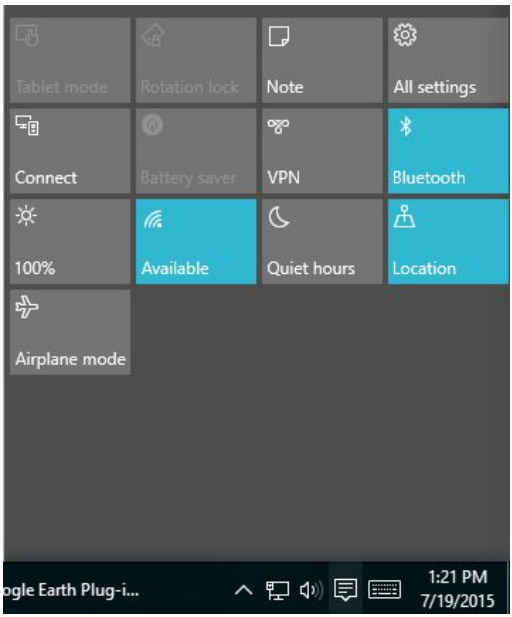
Windows 7 devotees. You can't manually add apps to the left-hand list; Windows 10 picks those for you, based on your most frequently used apps. Fortunately, you can also launch apps by typing their names into the Cortana search box at the bottom left, or scrolling all the way down the left-hand list to the tiny All Apps link.

Oddly, some apps don't show up in the All Apps list—like Paint, the venerable, quick-and-dirty image-editing app. I know it's there, but Windows 10 doesn't show it to me. (You can find it in the Windows Accessories folder.)

Microsoft will be judged on first impressions. However, not everyone will find the new Start menu intuitive. The Get Started intro app should probably be front and center to lead new users by the hand. Tips pop up occasionally, offering guidance, and the familiar toolbar sits at the bottom of the screen. There, you should see a row of icons you'll recognize: the Cortana search bar, followed by the new Task View, an Internet Explorer-like Edge icon, and more. But the Edge icon is the only visual hint that answers the critical question most new users will ask: "So how do I get to the Internet?"

Still, Microsoft's early vision for the Windows 10 Start screen honestly looked as good, or better, than the current version. Note the flexibility in adjusting the apps in the left-hand bar.

Windows 10's hidden depths



This Windows 10 Mobile-like collection of shortcuts is useful—if you know that it's hidden at the bottom of the Notifications screen.

DESPITE MICROSOFT'S EFFORTS to meld the best of Windows 7 and Windows 8 into Windows 10, some aspects of the new operating system are unfamiliar. Windows 7's desktop gadgets are gone, for example. In Windows 8.1, you could access the Settings by swiping in from the right to expose the Settings charm. Microsoft killed off the Charms in Windows 10, and settings can be found in multiple places.

Let's say you want to select a Wi-Fi hotspot to connect to. In Windows 8, you would swipe in from the right to expose the Settings charm. In Windows 10, you can click the little Wi-Fi or networking icon in the bottom right corner. Job done. But wait: To the right of the Wi-Fi icon is the Notifications icon. Click it, and it opens up a handy Windows 10 Mobile-ish array of shortcut icons, including a button to choose the Wi-Fi network—*and* a button to select a VPN. Why wasn't that VPN option available in the networking shortcut? I don't know. The Wi-Fi menu also includes a link to go to the Network Settings portion of the Settings menu, where you can specify proxies, or monitor data usage, or VPNs. By hitting Win+X, you can pull up the Control Panel with even more settings.

Whew. Yes, there's definitely a "Who's on First?" feeling to the various settings menus within Windows 10. But to be fair, the best

place to start is with the Settings link in the Start menu. The really nitty-gritty configuration work is left for the Control Panel, but the most frequently used options reside in the basic Settings, with user-friendly toggles and pull-down menus.

Otherwise, Windows 10 automatically takes care of the basics, behind the scenes. I hooked up a number of USB peripherals to a Windows 10 machine with no issues, and routinely connected to either my work or home router. I did have an instance or two when Comcast's connection was flaky, however, and while other devices seemed to reinstate the connection, I had to reboot my PC. Since I've downloaded the "release" code, however, I've had no issues.

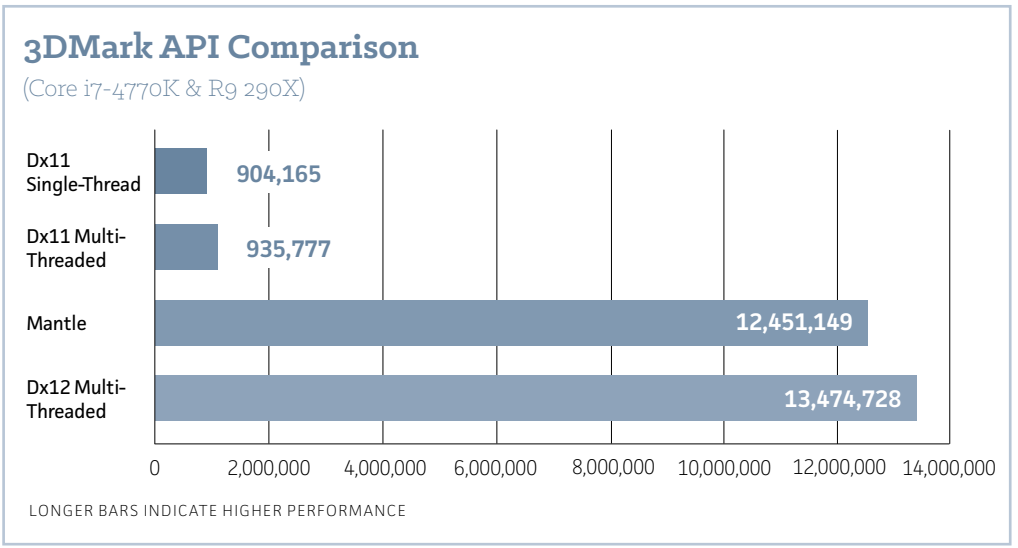
The most frequently used options reside in the basic Settings, with user-friendly toggles and pull-down menus

Just be aware that there are levels to Windows 10 that the OS hides from you—including features (like a battery saver/monitor, for example) that I'd really rather see as a desktop widget. (Some vendors, like Lenovo do offer a utility that can be placed in the toolbar.)

How does Windows 10 stack up against Windows 8.1? Well, if you look at performance, it's essentially a tie. We've run dozens of benchmarks on Windows 10 (go.pcworld.com/windowsbench), and it looks like Windows 10 is slightly faster, but within the margin of error. Realistically, it's a tie.

Deep within Windows 10 lies DirectX 12, the latest version of Microsoft's API that will power your system's graphics card or chip. Those drivers ship with Windows 10, but Microsoft hasn't really promoted them yet. DirectX 12 is potentially a very big deal, however, because our early benchmark scores show its performance could be incredibly fast (go.pcworld.com/directx12). Keep in mind that this is a theoretical benchmark, however, and testing on real game engines won't be possible for several months.

A bug in Windows 10's drivers may also cause a small reduction (about 10 percent) in battery life (go.pcworld.com/batlife) with



DirectX12 performance stacks up nicely against the older DX11 API.

Windows 10. Intel has promised that a patch will solve that problem, but it's not clear whether it has been released. Some PC vendors are quietly warning that turning on Cortana's active listening mode will drain battery life, but it appears to have a small impact.

Microsoft's mediocre Windows Defender comes installed by default, handling anti-malware and firewall duties. That's not a dig at Microsoft—Defender is there to protect your PC in the absence of anything else—but we'd recommend replacing it with another free or paid anti-malware solution. Microsoft made one other security tweak, preventing you from deferring Windows updates as was allowed in the past for Windows 10 Home users.

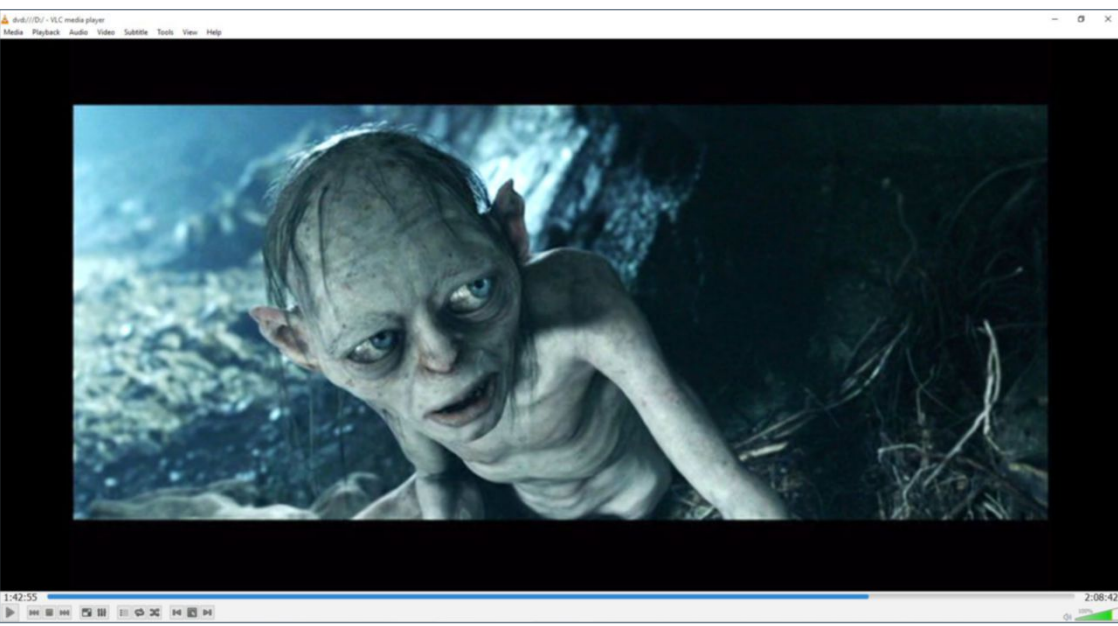
Like Windows 8, Windows 10 didn't initially include any basic Blu-ray or DVD playback support, but it does now, sort of. If you're upgrading from a PC that included Windows Media Center you should see a modern UI app on your PC called Windows DVD Player. In our tests, however, it's not great (go.pcworld.com/windvd). Instead, just download VLC—but not from the Store, which houses the crappy mobile app. Instead, go right to the source, the VLC site (videolan.org/

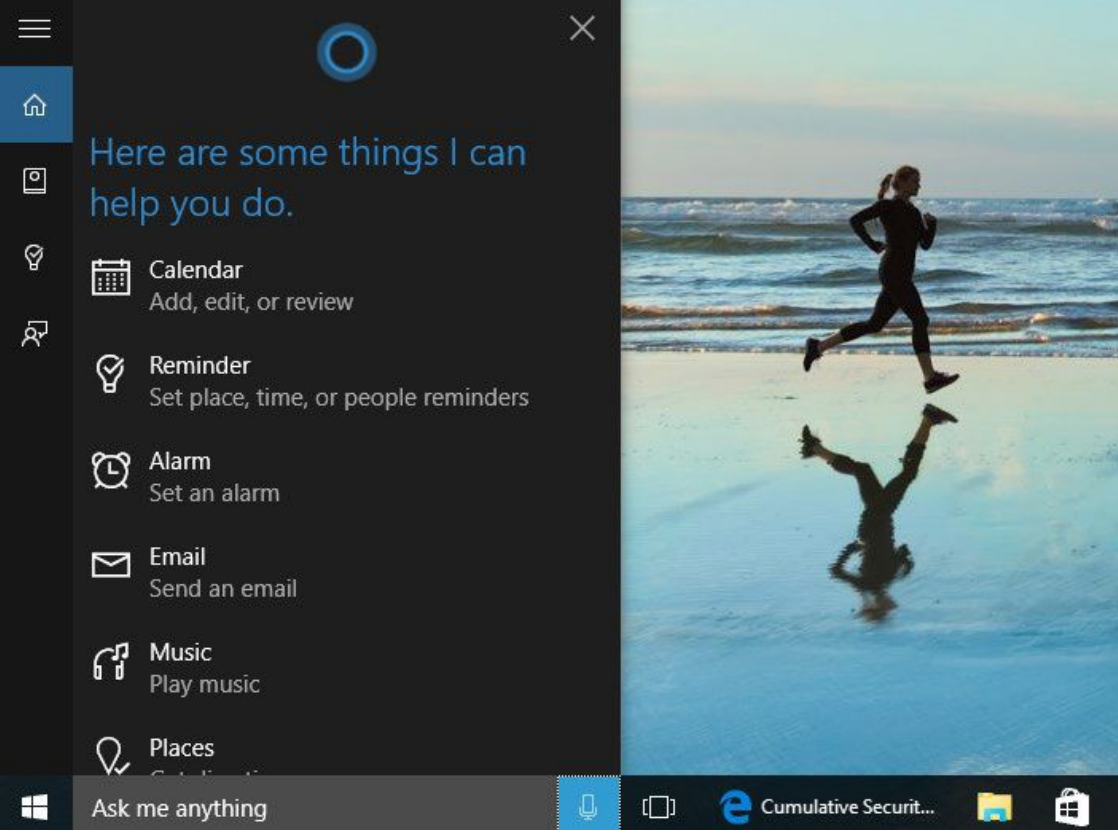
vlc). One apparent plus: Region switching seems to be a thing of the past. I swapped between a Region 1 and a Region 2 DVD I'd picked up in the U.K. Both played fine, and the region counter on my USB DVD drive never budged.

Windows 10 also introduces a Windows 95–era array of melodic alerts for various notifications. I've grown to like them.

Given that we haven't tested Windows 10 on a broad variety of hardware, it's difficult to gauge its stability. Patches and updates will be routine, of course. Early bugs, including an annoying tendency for my Windows 10 HP Spectre x360 to lose its connection to an external monitor, appear to have been patched. Ditto for some problems that I had connecting a Microsoft Wireless Mouse 3500 (connected via dongle) and Logitech's MX Anywhere 2 mouse to the PC. But other Windows 10 bugs (go.pcworld.com/10bugs) have cropped up, and there will probably be more, too.

If DVDs are, er, *precious* to you, using VLC or another third-party app is the only ticket that will allow entry to a DVD player in Windows 10.





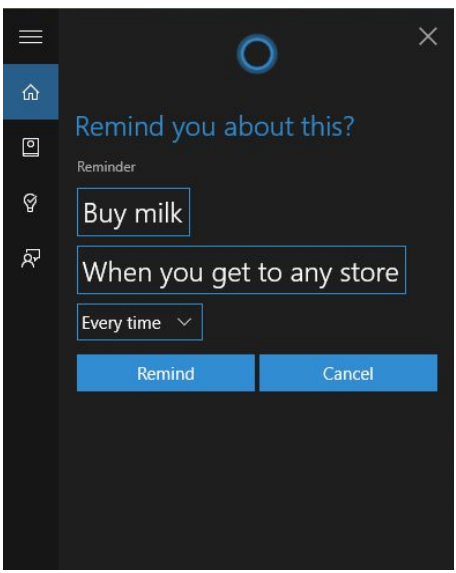
WINDOWS 10 REVIEW

Meet Cortana, the digital assistant of the future

POSSIBLY THE MOST significant addition to Windows 10 is Cortana, the digital assistant that made its debut in Windows Phone. The first thing you should do is tap the Ask Me Anything search field in the lower left and set up Cortana. Yes, Cortana noses into all aspects of your digital life—your calendar, location, interests, email, and more—but it's worth it.

On Windows 10's lock screen, you can set up several apps to display minimal or detailed information. But tapping Cortana at the beginning of each day provides a terrific summary of what you need to know: the weather, relevant news, local interests. Just make sure you manually connect to your Office 365 account, if you can, to surface relevant work-related information.

Oddly enough, my HP Spectre x360 lacked a microphone of sufficient quality (in Windows 10's view) to enable the **"Hey, Cortana"** feature, which actively listens for that keyphrase as a summons. That didn't stop it from working, although Cortana still had a disconcerting tendency to trigger multiple devices within earshot.



Reminders can be surprisingly detailed, but, once set, they're not flexible.

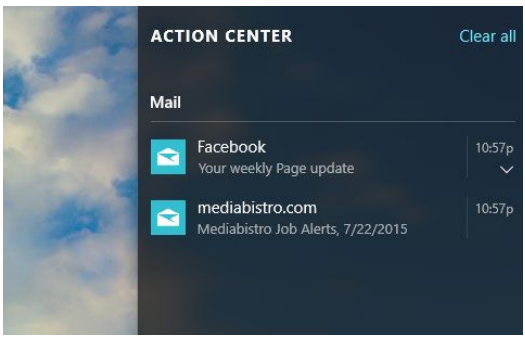
Voice commands take some getting used to. But there's something so handy about telling Cortana to remind you to pick up eggs and milk at the store. Of course, you can also do this with your Windows Phone, which brings location into the equation—you can either remind yourself to buy eggs at the store, or, *when you're at the store*, your phone can remind you to buy eggs. Unfortunately, once a reminder is set, it's set—you can't adjust the time. I also had no luck trying to set a reminder with my Windows Phone 8.1 phone and having it talk to Windows 10 Cortana behind the scenes.

Cortana even takes dictation—such as an email to your boss—while you're working on another screen.

One issue I do have with Cortana is that, like the early days of search engines, she sometimes requires specific phrasing. Saying **"What can you do?"** to Cortana helps establish her limitations. But commands that seem natural—**"Play some Rolling Stones"**—just aren't recognized. (**"Play my music"** seems a little vague.) In the email

example above, I had to say **"Send an email to Melissa"** and *then* pick the correct Melissa, and *then* dictate the email, and so on. Microsoft touts Cortana's natural language capabilities, but there's significant room for improvement.

Cortana's reminders and other updates pop up as notifications that "fly in" from the lower right. I particularly like the way Microsoft handles these. A reminder will plop itself into my peripheral vision and squat there until I deal with it. But email appears only briefly, sliding in with the sender's name, subject, and first lines, then vanishing—tucked away in Outlook or Mail for later.



Miss anything? Check the Action Center to the right to find it.

If you miss a notification, though, don't worry. You'll find them all archived in the Action Center notifications tab, accessed by the speech balloon icon in the lower right.

I suspect Cortana will be one of Windows 10's more polarizing features. Home users won't mind yelling at Cortana for the answer to a question, but workers in a busy office will probably think twice about asking Cortana to email their doctor about that strange rash.

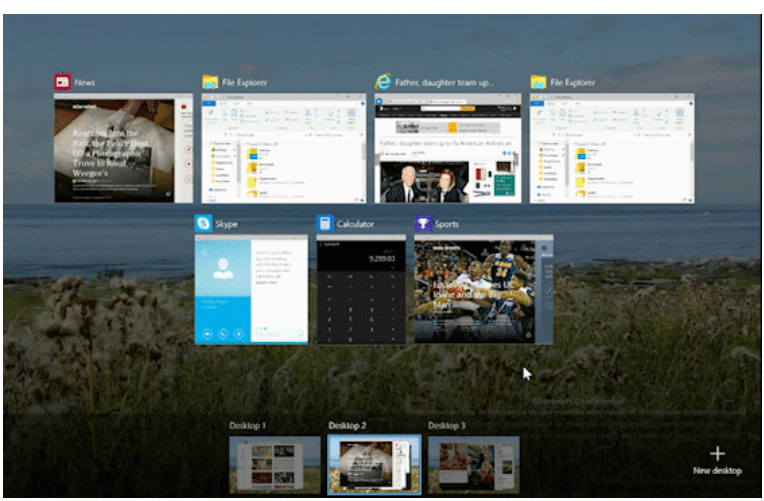
WINDOWS 10 REVIEW

Task View/Virtual desktops: A cool tool

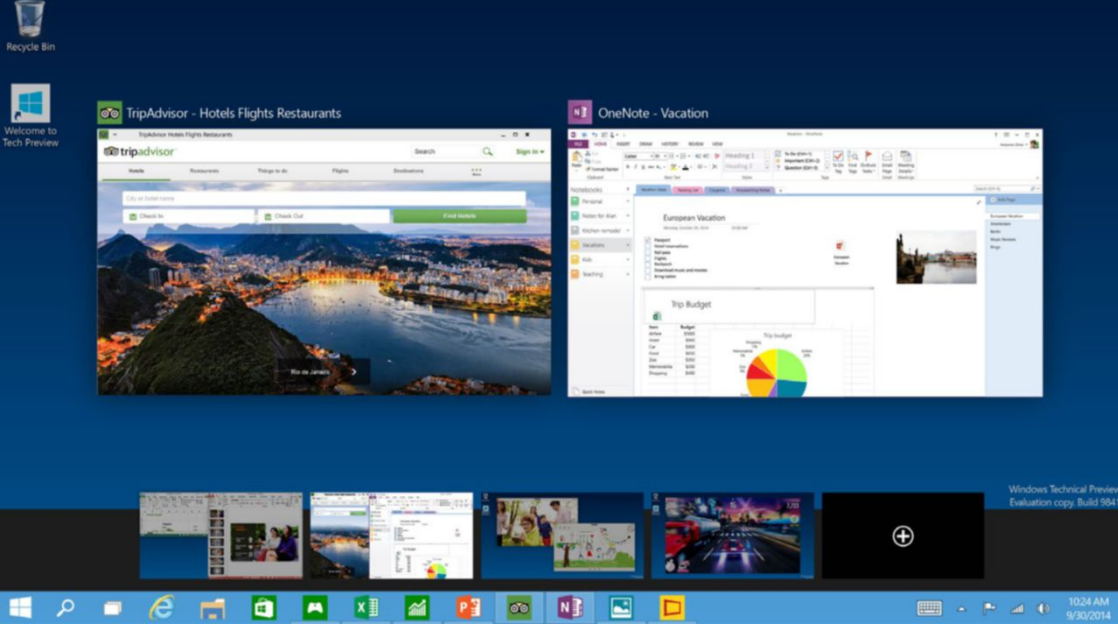
WORKING WITH WINDOWS 10's virtual desktop mode or Task View takes some work. It's a bit intimidating in the sense that the Windows 8 Start screen was: It's an unfamiliar interface, and it requires some effort to use efficiently. In the end, though, it pays off.

You're probably used to opening up as many apps as will fit in a window, with the remainder either unopened or minimized to a desktop. If you want to work with more apps at the same time, you invest in another monitor. Task View doesn't necessarily minimize those unused apps; it just hides that entire *screen* of apps, keeping everything the way it was.

This has two practical advantages. Say you have a nicely ordered screen of apps: a spreadsheet in one corner, email in another, with a PowerPoint document taking up the other half. Suddenly, you remember that you need to cull some client feedback from an email



You now can drag and drop apps from one virtual desktop to another.



thread. Yes, you could rearrange those apps again—or you could open Outlook on a new virtual desktop using the Win+Ctrl+D command. (You can also click the Task View icon and the **+** icon in the lower right corner to create a new virtual desktop.)

Task view also allows you to multitask more efficiently. Take a typical Sunday night: the weekend's winding down, you're not quite ready to give up Facebook and Amazon, but there's work to be done. By creating a separate virtual desktop with Task View, you can create a separate work and entertainment space, and then flip back and forth between them using Ctrl+Win+left arrow or Ctrl+Win+right arrow.

That's the key to making Task View work: the Ctrl+Win key flip. With a second monitor, you glance left or right. With a virtual desktop, the screen moves—not your head. You can flip back and forth quickly and efficiently.

Unfortunately, there are a few quirks. For one thing, if you have two monitors, *both* monitors flip to a new desktop with the Ctrl+Win key command—even if you don't have a virtual desktop set up—which means you end up with a blank screen. That's annoying. There's also a "hard stop" at the end of the row of virtual desktops—if you keep tapping Ctrl+Win+left arrow, for example, you won't wrap around to

Windows 10's Task View allows you to arrange multiple apps across multiple virtual desktops, all but one of which is hidden from view.

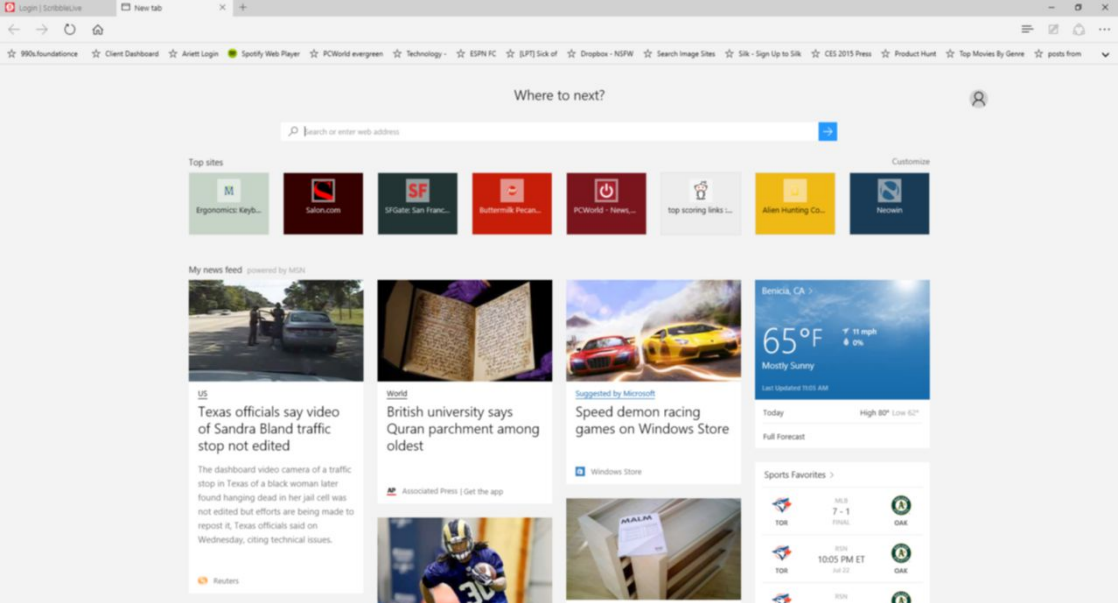
the beginning.

In the Settings menu, you have the option of configuring your taskbar to display *every* app running on your Windows 10 system, or else just the apps that you've tied to that desktop. Note that even if you do choose the latter, apps that demand your attention (say from an instant messaging application) should still flash on your toolbar.

If you choose to hide apps that aren't being used on the virtual desktop, you can sometimes forget and "lose" them.

Things can get a little crazy if you start mixing and matching Alt-Tab commands and Task View. Alt-Tab creates a cloud of suggested apps to fill in the remaining space, which you can snap to the various locations via the Win+arrow key. If you do choose to hide apps that aren't being used on the virtual desktop, you can sometimes forget and "lose" them.

Don't be intimidated, though. There's absolutely nothing requiring you to use Task View. It's just an advanced tool that's there if you want.



WINDOWS 10 REVIEW

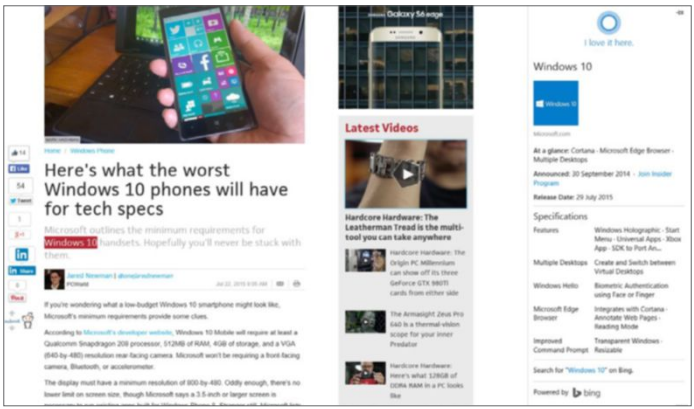
The Edge browser isn't fully baked

WINDOWS 10 ALSO introduces Microsoft Edge, a browser that Microsoft has touted as the answer to the demands of the modern Web. When I initially wrote our review, I had very mixed feelings about Edge, both aesthetically and functionally. Still do. Part of the issue, for me, is that Edge doesn't feel finished. And it's not, clearly, as support for Firefox-style extensions won't arrive until later this fall. That means Edge has some breathing room, though, as Microsoft can either tweak its functionality or let third-party developers step in.

To begin with, Edge's UI looks spartan even compared to Chrome's. When you start Edge or load a new tab, you have a choice of loading a bare search bar, or a bar accompanied by a few icons of frequently accessed pages, or a bar surrounded by content from MSN. There's something industrial and lifeless about it all. Even switching over to the "dark theme," accessible via the Settings menu, doesn't do it for

me. Heck, there's no default homepage (or button) unless you dive down deep into the advanced Settings menu and add one.

Those Settings are worth poking through, by the way. Edge loads Flash by default, which you can toggle off. Do Not Track privacy requests are off by default. Pop-ups are blocked. And there are some other very nice features—preloading Web pages, password management, and caret browsing—which are worth a look.



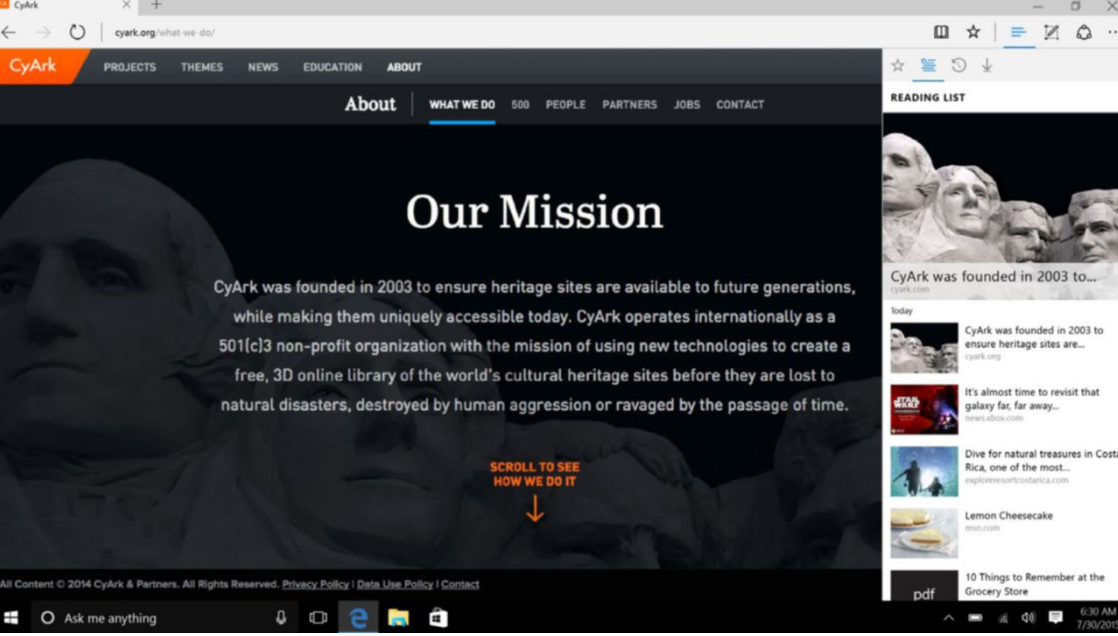
Adding Cortana is a welcome feature.

We tested Edge both with Build 10240 of the Insider track as well as the "release" version of the code, Windows 10.0. What we found was interesting.

In both code bases, I surfed to several random Web pages, using *The San Francisco Chronicle*'s SFGate.com site and others as test beds. I turned off all plug-ins in Chrome, and measured the time before I could scroll down and "read" the page. With the preview code, I found Google's Chrome browser considerably more responsive, loading pages in under 8.0 seconds, while Edge took about 23.0 seconds or so. I then repeated the test the week before the launch, with random pages from SFGate, PCMag.com and Salon.com. Only the Salon page loaded significantly faster on Chrome: 5.0 seconds versus 8.3 seconds for Edge. Otherwise, they were roughly comparable.

On July 30, I tested it with the Windows 10 Pro Build 10240 installation that I hadn't updated yet. Edge loaded pages, on average, in about 10.0 seconds Chrome, in about 4.8 seconds. I then switched to a Windows 10 Home machine running Windows 10.0.

Here, Edge loaded pages in an acceptable 4.3 seconds or so. I found the browsing experience perfectly fine—except when I tried Chrome,



Edge loads Flash by default, which you can toggle off.

it loaded pages on an average of 2.2 seconds or so. That's nearly half the time. That ratio held up using pages from CNN.com and other sites.

I also reran a "stress test" I had performed, using 30 tabs from all sorts of media-rich websites. Under my previous tests using an Insider Build 10240 build, Edge tabs hung, stuttered, and became unresponsive, pegging a Core i5-based HP Spectre x360 at 98% CPU utilization and 97% of the available memory. Using the same tabs, Chrome hit 59% to 70% CPU, and 78% memory utilization. When I reran the test several days later, Edge loaded 22 tabs, then crashed.

Under Windows 10.0, I experienced a similar slowdown using Windows 10 Home, consuming 99 percent CPU and 90 percent of the available memory. The system was virtually unresponsive. Chrome consumed 66 percent of the CPU, and 90 percent of the memory. Edge also nearly locked up after 25 tabs, but then recovered.

From a performance perspective, I would agree that Edge has improved, especially in page-loading times. But Chrome still appears to be a better browser. Edge may indeed be "blazing fast" (go.pcworld.com/blazing) on the benchmarks, but I browse webpages, not benchmarks.

From a feature perspective, however, Edge is more competitive.

Cortana's also built in to Edge, although she's only there if you want her. You can highlight a word or phrase, right-click, and ask Cortana. A sidebar will slide in from the right, essentially a small webpage with a fuller explanation. Microsoft's tried this trick before with Office, and it's a useful tool.

Reading List is, too. By clicking the star icon after the page loads, you can save it to a Pocket-like Reading List for later. About the only thing I'd like to see here is either RSS integration, or a right-click option to save a page you haven't clicked yet to the list.

I'm less impressed with Edge's ability to mark up a webpage. Microsoft pitched this feature as something akin to a personalized web, but it isn't. Clicking the icon that looks like an overly abstract pencil in a box allows you to add notes, squiggles, even text to a webpage. The problem is that the result is stored as an image file for OneNote or other apps. So who cares? You can take a screenshot of any webpage with any browser in the world, save it to Paint, and *then* mark it up. I haven't seen Edge crash when using web notes after Windows 10.0 released, however.

Edge may indeed be "blazing fast" on the benchmarks, but I browse webpages, not benchmarks.

Edge's Reading Mode, which strips the unnecessary cruft out of a webpage, is a plus for Edge. For a visually distracting page with ads and pop-ups all over the place, it's nice. You can't load a page in Reading Mode without viewing the page as it was originally laid out, however, a nod to advertisers and the sites that depend on them (cough).

(Note that Windows 10 actually includes *two* browsers: Internet Explorer 11 is still present, just hidden away. If you'd like to use it, go to All Apps ➜ Windows Accessories ➜ Internet Explorer and load it up.)

Edge will undoubtedly improve over time. But Chrome fans would always joke that Internet Explorer was "the browser that downloads Chrome." Right now, Edge looks to be more of the same.

Continuum: Windows 10 on the go

MICROSOFT DESIGNED WINDOWS 8 with a mind toward tablets and desktops alike. Because Windows 10 is designed to function primarily in a desktop mode, it needs its own answer for tablets: Continuum.

When a tablet like a Surface (I used a Surface Pro 2 for testing) is undocked, Windows 10 by default will ask whether you want to put the system into tablet mode. The Start menu suddenly looks more like its Windows 8 ancestor: The live tiles increase in size, and Windows buries the text-based left-hand menu behind a "hamburger" menu icon on the upper right.

If you happen to be within the Desktop, your app shortcuts will disappear, leaving only the Cortana icon, the Task View icon, and what

If you shift to tablet mode within Windows 10, the Start menu will be replaced with a Windows 8–ish Start page.

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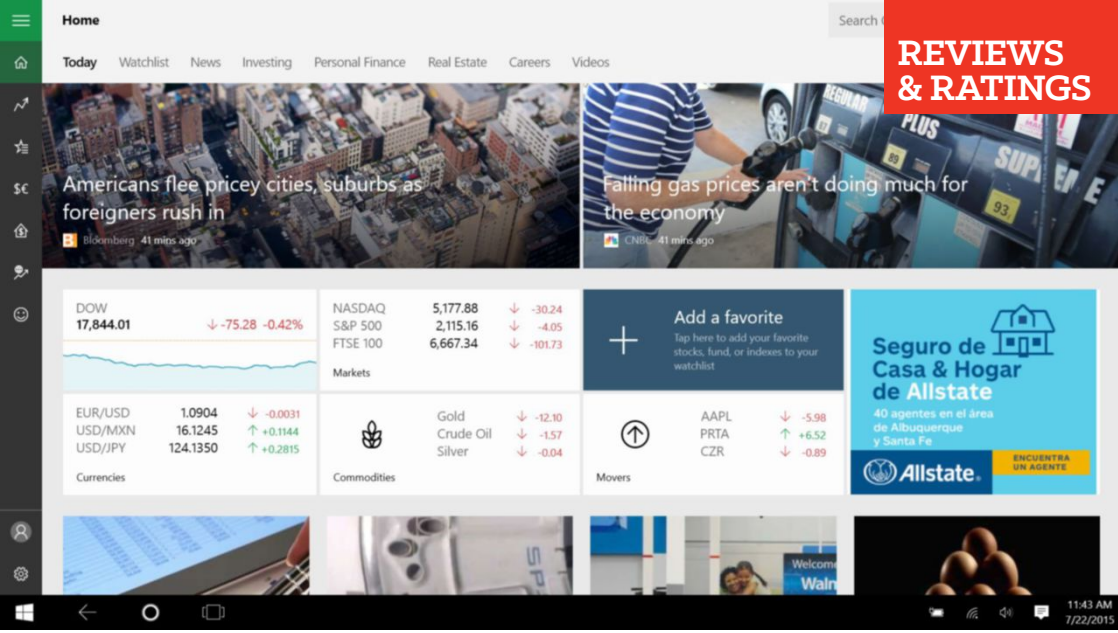


looks like a back-arrow (and is). It's a bit disconcerting, but your apps are still there—just hidden from view until resurfaced by the Task View icon.

I do like how the software keyboard auto-suggests words, however, and wish there were a way to enable that feature when using the hardware keyboard. (Bugs, like a refusal to accept typed input or an inability to launch apps via Cortana, have been fixed.)

I'd also prefer to see something, well, more like the Windows 8 Metro apps when Continuum is enabled in an undocked mode. Apps like Paint still require me to fat-finger through menus to force them to work.

Windows 10 apps like MSN Money scale nicely to fill the screen in Continuum's tablet mode.

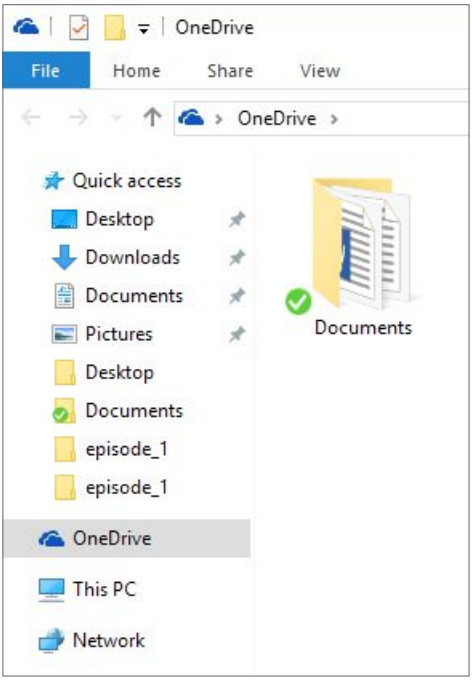
OneDrive, the app that isn't

Beginning with Windows 8, Microsoft launched the concept of OneDrive, or storing your documents in the cloud (using a decidedly ugly Metro app, no less). With Windows 10, OneDrive now is tightly woven into the operating system, showing up as just another folder inside File Explorer. You can even treat it as a shareable drive. One feature has disappeared, though: the confusing "placeholder" files that resided on your PC as a time-saving device. And that's good.

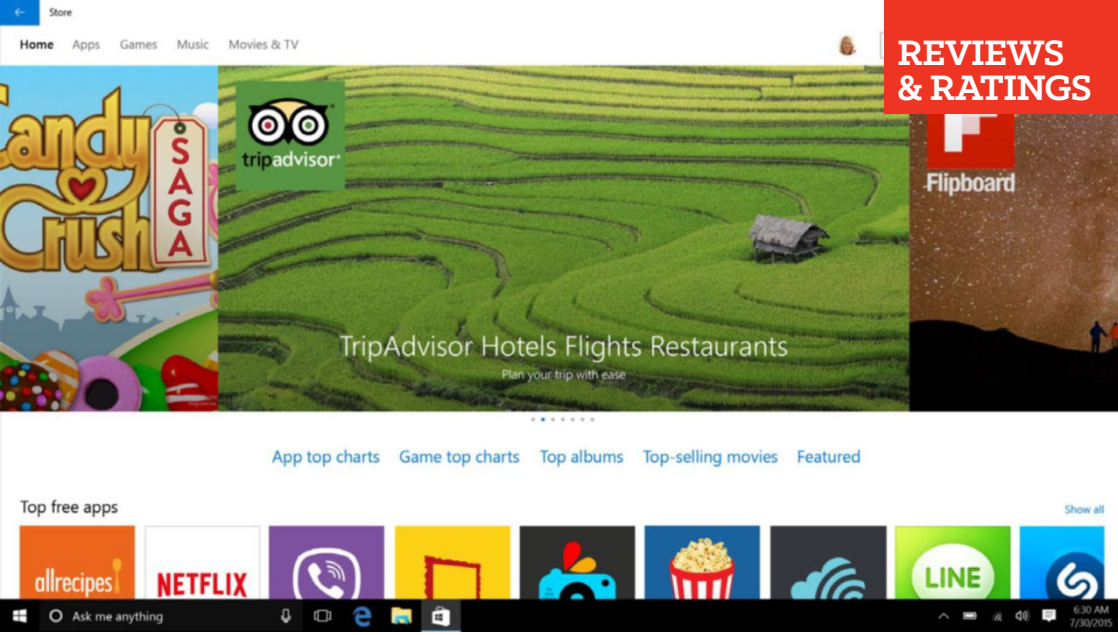
But while OneDrive has been assimilated into the rest of Windows 10, many other apps remain as standalone applications.

If there's one mistake Microsoft made early on with Windows 10, it's that the apps themselves looked decidedly blah. Apps "flowed" to fill the available space. On a modern widescreen monitor, they can end up as vast, vacant courtyards with a few weeds of content pushing up. Microsoft's answer is to minimize or snap the apps into a smaller space. What I'd rather see is some faint, self-aware backdrop tuned to the app—an album cover or band photo in the Music app, for example.

What's impressive is that Microsoft is taking action. On July 15, I mentioned to a Windows 10 product manager that Music needed at least to sync with the user-selected Windows 10 color scheme. By the weekend, Microsoft had updated the app and fixed the problem.



OneDrive may be listed as an app in Windows 10, but it's really just another folder for you to store your stuff in.



The Windows 10 Store serves as a front page for apps, games, video, and more.

WINDOWS 10 REVIEW

Windows apps: Sparse, sometimes great

COMPARED TO THE Android and iOS app stores, the Windows app store (known as the Store) feels rather meager. Microsoft splashes a few key apps at the top of the screen (Flipboard, Watch ESPN, Line, among others), although the enormous hero images given to each one ensure that other, equally worthy apps are somewhat buried down below. A few "leaderboards" of the most popular apps across a variety of genres help separate the wheat from the chaff.

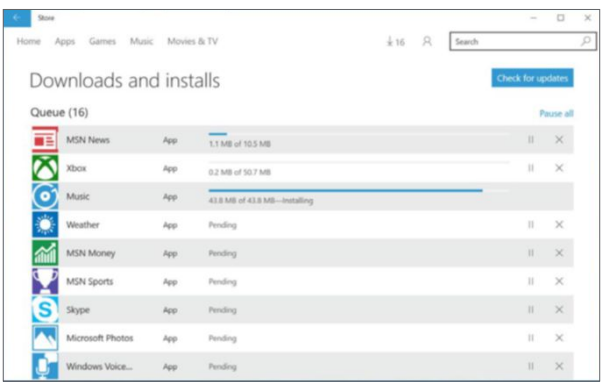
There's no indication as to which apps are so-called Universal apps, ready to run across Windows 10 desktop PCs and phones. A few key details are omitted, including the number of downloads. There's also a small catch: Each app can be loaded on only ten Windows 10 devices.

You'd think Microsoft would heavily promote at least three apps in the Store: Word Mobile (go.pcworld.com/wmobile), Excel Mobile (go.

pcworld.com/exmobile), and PowerPoint Mobile (go.pcworld.com/ppmobile). Neither of them ship with Windows 10, but all of the universal Office apps are available in the Store for download. Be sure you do.

Microsoft has cleaned up its language surrounding in-app purchases, a problem just before Windows 10.0 dropped.

But that's not the most annoying thing about the Store. Microsoft began updating its individual Windows 10 apps separately from the main OS a short time ago, and those apps are *not* updated via Windows Update. Instead, you have to enter the Store, click your little account icon at upper right, and scroll down to Downloads. There, you can make sure you have the latest and greatest apps at your disposal. But there's nothing really encouraging you to do that.



Apps are updated via the Windows Store, not via Windows Update. (MSN News, Money, and Sports are now merely websites, not apps.)

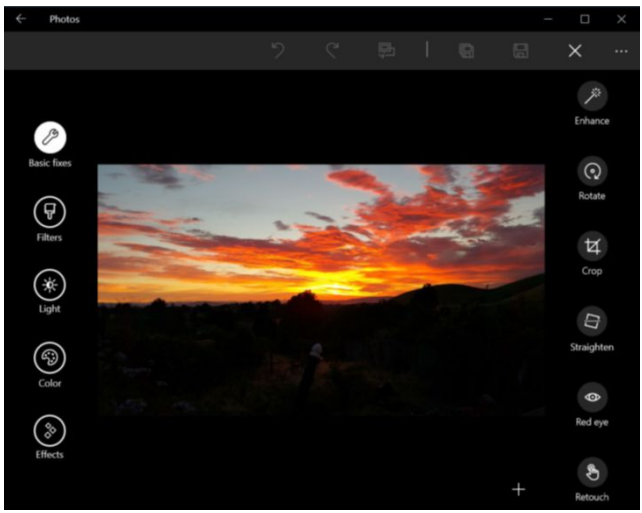
I think PC users and developers alike would hope the Store evolves into something like Steam, a general storefront for app purchases and downloads, plug-ins, mods, and the like. But it's clearly not. In fact, the only true "game" I see there is Grand Theft Auto: San Andreas, a game that was ported to Windows Phone and can also run on a PC. Apple, Google, Valve, Gog.com: all of these app stores feel more robust and on point than what Microsoft's delivering. There's definite improvement on Windows 8, but Microsoft needs to make the Store one of its post-launch priorities.

Photos: a powerful tool that's worth exploring

Unlike some of Microsoft's Windows 10 apps, Photos is surprisingly powerful. One of the first Universal apps Microsoft published, Photos looks like just a mosaic of photos you've shot on your camera or tablet.

A recent revision in the app allows you to pull images from OneDrive.

On the left you'll find two headers: Collection and Albums. Collection is just your Camera Roll, renamed: a grab bag of photos you've shot or images you've saved, organized chronologically. (Don't be afraid to click on the monthly headers, as that will take you to a month-by-month index, terrific for finding photos of Christmases past, for example.) I also really like the option to show just one of several duplicate photos from your online collection. It's not quite a de-dupe function, but close.



Click the "edit" stencil in the Photos app for Windows 10 and a number of powerful editing tools opens up.

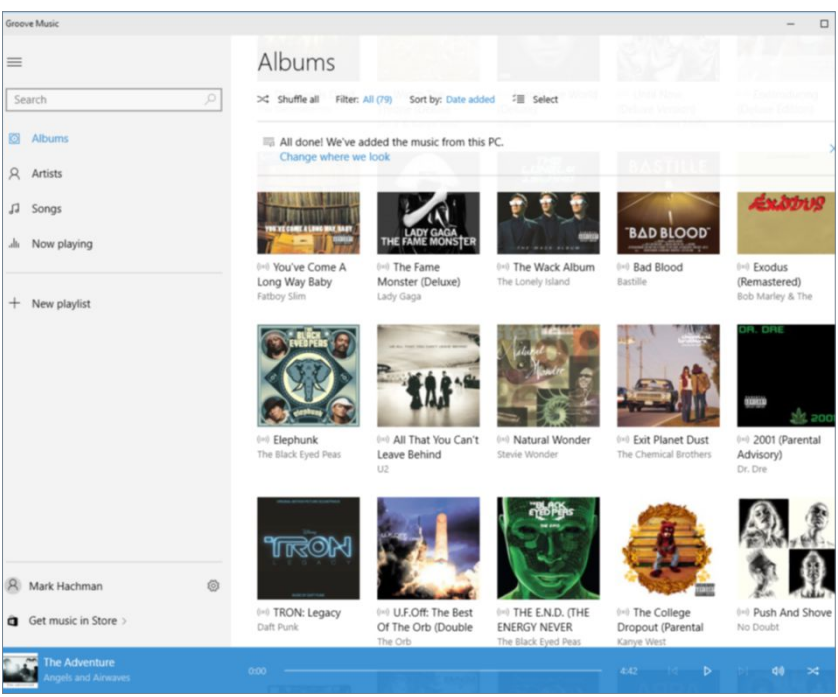
Windows 10 also invites you to upload a series of related photos to the My Photos folder on Windows 10, where it will create an album for you.

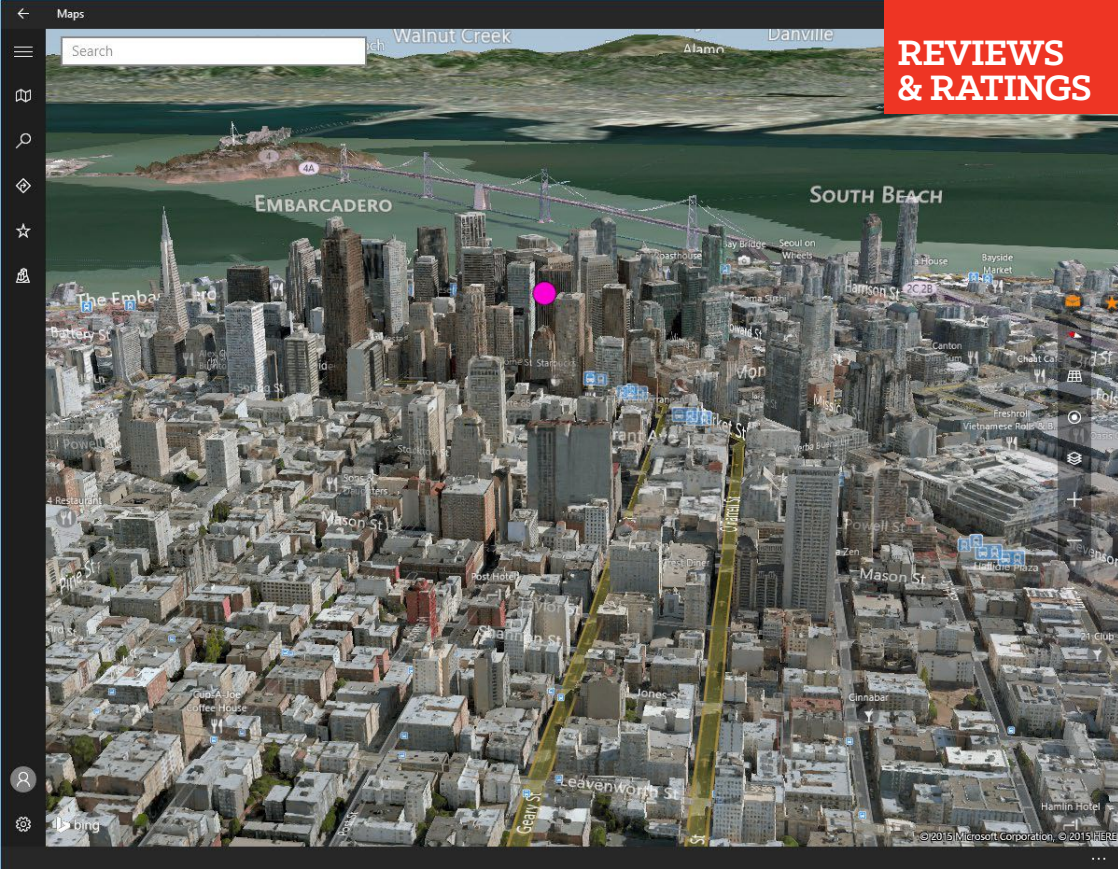
Click on a photo, and a wealth of options opens up. The Edit icon loads the editing tools: You can play with color and lighting, add effects, crop, straighten, eliminate red-eye, retouch—or even do it all in one fell swoop with the Enhance button. (Note the swirly-arrow Undo and Redo options at the very top, as well as the Compare option.) Some controls are weird, though. If a radial dial appears with a number in the middle—such as Contrast, for example—move the large circular control around the outside of the circle to adjust it.

Photos doesn't have all the options of, say, Lightroom, but we'd say the app is on a par with, if not better than, Adobe Photoshop Express for Windows.

(Groove) Music: let's jazz it up a bit

WHILE MICROSOFT NOW shies away from using the term "Xbox" in conjunction with its Music application, the Music app remains virtually unchanged from Windows 8. It first asks you to sign in, if you haven't already, then loads your existing music catalog in a snap—far quicker than it did on Windows 8, incidentally. If you've uploaded any music into the Music folder in OneDrive it will add those songs, too, complete with metadata and album art that it can cull from the





Several cities in Windows 10 Maps, such as San Francisco, are rendered in 3D. It's a gimmick, but an attractive one.

Internet. Ideally, of course, you'll already own an Xbox (sorry, *Groove*) Music pass, and can stream as much as you'd like.

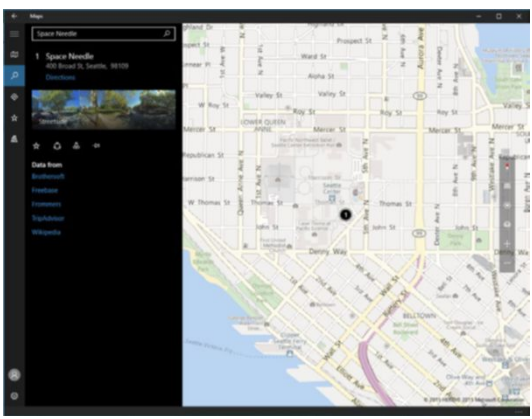
Unfortunately, Music suffers from the same plain aesthetic noted elsewhere in this review: while the Artist and Songs index pages includes artist snapshots, the actual page where the song lives includes just *two* pieces of art. For music! Geez, Microsoft, my tastes are boring enough. This app badly needs biographical information, lyrics, a link to Bing Video—*something*. At least hero art is buried inside the Now Playing portion of the app. But Windows 8 did Music far better.

Oh, and why in the world isn't the music equalizer linked within the app? Can I rip a CD using Windows 10? Music offers just the basics. Microsoft can do better.

Maps: so close to great

Some of Microsoft's offerings, such as Music, arguably work best as dedicated apps. Others, such as Maps, should probably be passed over in favor of a website, at least on a Windows 10 PC.

Maps is a Universal app that spans both desktop PCs and phones, and is downright elegant to boot. The black motif of the app presents the maps and Streetside street-view images to best effect.



But the app lacks depth. You can view a map in either an aerial or live traffic view, and chart directions from place to place. But directions aren't sent to your phone, as if it were OK for you to consult your laptop as you drive.

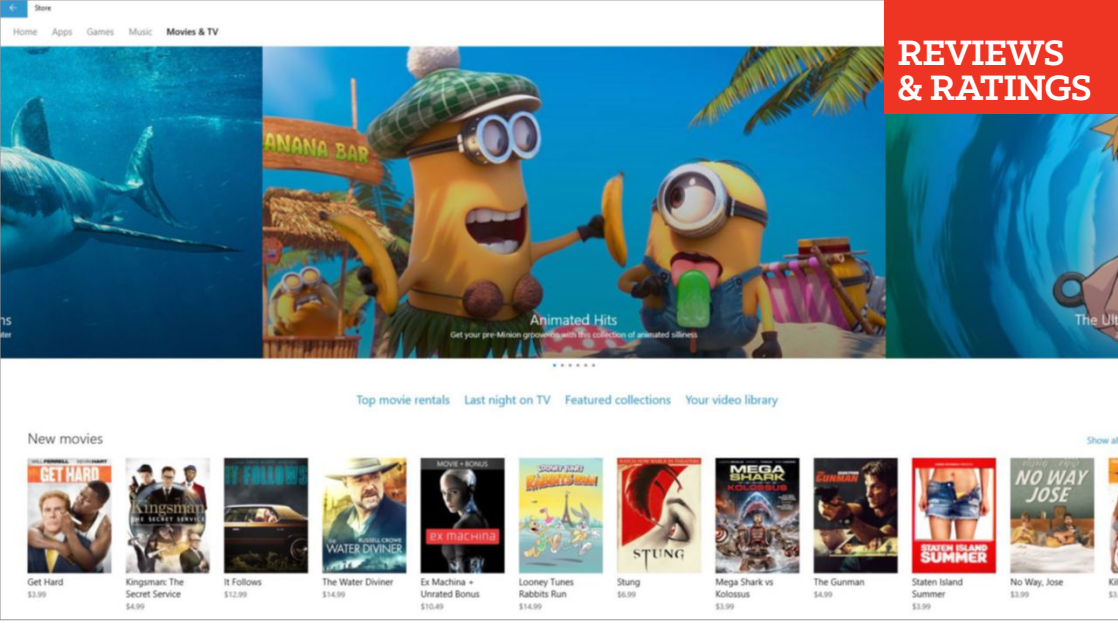
Other aspects of the Maps app feel a little flimsy. There's no context given for locations, such as hours of operation, phone number, or nearby attractions. Once you're viewing a 3D city, there's no obvious way of backing out into a 2D view again. Unless you type in a given address, it's seemingly impossible to figure out how to trigger the Streetside view option. (My son loves to pick a random country and just roam from street to street, soaking up what life is like in, say, Belgium.) Finally, I would like the option of clicking a restaurant on the map and pulling up a sidebar with contextual information.

Maps allows you to search for a location, but only surfaces the barest amount of contextual information. But you can drill down deeper.

Microsoft offers all this—on its Bing Maps website (or Google Maps, if you're so inclined). You may as well visit there first.

Movies & TV: Microsoft mails it in

The Movies & TV app was spare to the point of unbelievability, but it's now a bit better. At first launch, there's very little beyond four words on the left-hand rail: Movies, TV, Videos, and Downloads. The latter is populated only if something is being downloaded in the background.



Otherwise, both TV and video are populated only by content you've purchased from Microsoft, or from ripped videos you own (right?).

Even more disappointingly, there's no way to organize your videos. The app doesn't allow you to edit metadata, nor can you create any new folders. That's simply basic functionality that should have been in there since the beginning.

At least the app supports a number of modern streaming codecs. Which ones? Well, Microsoft doesn't actually tell you.

The lone bright spot is Microsoft's actual Movies & TV store—once you get there. There's a wealth of content to buy and rent, at reasonable prices. Just enter your password (or your PIN) and, provided you have a credit card on file, it's yours. There are a number of caveats (go.pcworld.com/caveats), though, which are worth reviewing.

Fortunately, Microsoft's Movies & TV store makes up for the app's boring design.

Mail and Calendar: a very capable free app

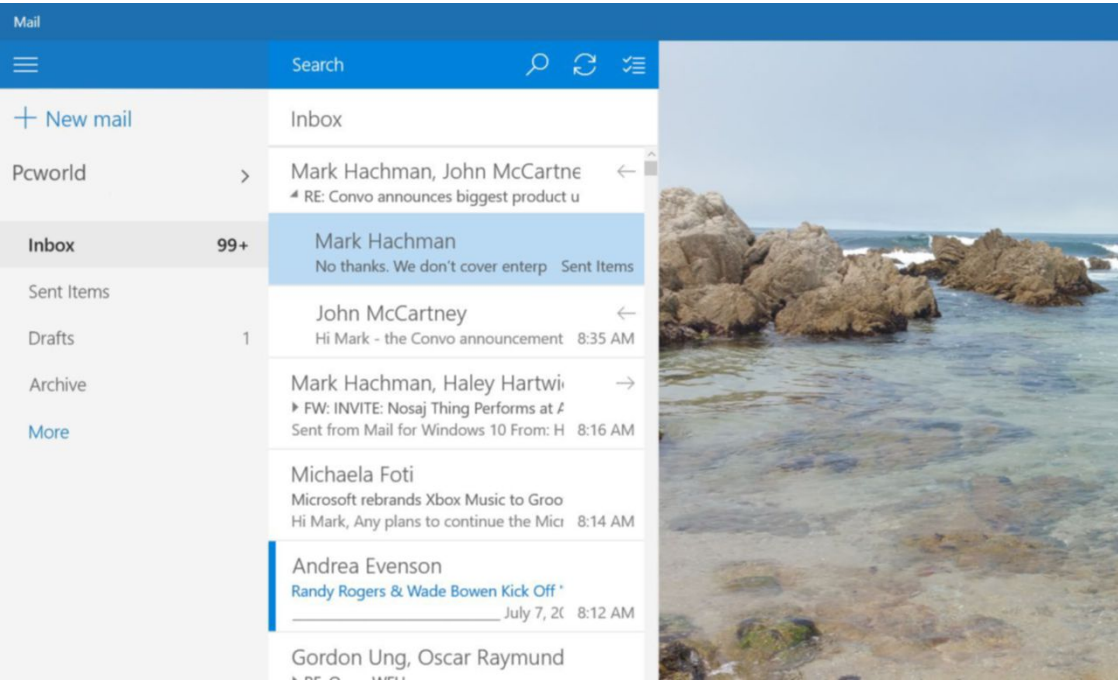
Until recently, accessing your Exchange-hosted email and calendar on a smartphone was a bit of a trick. On Windows, where you can either browse via a website or a native app like Outlook, reading email is rather basic. And so is the Mail app, as it turns out.

Mail follows Microsoft's free productivity app strategy—it does

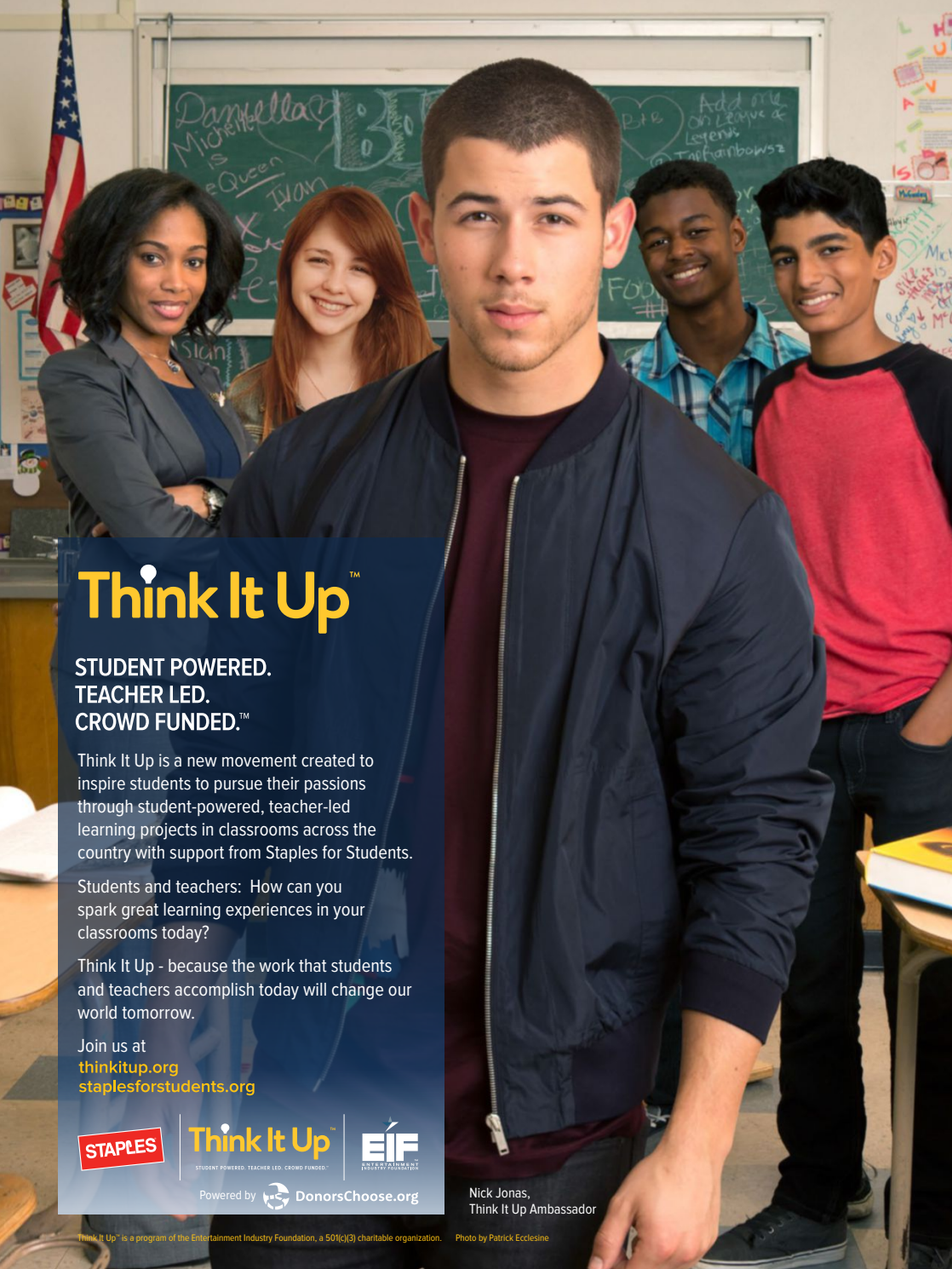
nearly everything you want: reading email, browsing attachments, even giving you modern conveniences like Microsoft's Clutter, which filters out the less-important email that doesn't quite qualify as spam. About the only real deficiency I noted was Microsoft Edge's inability to open a PDF file that had been emailed to me, as well as the lack of out-of-office notifications. Well, that and the lack of a standard signature file and out-of-office notifications. For that, you'll need Outlook.

Mail has definitely improved. When I tried to hunt down an old email a week or so back, Mail couldn't find it. Now it can, across Exchange and Outlook and more.

As you might expect, Mail doesn't maintain the tabs that Gmail does (Promotions, Social, Updates, and the like), instead dumping them all out into one giant stream. The related Calendar app can also be a bit crowded once you let in all the stuff you sort of have to tolerate: the inevitable birthdays of Facebook friends, U.S. holidays, plus your personal and work calendars. There aren't any quick to-do lists, though—in Microsoft's world, that's OneNote's domain.



Nothing fancy, but Windows 10 Mail gets the job done. And you can even specify a custom background to liven things up.



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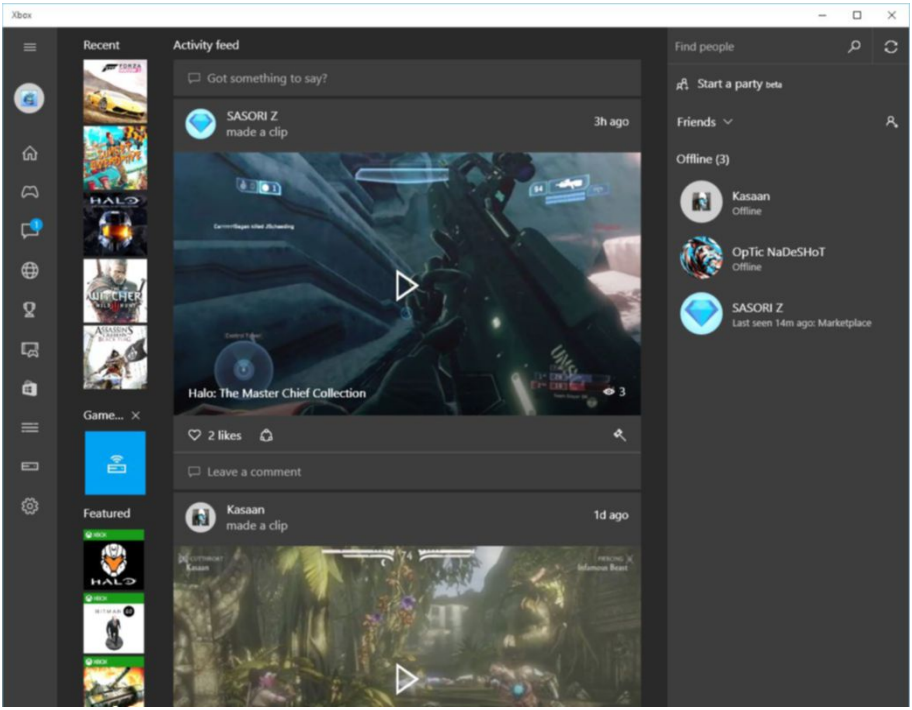
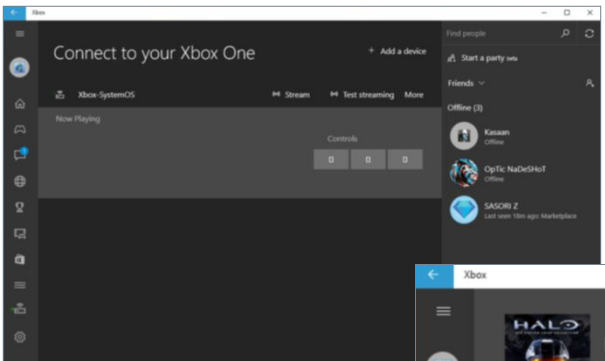


WINDOWS 10 REVIEW

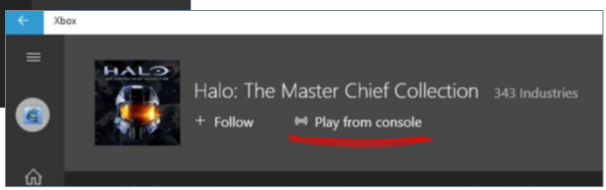
The Xbox app: Where you'll go to relax

WINDOWS 10'S XBOX app is made for gamers, and it's the portal to Microsoft's entertainment offerings—or most of them, anyway.

Surprisingly, the Xbox app supports both Windows 8 and Windows 10 PC games that were connected to Microsoft's Live services, as well as games you might have owned and played on either the Xbox 360 or Microsoft's latest console, the Xbox One. If you own or have played games on any of these platforms, chances are you'll see a list of those games when you first log in, as well as any achievements you may have completed.



You can connect to your Xbox One if the Windows 10 PC is on the same network. If you click on a game within the Xbox app, it might take a few seconds for the screen to load. Click on Play From Console to begin streaming.



Unlike the similar home screen under your account on Xbox.com, the Xbox app is more like a traditional social network, with a social timeline that dominates the app. Here you can chat with your friends, share game clips, and track your achievements—both what you've already accomplished and what you hope to achieve. You can also "follow" games and gamers.

The Xbox app could eventually morph into something like Twitch, the existing game streaming service owned by Amazon. But the real selling point of the Xbox app is its ability to stream games from the Xbox One to the Windows 10 PC.

Microsoft's thinking is that if a teen's parents are downstairs watching *Dancing with the Stars*, that's fine. The teen can log in to the Xbox One from upstairs and play anyway.

Streaming a game requires both the Xbox One and the Windows 10 PC to be set up to allow game streaming. Within the app, you simply navigate down the left-hand nav bar until you reach the Connect button, then find the Xbox One on the network. You can then either hand-select a game that you already own to play from the app itself, or stream the Xbox One interface itself. Note that you'll also need to own an Xbox One or Xbox 360 controller to play; neither mouse nor keyboard are allowed.

Setting up game streaming for the first time is a bit tricky. I found I

had the best results when the Windows 10 PC was connected wirelessly, and the Xbox One was powered on. Once connected, though, I found I could power up the Xbox One remotely and play from a PC connected via Ethernet.

"Your mileage may vary" is a good rule of thumb for the Xbox game streaming experience. Latency determines whether your trigger will fire the game's blaster at the right time. The farther you're away from the router, the more chance the game video will start smearing. (You can also use a wired Ethernet connection.) The app therefore requires you to be on the same network as the Xbox. In general, though, I found the video quality to be pretty close to the One's native 1080p resolution, with little latency, even when streaming *Forza Horizon 2*, a racing game. It definitely works.

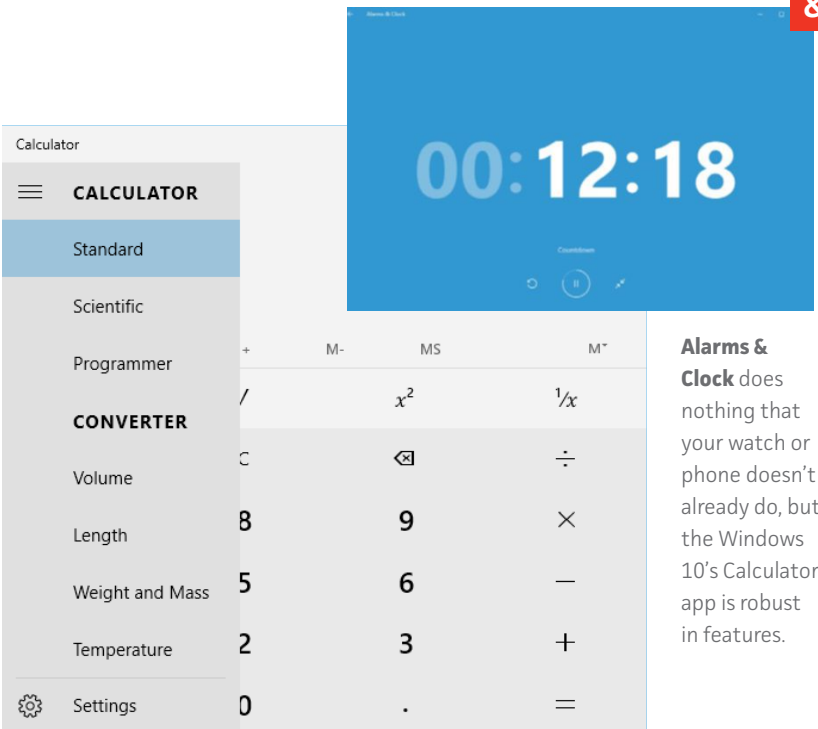
I'm just not sure how many people use People as their jumping-off point for reaching out.

Eventually I suspect Microsoft may tuck the TV & Video app inside the Xbox app. Yes, I'm aware that gamers want the Xbox One to focus on games first. But if you're going to watch video, you may as well watch it on the TV, which an Xbox is typically connected to.

Other apps: Some old favorites remain

Some of the best apps in Windows 10 remain essentially unchanged from Windows 8, including Sports, Weather, News, and Money. They're excellent sources of information. Sure, your broker may have more concrete insights than the Money app, and ESPN might deliver a more comprehensive view of the July baseball trade market. But for the casual fan (are there casual fans of weather?), the topical Windows 10 apps fit the bill. (Microsoft has decided that some of its other apps, such as the Travel app, will eventually be relegated to websites.)

One exception to these is Microsoft's People app, which I've never quite understood. People filters information like a traditional Rolodex: name, phone number, email, et cetera. I'm just not sure how many people use People as their jumping-off point for reaching out. If I want

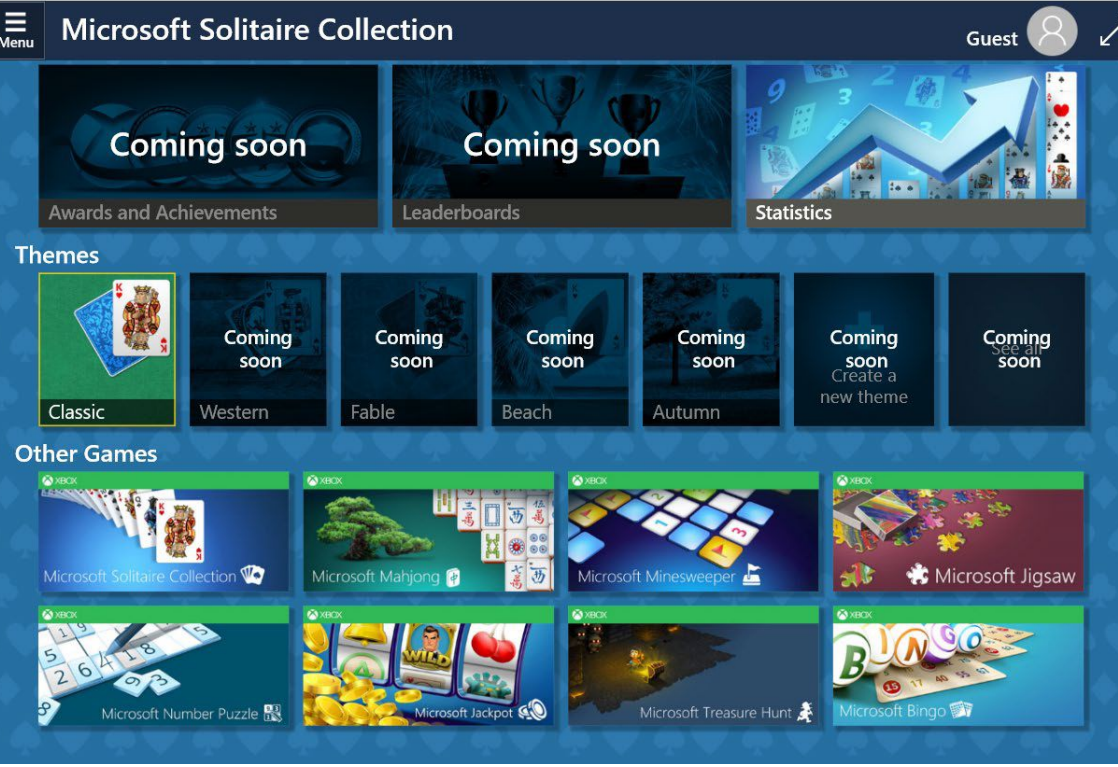


Alarms & Clock does nothing that your watch or phone doesn't already do, but the Windows 10's Calculator app is robust in features.

to email someone, I open Mail or Outlook and enter my contact's name. Ditto for my phone, Facebook, or Twitter. People is sort of the appendix of Windows past, and I probably wouldn't miss it if Microsoft's engineers removed it.

Microsoft also includes some other somewhat insignificant apps within Windows 10: Alarms & Clock, for example, does nothing that your watch or phone (or Outlook) doesn't already do—although it can pop up a visual alert at a given time, too. In the case of the Calculator app, the drab appearance hides several useful calculators and converters. For basic arithmetic, however, remember that you can also ask Cortana.

The Windows Accessories folder also hides some of the older apps, including WordPad, Paint, and the Clipping Tool. None of these seems to have been updated, and the Math Input Panel seems as useless as ever.



I probably should have listed Microsoft's Solitaire Collection among the best apps Windows 10 offers. Just look at it: It's gorgeous, with design elements I would have loved to see influence other apps within Windows 10. And it's not just one game—it's a bunch. Minesweeper's there, for example—not only is a version of the classic game included, but so is a new derivative, Treasure Hunt. There are several Solitaire variations, Mahjong, Sudoku, slots, and bingo. Eventually, there will be leaderboards, Microsoft promises. (Note that the app can still kick you out to the Microsoft Store to download apps, however. One question: why does a game like Mahjong take almost 250 megabytes?

Microsoft doesn't actually include a Skype app in Windows 10. Weirdly, there's a Get Skype app that's simply a "Hey, click this link to get Skype" webpage. Finally, for those who wish to use Windows 10 to connect to a 3D printer, there's the 3D Builder app, which we didn't test.

There's even some apps, like Movie Maker, which emerge from the hidden underworld of Windows Essentials 2012 and appear in Windows 10.

Microsoft's Solitaire app has a vibrancy about it that makes other aspects of Windows 8 pale by comparison.

You might know **Joshua**. He loves video games, and he owns enough to know they're not all meant for kids. That's why he reminds his friends (at least the ones that have kids) that they all have **big black letters on the box** to help parents find the ones that are best for their families.

You can learn about those ratings at **ESRB.org**

Los Angeles, CA

ESRB ENTERTAINMENT SOFTWARE RATING BOARD

EARLY CHILDHOOD eC CONTENT RATED BY ESRB
EVERYONE E CONTENT RATED BY ESRB
EVERYONE 10+ E10+ CONTENT RATED BY ESRB
TEEN T CONTENT RATED BY ESRB
MATURE 17+ M CONTENT RATED BY ESRB
ADULTS ONLY 18+ AO CONTENT RATED BY ESRB

What's next for
Windows 10?
Windows 10 Mobile.

WINDOWS 10 REVIEW

Windows 10 charts a better course

MICROSOFT'S CUSTOMERS HAVE grown used to floating lazily from one Windows release to the next…Windows 95, 98, XP…rousing as they bumped through the rapids of Windows Vista, then relaxing again as Windows 7 flowed gently ahead for several years. Then— SPLASH!— as Windows 8 landed, customers sputtered and swore. Some jumped ship. Since then, everything that Microsoft has done has been designed to lure customers back into that comfortable, productive world that Windows established.

For me, that's been achieved. Windows 10 feels like Windows; I made the mental shift from Windows 8.1 to Windows 10 during the weeks I've spent with it as a Windows Insider. That was a very clever tactic, by the way, to encourage users to overcome their unfamiliarity with the

OS as beta testers.

I don't like the Edge browser. I do like the vast majority of Windows 10, even with the bugs. Microsoft needed an additional month or more to buff out more dings and dents on its new OS, but in the new world of continual updates, maybe that's the wrong attitude.

Over the next few months, Microsoft will deliver Windows 10 Mobile, plus a few of the Windows 10 updates to the eagerly anticipated HoloLens and even the Xbox One. During that time, we expect a more cohesive Edge experience and—fingers crossed—some aesthetic tweaks to Microsoft's apps as well. Only then will Microsoft's ambitious Windows 10 vision be fully realized.

We haven't changed our verdict, or our score, after retesting with the Windows 10.0 code. Download it, definitely. Not only is it free to the vast majority of customers, it's a sizeable improvement on both of Microsoft's prior operating systems. Microsoft, to its very great credit, has assumed a corporate persona of humility and responsiveness that it has previously lacked. If there are problems—and there are—we have every confidence they'll be fixed.

Windows 10 SUPERGUIDE

EVERYTHING YOU NEED TO KNOW

Learn all about Windows 10's free upgrade, killer new features, and availability.

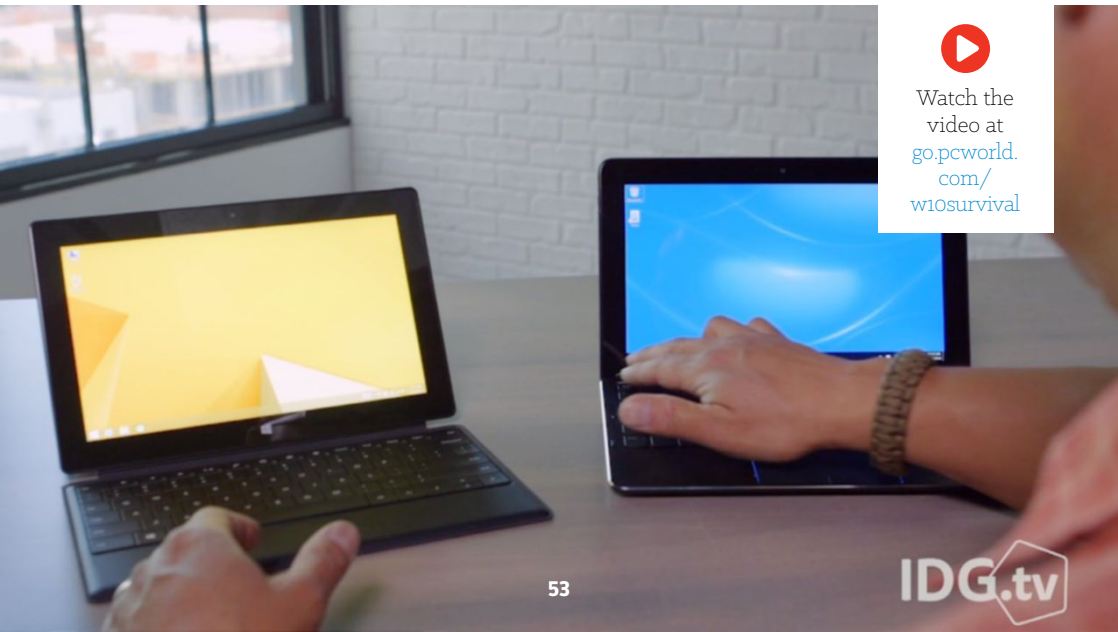
AFTER MONTHS OF teasing, testing, and technical previews, Windows 10 is finally here, and it's one of the best operating systems Microsoft's ever released. Windows 10 weaves together the best parts of Windows 7 and Windows 8, adds a dash of compelling features, then gives it all away for free to current Windows 7 and 8 users.

And yes, the Start menu is back.

First things first: if you haven't already, read our comprehensive review of Windows 10 (page 8) for a detailed, no-nonsense look at every corner of the new operating system. There's a lot to cover!

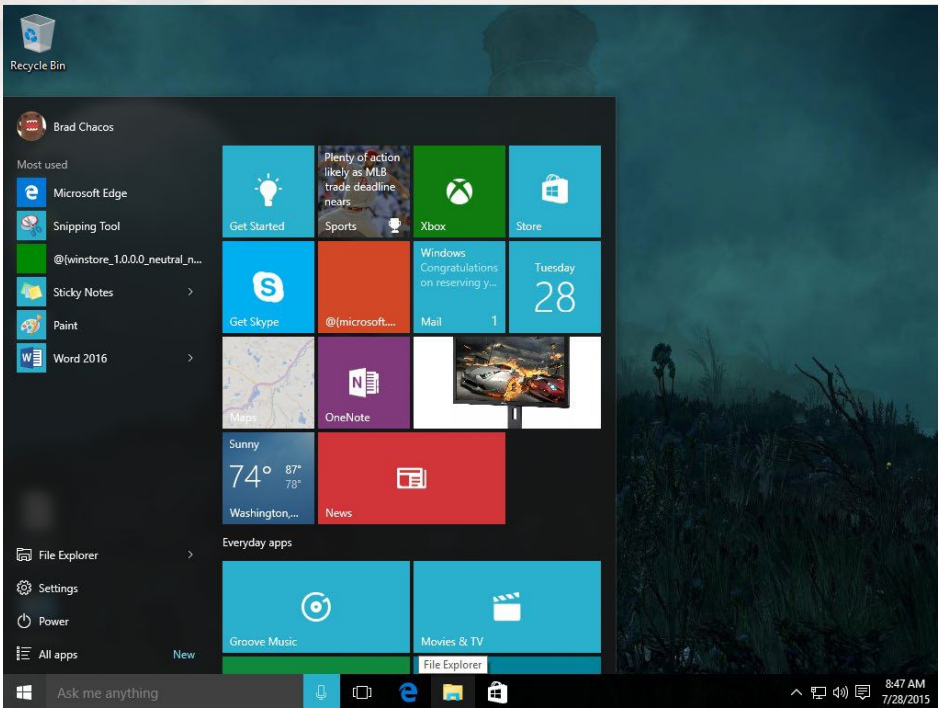
If you decide to take the plunge, be sure to read Ian Paul's three tips for a hassle-free Windows 10 upgrade (page 101)—it'll save you some headache.

Windows 10 rolled out to more than 14 million PCs in its first day or so of availability, and while there were some bumps, things went pretty smoothly overall. It even runs on old XP- and Vista-era (go.pcworld.com/w10oldpc) machines!



Watch the video at go.pcworld.com/w10survival

IDG.tv



Windows 10's Start menu blends Windows 7's feel with Windows 8's Live Tiles.

Microsoft's still slowly pushing out upgrades to users who "reserved" Windows 10 as part of a staggered launch, and it may take weeks to plow through the queue, but fear not: You can use the Windows 10 media creation tool to install Windows 10 *right now* (see page 104) if Microsoft's moving too slowly for your tastes. The same tool can be used to create Windows 10 ISO images (go.pcworld.com/w10iso), though you'll want to formally upgrade-in-place before you try a clean install, lest there be activation woes.

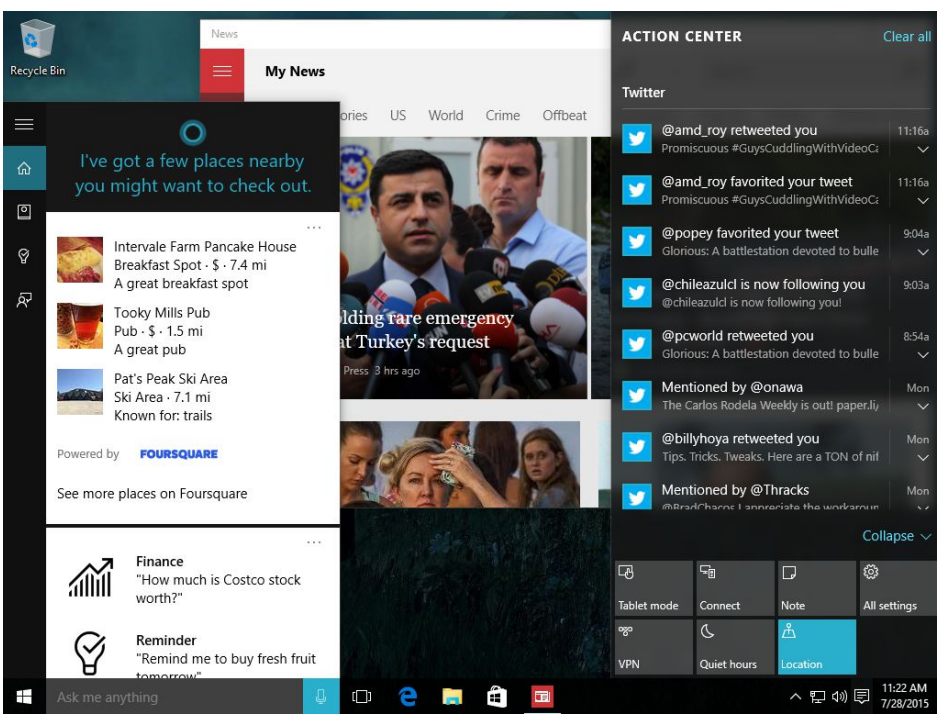
If you want a brand-new computer to go with the brand-new OS, Dell and HP are shipping Windows 10 PCs right now. Acer and Lenovo are accepting preorders.

WHAT TO DO WITH WINDOWS 10

In this feature Mark Hachman shows you how to maximize your first 30 minutes with Windows 10 (page 59) and make the operating system your own. Once you're done, see our take on the best new Windows 10 features you should try first (page 70) .

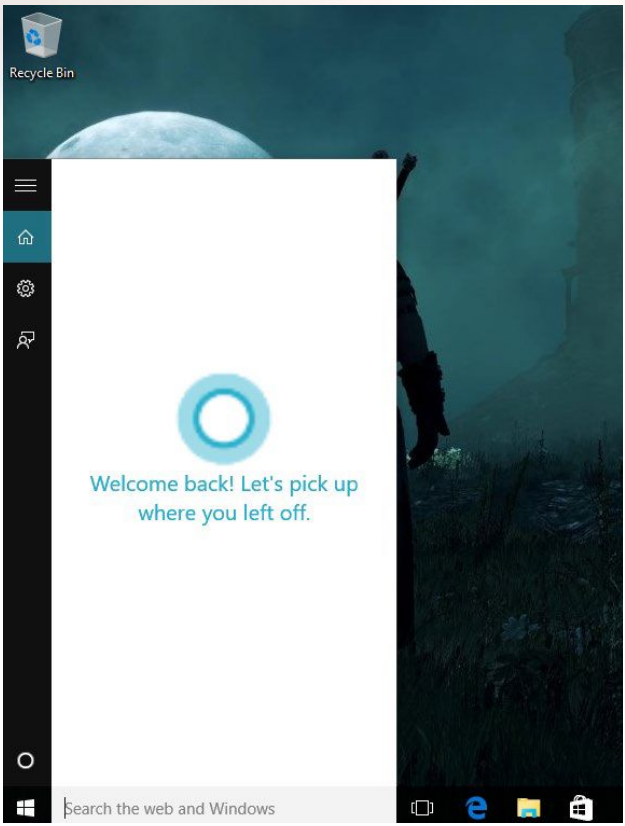
With the basics under your belt, it's time to go even further. PCWorld's video of five must-know Windows 10 tweaks (page 83) will help you dip your toes into some of the operating system's deeper powers. Feel the rush—feel the *power*—and then dive headfirst into our mammoth list of Windows 10's best tips, tricks, and tweaks (go.pcworld.com/w10tips). But keep digging! Windows 10 has some pretty awesome hidden features (page 89), too.

Perhaps you want to dig even further into Windows 10's highlight



Windows 10's Cortana, Action Center, and windowed Metro apps.

new features. PCWorld's guide to Windows 10's Edge browser (go.pcworld.com/w10edge), revolutionary DirectX 12 (go.pcworld.com/w10dx12faq) graphics technology, Task View virtual (go.pcworld.com/w10virtual) desktops, Windows Hello (go.pcworld.com/w10helloworks) biometric authentication, and the Cortana digital assistant (go.pcworld.com/w10cortanaguide) explore every nook and cranny of those capabilities. There's even a new Windows 10 Edition of Minecraft (go.pcworld.com/w10minecraft) in the Windows Store, though be warned: It's not the same as the desktop PC version of Minecraft.



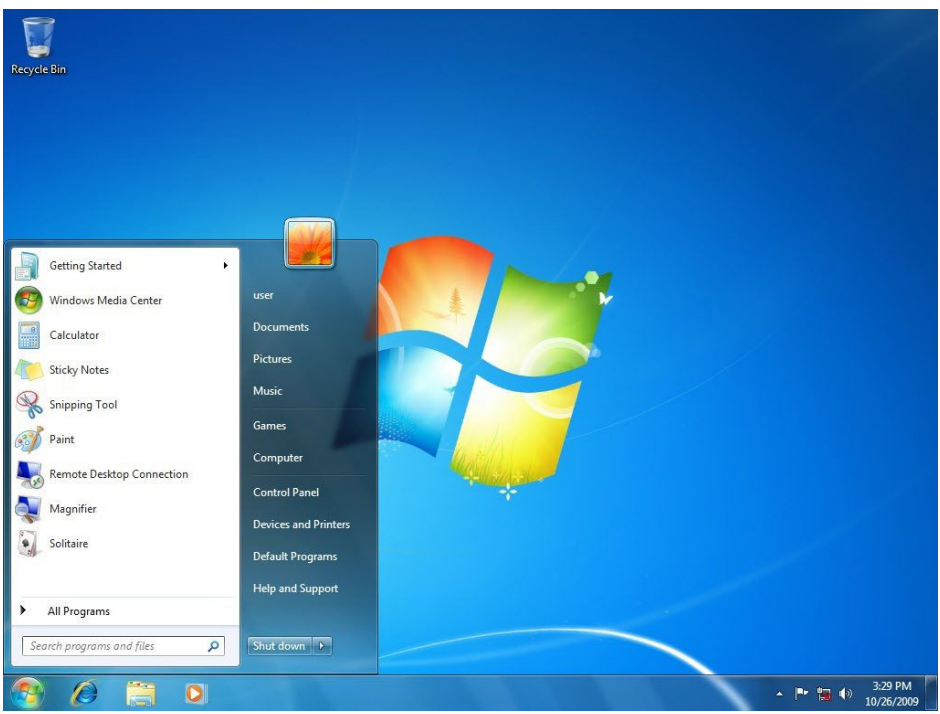
Let's take a quick moment to talk about Windows Hello and Cortana a bit more. Both of the powerful new features deeply add to the usability and overall experience of Windows 10, but they demand a lot of your personal info in order to do so. Windows Hello requires special hardware (go.pcworld.com/w10hellohw) that isn't found on many PCs, however, and you can disable Cortana (go.pcworld.com/w10contanano) if you have privacy concerns. But if you *don't* mind using Cortana, Satechi's $23 Cortana Bluetooth button (go.pcworld.com/w10cortanabutton) can free the assistant from your desktop by plopping her in your car or

kitchen countertop. And you'll definitely want to ask Cortana these 50-plus easter egg questions (go.pcworld.com/w10cortanaeggs) for some hilarious answers.

We also include a few more granular tip pieces, mostly revolving around specific pain points for the operating system. We explain how to disable Windows 10's contentious Wi-Fi Sense password sharing feature (see page 120), and how to play DVDs in Windows 10 (go.pcworld.com/w10dvd) now that Windows Media Center is dead. Uninstalling programs is a little different—and a lot better—in Windows 10, too.

Microsoft's decision to force updates on Windows 10 Home users has caused the brandishing of pitchforks. There's help: our guides to scheduling Windows 10 updates (go.pcworld.com/w10updatesched)

A small legion of users plan to skip Windows 10 and stick with Windows 7 (pictured).



and labeling Wi-Fi connections as metered (go.pcworld.com/w10wifimetered) can force Windows to let you download updates at your own pace. Microsoft's also released a tool that allows you to permanently block bad updates (see page 122) that bork your system.

Windows 10 feels like a welcome step in the evolution of Windows, unlike its predecessor.

Oh, and we've also created a guide that teaches you how to use per-monitor display scaling (go.pcworld.com/w10display) to perfect your Windows 10 experience on a setup using multiple monitors of varying resolutions. 4K monitors are only getting cheaper, after all, and who *doesn't* like to rock as many screens as possible?

WINDOWS 10 HOLDOUTS

Not everyone is jumping with joy over the idea of upgrading to Windows 10, however.

There are plenty of valid reasons why you might not want to upgrade to Windows 10—not least of which is how the operating system continues Windows 8's ploy to tie you to Microsoft's online services. And for as awesome as Windows 10 is, it isn't perfect, with some niggling issues still hanging around.

Don't take our word for it though! Listen to why Windows 7 holdouts are passing on Windows 10 (go.pcworld.com/w10holdouts) in their own words. It's pretty eye-opening, and may just sway you to stay put as well—but we wouldn't recommend it for most folks.

Windows 10 feels like a welcome step in the evolution of Windows, unlike its predecessor. And if you've stayed put with Windows 7 thus far, Microsoft's new operating system will introduce you to Windows 8's awesome technical tweaks, too—but wrapped in Windows 10's far more pleasant and familiar interface.

How to maximize your first 30 minutes with Windows 10

So you finally have Windows 10 on your PC. What do you do with it? Join our guided tour. BY MARK HACHMAN

WINDOWS 10 IS HERE! Windows 10 is here! Now what?

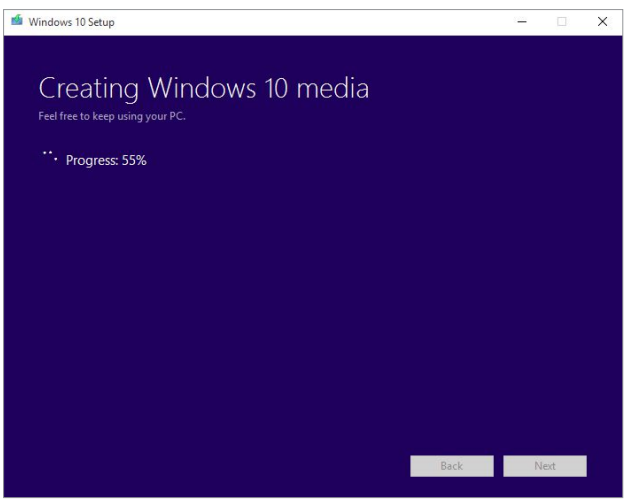
By now, you've seen our review of Windows 10. It's one of the best operating systems Microsoft has ever produced, and it's worth the download. But if you're new to Windows 10, it can feel a bit daunting.

Actually, it's more familiar than you think. And we can help walk you through your first 30 minutes with Windows 10.

PRELOADING AND INSTALLATION

If you purchased a new Windows 10 PC, you have the easiest road. You can skip this section. But for most of us, Windows 10 came via an upgrade to Windows 7 or Windows 8.1. And if you're in the camp, read on.

Assuming you reserved Windows 10, you should have Windows 10 by now. If you don't, that's a.) either because Microsoft has millions of PCs to upgrade, and you're further back in the queue or b.) because you're missing a critical driver. If you have a piece of hardware that lacks a signed, approved Windows 10 driver, Microsoft won't deliver Windows 10 until you do. Makes sense, doesn't it?



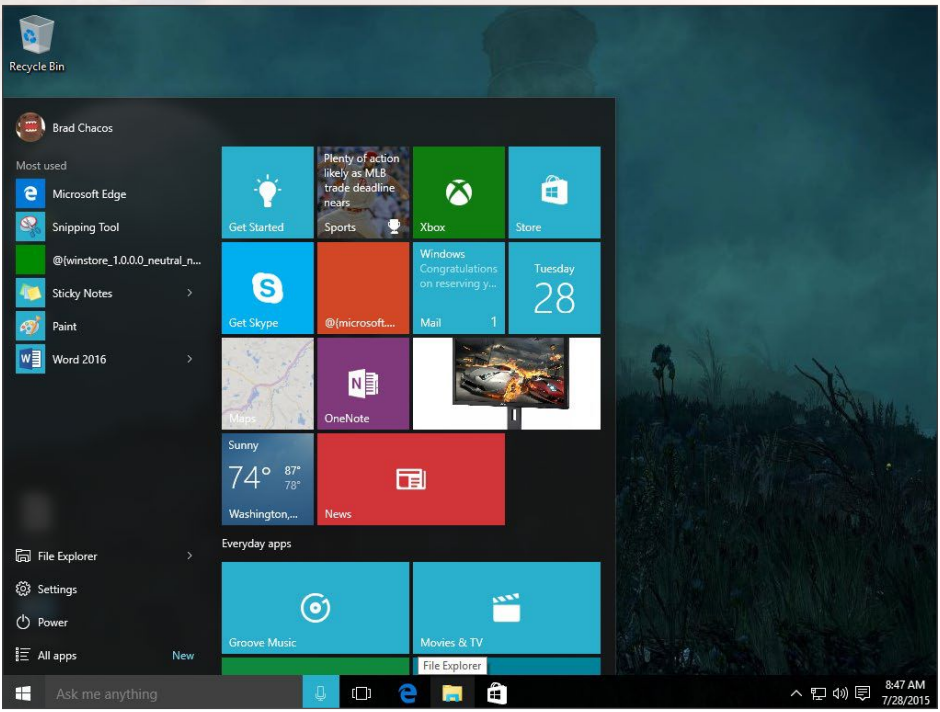
The Windows 10 installation tool.

On the other hand, some of you may be surprised just by how quickly Windows 10 showed up. That's because Microsoft quietly preloaded Windows 10 onto your machines, then unlocked the code. After that, Windows began its installation.

You should see the installation process begin. Microsoft will install the files, ask you for your Microsoft account, and unlock Windows 10.

Those files will be downloaded to your PC, part of what's called an "update in place". Windows 10 will be overwritten onto your PC. But you'll also have the option to create a USB key or other installation media to do a "clean install," which enthusiasts prefer.

To do so, you download the Windows 10 media, which will allow you either to create an ISO file that you can burn to a DVD, or else create a bootable flash drive. You'll have the option of installing over an



The Windows 10 Start screen.

existing Windows installation, or starting from scratch. Our guide to installing Windows 10 can help walk you through the process.

AND CONGRATULATIONS! IT'S UPDATE TIME

I know the first thing you probably want to do is explore your new operating system, but let's put that on hold for a second. We've been told to expect a pretty massive "Day 0" patch from Microsoft, which you may have received as part of the upgrade/setup process. Let's just make sure that isn't anything more in the pipeline.

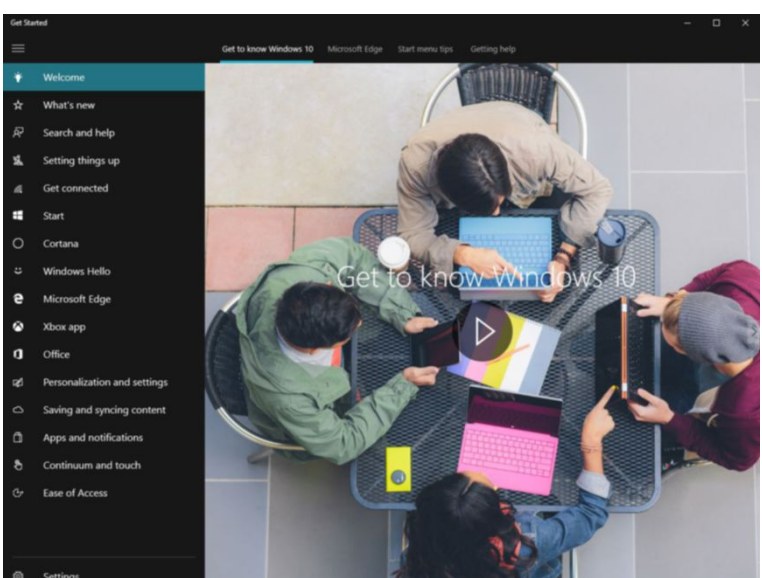
Don't be disappointed, however—we can still continue with your Windows 10 orientation. We'll just have an overarching goal in mind. And fittingly, the place to start is, well, Start.

LET'S START EXPLORING

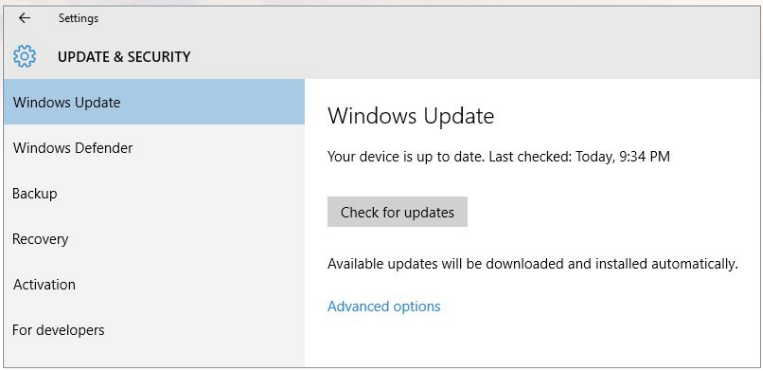
All the way down in the left-hand corner of your screen is the Windows icon—probably similar if not identical to the Windows icon on your keyboard. If you click on that icon, tap that icon on your touchscreen, or touch the Windows key on your keyboard, you'll open up the Start menu.

Boom! Pretty nice, right? Windows 7 users, you're going to see a list of apps listed in the left-hand nav bar. Windows 8 users, you'll notice the familiar Live Tiles to the right. Some of those Live Tiles may already be flipping over to show you relevant information. For now, though, let's start on the left.

What you'll see is a list of "frequently-used applications" that Microsoft has selected for you—they may have even carried over from a previous OS, if you upgraded Windows 10 in place. These will change depending on how frequently you use them. Unfortunately, you can't pick and choose what apps appear here. You can make some adjustments, however, and we'll show you how in a second. Here's a



Windows 10's Get Started app—a good resource if you're looking for some more hand-holding.



Check this to make sure you have the latest updates.

hint: it's in that "Settings" link, at the bottom.

Take a minute to click the "All Apps" button at the bottom of the list. This should be called the "Almost All Apps" button, because Windows, inexplicably, doesn't show you tried and true apps like Paint where you might expect them. But everything else that's installed on your system should be there.

For now, let's look to the right. The first thing you should know is that the Start menu is a window—it can be resized and reshaped to your preferences, within limits. It can even go full-screen, although that will require a change in the Settings.

You can arrange and rearrange tiles as you'd like. Try right-clicking on one, and adjusting the size; if you can't enlarge it, try dragging-and-dropping it to an open space. Maybe you'd like the Mail application to be in the top left-hand corner. Or your Calendar. You should be able to pin any app to your Start menu, including those found in the left-hand nav bar. Not all will function as Live Tiles, however—that's up to the app designers.

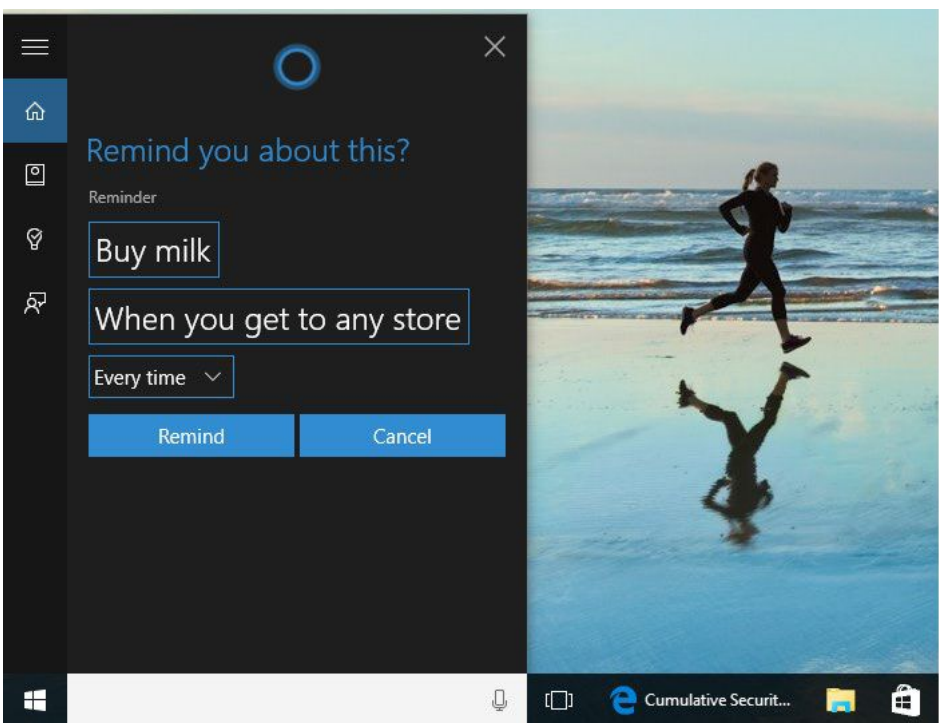
There's one app I want you to look out for: Get Started. It doesn't appear that Microsoft is going to hold your hand through the opening minutes of Windows 10, so Get Started is Microsoft's overview to the new OS. You don't have to click it now, but be aware it's there. Now, scroll down to Settings, and click there.

A QUICK TOUR OF THE SETTINGS

Some people get a little nervous about tampering with the guts of their PC. Don't worry—the *real* guts of the PC are left for the Control Panel. In Windows 10, Settings are more like your car's dashboard.

Remember, we want to find out how to check for updates. And this we can do, quickly, by going to the search box in the upper right. Just start typing "Update" and a number of options should begin appearing. We want "Windows Update settings". Click that. On the following screen, click "check for updates". If your system begins downloading updates, grab a cup of coffee and check back in a bit. Once that's finished, great! You're up to date and ready to go.

Now, let's continue making your PC *yours*.



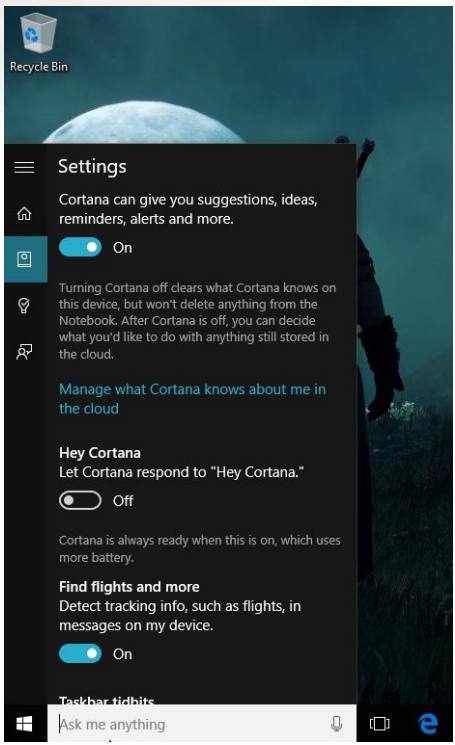
Use Cortana to set reminders and ask about facts.

PERSONALIZATION

Click the gear icon at the top-left corner of the window until you're back at the main Settings page. Where we're headed now is the "Personalization" icon.

Windows 10 smartly makes the background screen the first Personalization setting to be adjusted. These should be self-explanatory: pick a background screen or stick with the default. If you want to load a picture of your kids, for example, you'll need to track one down from Facebook or elsewhere, or use one that's stored on a USB key or in the cloud.

Flip through the other settings on the page, using the left-hand navigation bar to tweak various elements of your PC. On the lock screen setting, for example, you'll have the opportunity for Windows to show you your next appointment, for example, if you set up Calendar to show a detailed view. By the time you're done, your Windows 10 PC should look and feel more like home.



Hey Cortana! You don't need to type; Cortana can listen for the sound of your voice.

CORTANA AND NOTIFICATIONS

And if your Windows 10 PC now feels like home, Microsoft would like for you to start thinking of Cortana as one of your friends. Right now, she's probably down in the lower-left hand part of the screen, asking you to "Ask me anything". Let's briefly run through the basics.

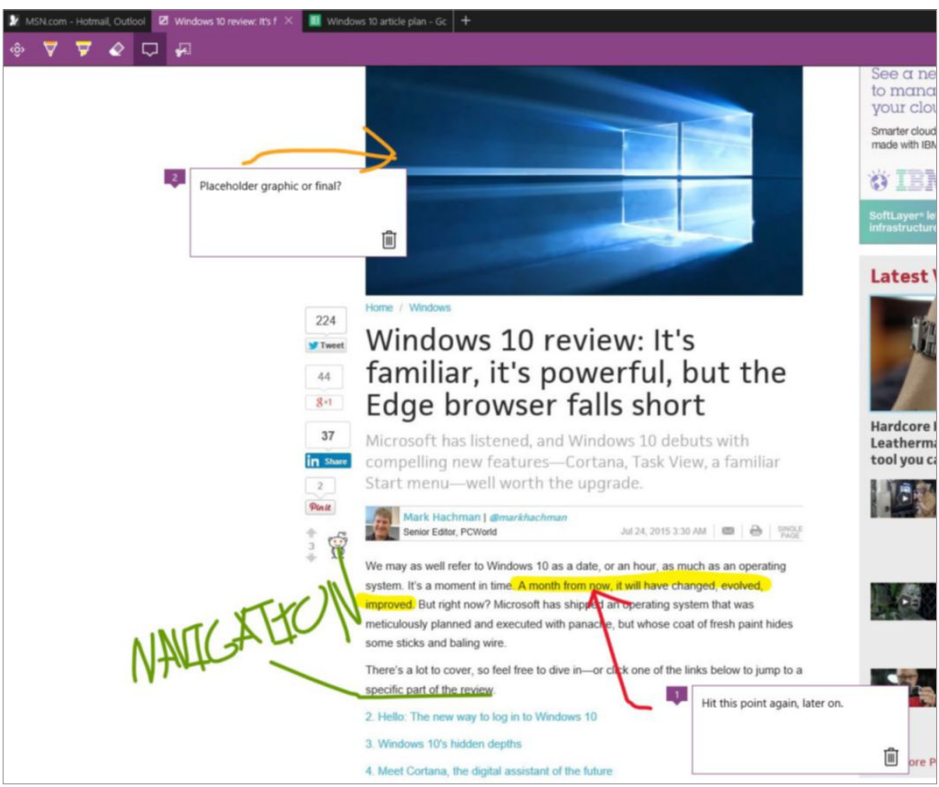
You don't need to use Cortana, although the first time you click on the search bar you'll receive a pitch to set Cortana up. Cortana wants to pry into as many corners of your digital life as you'll allow in order to work best. If you agree, she'll start working in the background to

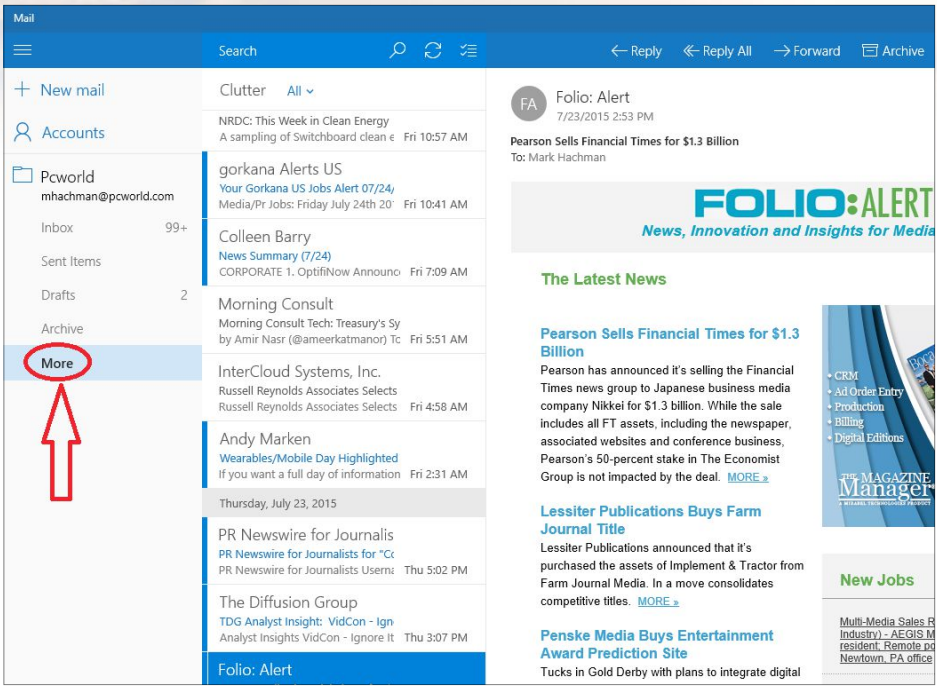
advise you, for example, of when you'll need to leave to make your dentist appointment on time.

If you don't want to use Cortana, you can opt out—in the initial stages, or later, via the Cortana settings menu. You'll need to enter the Notebook to do that: click the search button, then the third icon down from the left. Go to the Settings menu and you'll see a toggle switch to turn Cortana off. Once back in the Notebook, you can also dig through the various categories and let Cortana know your likes and dislikes, too.

If you do set a reminder, it will pop in from the lower right, and usually squat down in the corner of your screen until you dismiss it. Mail notifications work a bit differently; they'll fly in, hover for a

You can use Web Notes to mark up all sorts of Web pages, for all sorts of purposes.





Clutter is a nifty feature of Mail. Here's where you'll find it.

moment, then disappear. Miss something? Well, there's an archive of what Windows 10 showed you, called the Action Center, waiting patiently in the system tray portion of your taskbar, in the right-hand corner of your screen. It looks like a text bubble from a comic book. Click it, and you'll see a summary of what Windows 10 thought was important.

Cortana can serve as a generic search bar for documents and other apps you've stored on your PC. Sometimes, the easiest way to launch an app is simply to start typing its name in the Cortana search bar.

There are three more things that you need to be familiar with before our tour is done: launching the Internet browser, Microsoft Edge; setting up your email; and downloading just a few of the apps that you'll probably want from the Store.

MICROSOFT EDGE

The one question some of you are undoubtedly asking is: "How do I get to the Internet?!" That's an easy one: with Microsoft Edge.

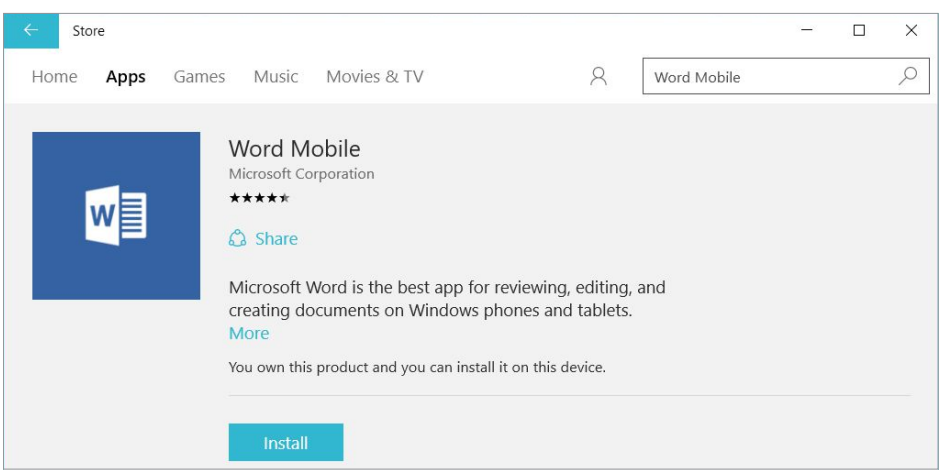
You're probably familiar with the Internet Explorer logo. Edge, not coincidentally, looks like an, er, edgier version of Internet Explorer. The easiest place to find it is down at the bottom of the screen, in the row of icons that Microsoft calls the "toolbar" but you probably know as the taskbar. Click it.

Edge will probably launch with an array of content from across Microsoft's properties, with a search bar in the middle of it. Like most modern browsers, you can either type a Web address or a search term in the field.

Again, however, you'll want to explore the settings. This time they're hidden inside an ellipsis (...) menu to the upper right (hurray for consistency, Microsoft). The first thing you may want to do is change the "theme" from light to dark, just to see the difference. Next, you'll want to import your favorites from another browser. This can be a bit tricky.

If you're a Chrome user, you'll probably want to simply search for Google's browser, download it, and then decide whether or not you'll

It's a mystery why Word Mobile isn't heavily promoted in the Store app.



want to take your bookmarks and import them to Edge. Ditto for Mozilla or Opera. If you worked in Internet Explorer, however, your bookmarks should carry over.

MAIL

Honestly, setting up email within Microsoft's Mail app couldn't be easier. Launch it (either via the Start menu or via Cortana) and then simply add an account. You'll need to type in your email address and password, but after that you should find Mail reaches out and grabs what it needs. If you'd like, you can even add multiple accounts and switch back and forth.

About the only tip I'd recommend is clicking the "More" link in the left-hand list of links. That opens up a number of different folders in which to store your email, as well as the Clutter folder, which is Microsoft's modern equivalent of the Spam folder, hiding emails that aren't quite junk, but aren't important, either. You may also want to explore the Settings menu (in this app, it's a gear icon in the bottom left corner).

Honestly, setting up email within Microsoft's Mail app couldn't be easier.

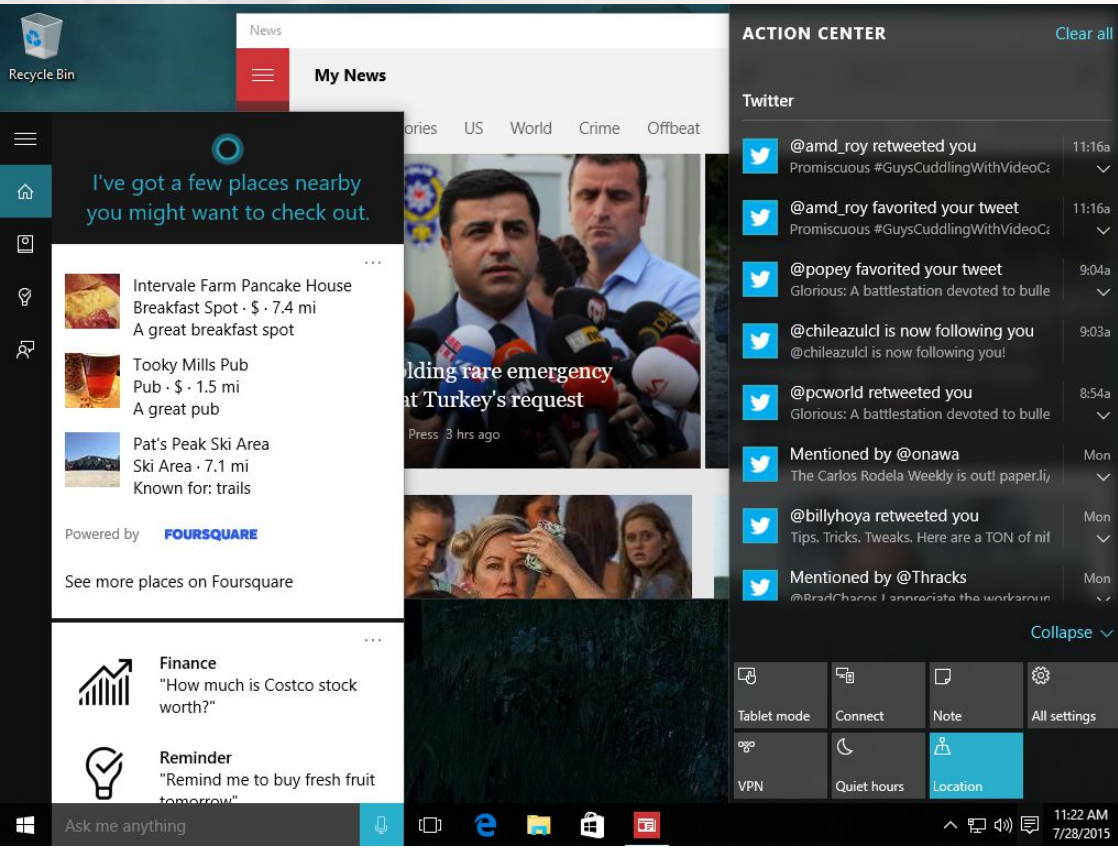
THE STORE: GO GET OFFICE

Last but not least, you'll want to grab a copy of Microsoft Office. You have two options: pay for a full-fledged copy of Office 365—which will require you to pay $70 per year for Office Personal—or the much simpler, cheaper route: Word Mobile, Excel Mobile, and PowerPoint Mobile. All three are free, and available via the Store app.

Microsoft's Store is a home for, quite frankly, a lot of mediocre apps that you don't need. What you should do, however, is type "Word Mobile" into the search bar, download it, an do the same for the other two apps. Word Mobile doesn't have all the features of Office 365, but it has enough to satisfy the casual user.

Windows 10: The 10 best new features you should try first

From Cortana to the fancy new Start menu, you won't want to miss these WIndows 10 features. BY BRAD CHACOS



THE BEST OF WHAT'S NEW

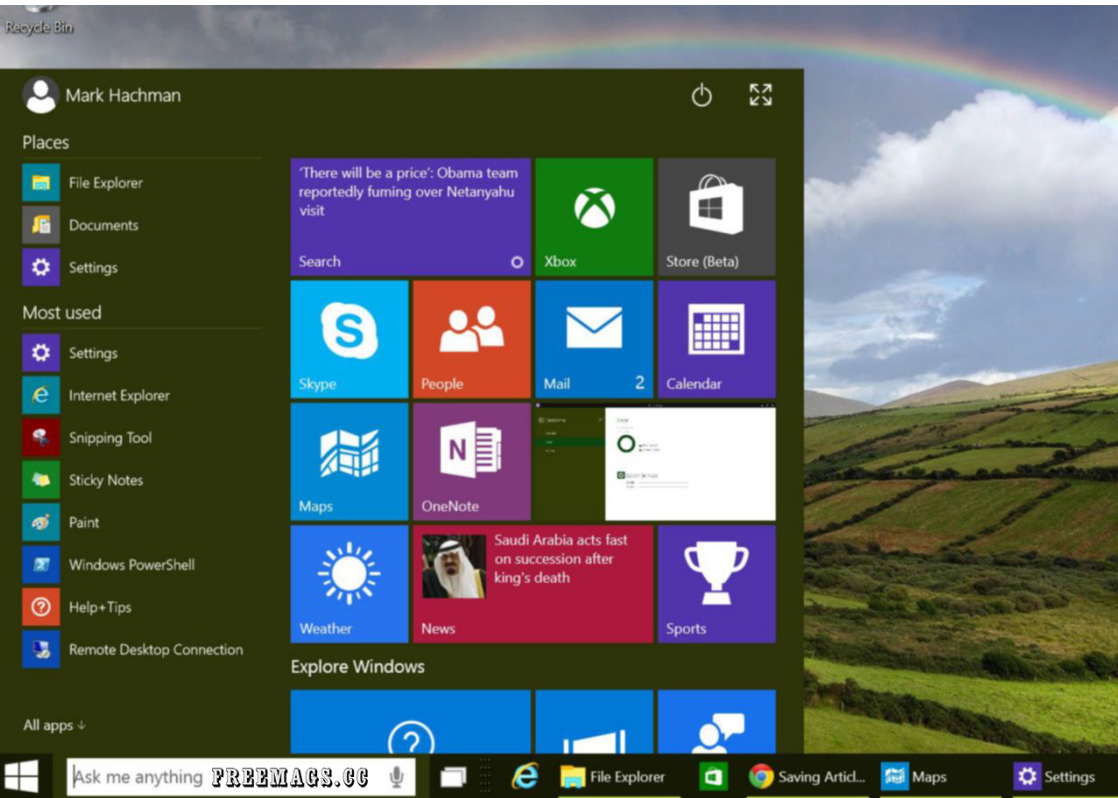
LET'S NOT BEAT AROUND THE BUSH: Windows 10 is wonderful. It's head-and-shoulders better than Windows 8.1, at least for traditional PC users. The fact that it banishes full-screen apps and the Metro Start screen to the ether, focusing instead on the tried-and-true desktop, should be reason enough to make PC purists smile.

That's just the tip of the iceberg, though. If you're fresh to Windows 10, these are the cool new features you'll want to check out first.

THE START MENU

Windows 10 atones for one of Windows 8's greatest sins by returning the Start menu to its rightful spot in the lower left-hand corner of the desktop. But rather than focusing on desktop apps alone, the Windows 10 Start Menu mixes in a dash of the Metro Start screen's functionality, sprinkling Live Tiles of Windows 8-style apps next to shortcuts to more traditional PC software.

You can turn off that Live Tile functionality if you'd like, and even unpin all the Metro apps from the Start menu, returning it to purely desktop-focused glory. Or you can choose to have the Start menu expand to the full screen, and resize Metro apps to recreate a more Windows 8-like experience. The choice is yours.



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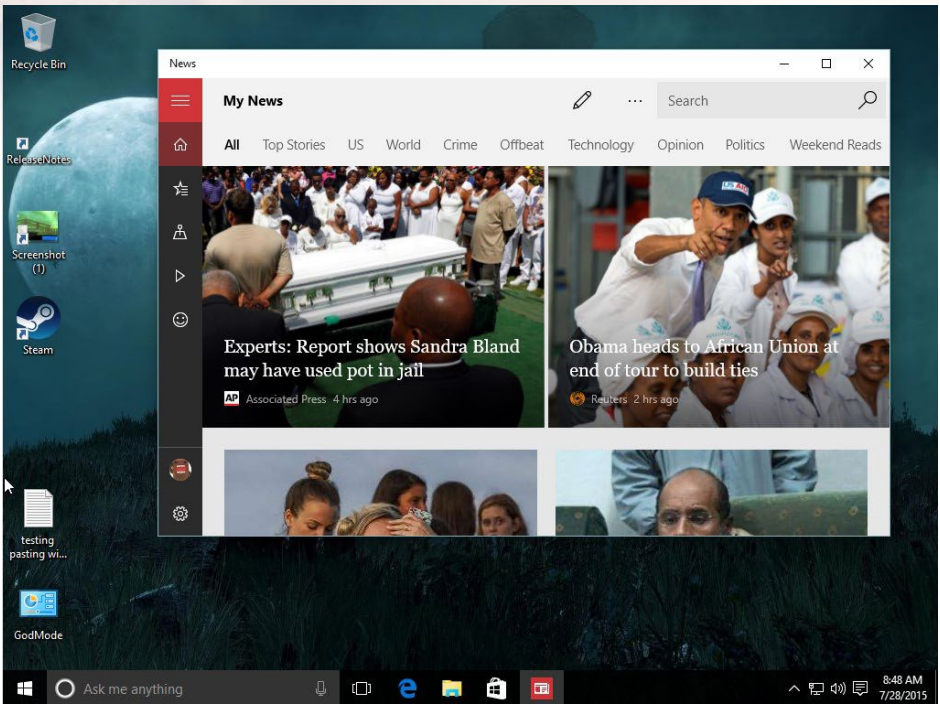


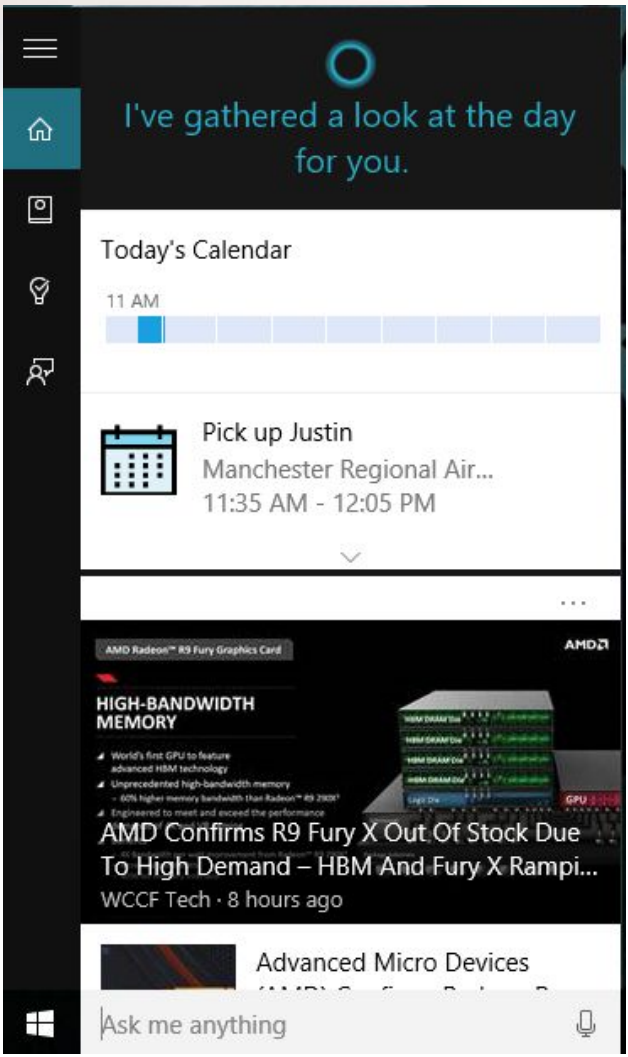
WINDOWED WINDOWS STORE APPS

As you might have caught onto by now, those reviled Windows Store apps from Windows 8 haven't been eradicated—but they have been remolded to fit desktop sensibilities. In Windows 10, launching a Windows app on your PC opens it in a desktop window, rather than dumping you into a full-screen app. The windowed apps have a mouse-friendly toolbar of options across the top, and even alter their interface to best fit the size of the window. Nifty.

I never used Metro apps in Windows 8, but Windows 10's windowed Windows apps (whew!) have coaxed me into using them on a daily basis, especially Mail, Calendar, and Photos.

CORTANA

Cortana, Microsoft's clever digital assistant on Windows Phone 8.1, makes the jump to PCs with Windows 10, where she assumes control of the operating system's search functions. Cortana will want to access your personal info, then use that info along with her Bing-powered cloud smarts to intelligently surface information you're looking and perform other helpful tasks.



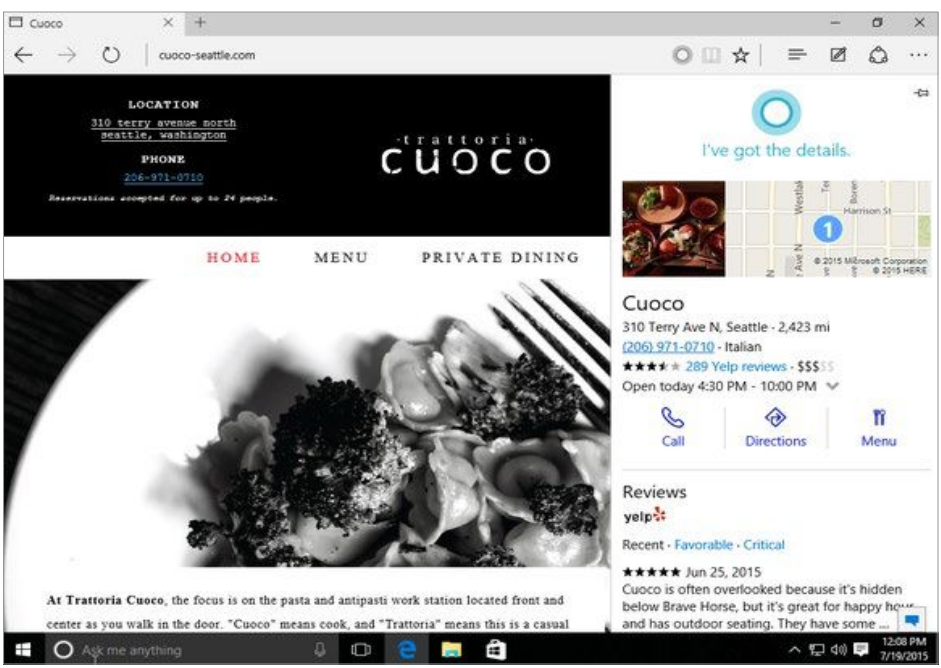
Cortana can help you find all sorts of online information via natural language queries you ask using text or voice commands. Cortana can also apply those natural language smarts to use search your hard drive, OneDrive, and business network for files that meet certain filters, like "Find pictures from June."

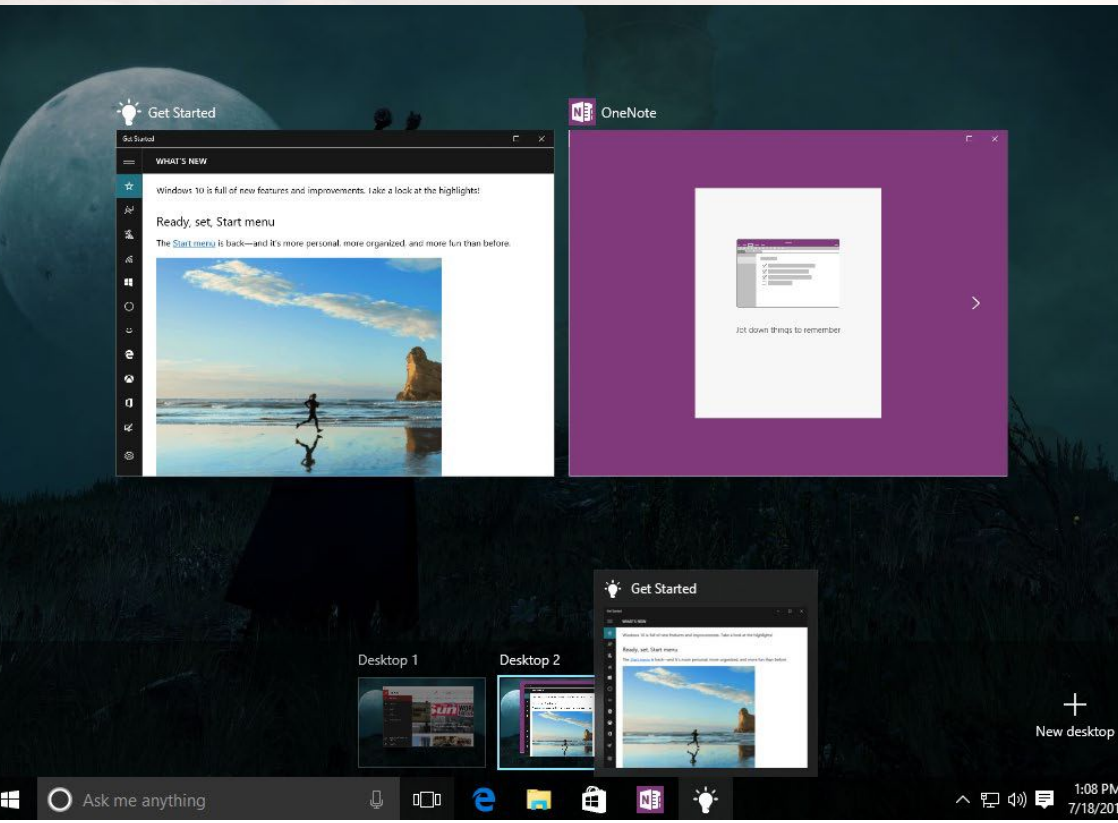
The digital can also play music, create reminders, set alarms, and even crack jokes.

THE EDGE BROWSER

Forget Internet Explorer. Well, don't forget it entirely—it's still tucked away in a corner of Windows 10 for legacy compatibility purposes. But the star of the Internet show in Microsoft's new operating system is clearly Edge, a brand-new browser built from the ground up for speed, slickness, and trawling the modern web.

Spartan uses Microsoft's new Edge rendering engine—which isn't being included in IE in Windows 10—and packs some nifty extras. Cortana pops up with supplementary information while you search the web, such as Yelp reviews and Bing Maps directions when you're viewing a restaurant website. Digital inking tools let you easily mark up a website and share it with others. Finally, Edge also includes an awesome clutter-stripping Reading View, and allows you to stash articles in the complementary Reading List app for later perusal.





VIRTUAL DESKTOPS/TASK VIEW

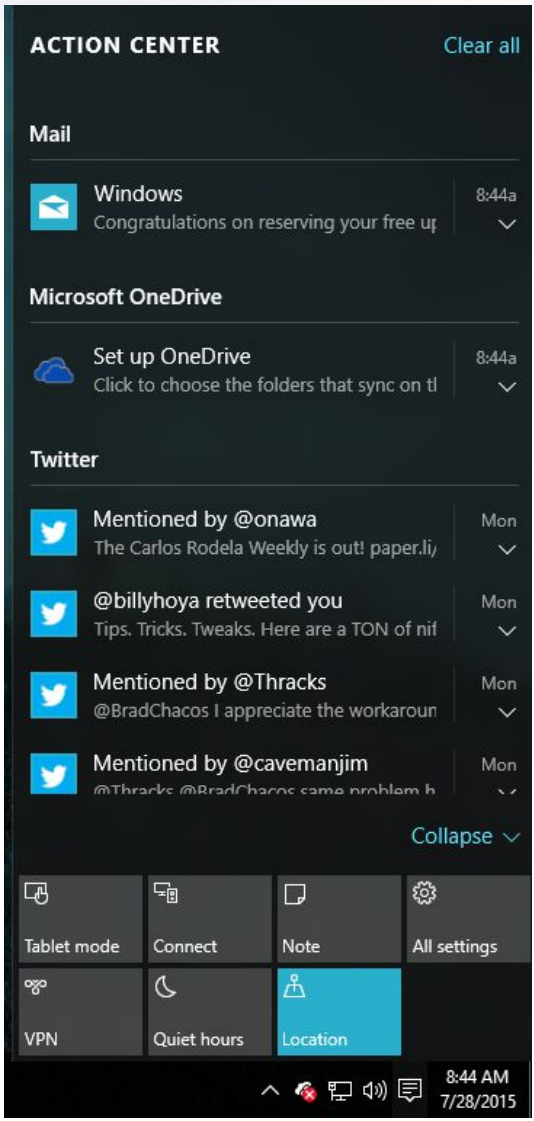
It's time to stop begging, enthusiasts: Virtual desktops have finally come to Windows. The poor man's multimonitor setup allows you to go back and forth between either open apps or multiple virtual "desktops" of apps, organized how you like them.

Task View, as Windows 10's virtual desktop implementation is called, won't appeal to everybody but it provides deep new functionality for power users. (The integration with windows snapping is especially handy!).

ACTION CENTER

Notifications are one of the coolest features of modern operating systems, with popups reminding you of all sorts of useful information. Windows 8 had them, but those notifications disappeared forever as soon as they faded from your screen—an issue if you weren't actively sitting in front of your PC when one popped up.

Windows 10 cures that ill with its new Action Center. As notifications slide into view, they're archived here. The Action Center also provides quick-action buttons for common functions, like activating Bluetooth or connecting to a VPN, as well as an option for shifting the interface to Tablet Mode.

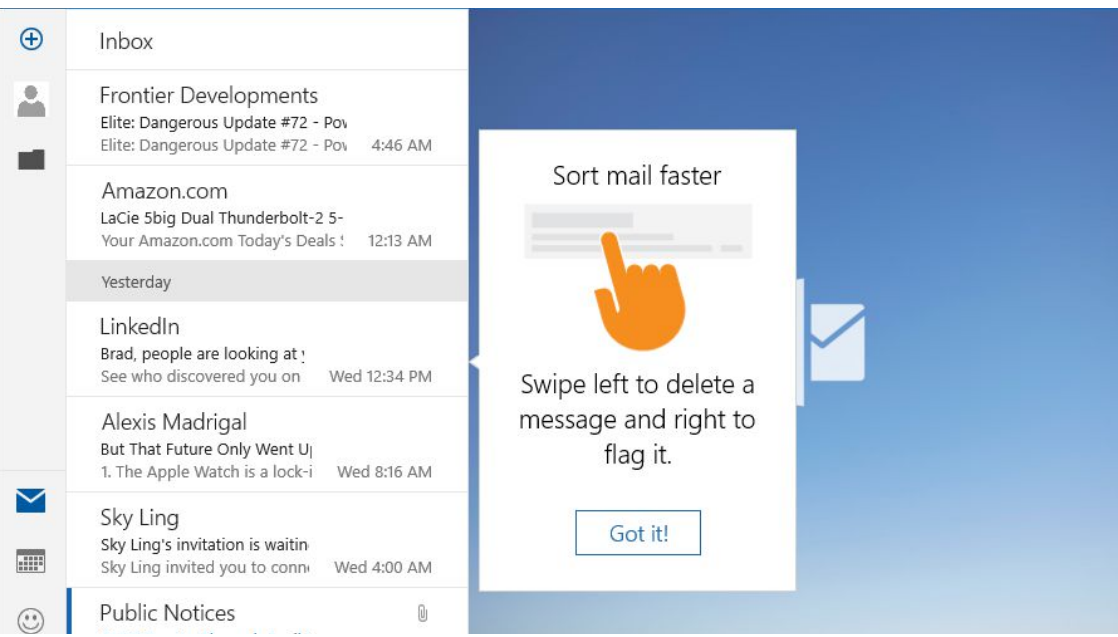


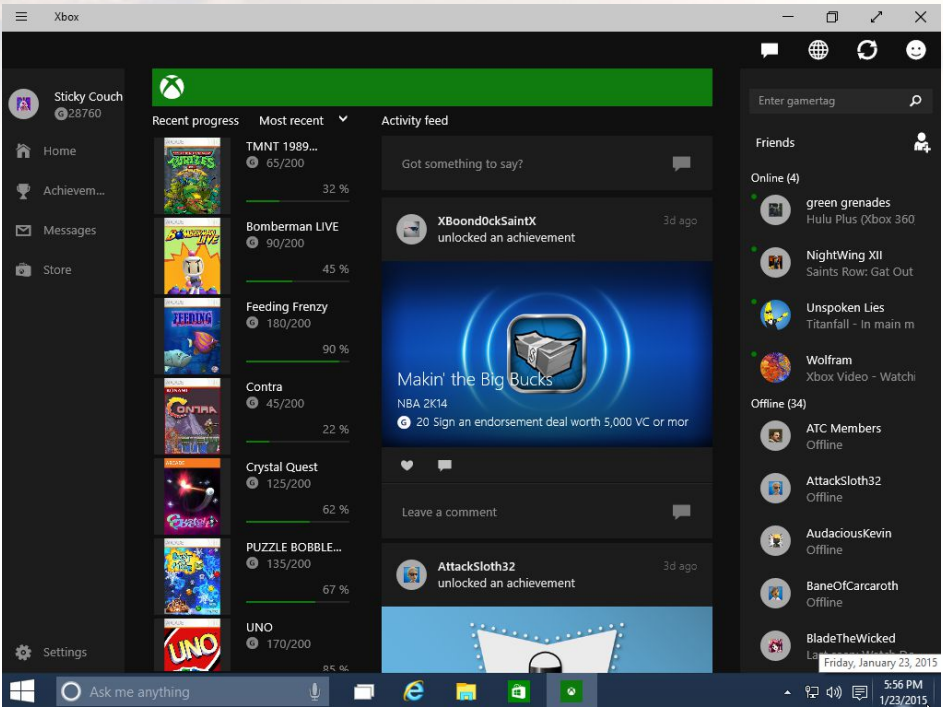
REVAMPED CORE APPS

Windows 10 introduces overhauled Mail and Calendar apps that are *vastly* better than their Windows 8 counterparts. While the Windows 8 apps were pokey, the Windows 10 variants are speedy and responsive, and they manage to fit much more info on the screen while still being friendly to mice cursors and fat fingers alike. The new apps also dynamically shift their interfaces to fit nicely into windows of all shapes and sizes.

The Mail app adds swipe gesture controls so you can quickly sort your inbox with just a few swipes—and what each swipe does is user-configurable, too. But more important for practicality, the revamped apps include key functionality that was missing in their Windows 8 predecessors: POP email support in the Windows 10 Mail app, and Google Calendar support in Calendar.

The new Photos app is surprisingly robust, as well.





THE XBOX APP

Windows 10's new Xbox app should feel deeply familiar to Xbox One fans: The center point is your Activity Feed, which is populated by your Xbox Live Friends' activities, such as unlocking an achievement or launching a Twitch stream. The right side of the app lists your friends; selecting one offers options to view their game clips, invite them to a party, send an IM, and more. You can also view your own achievements, manage your profile, and more all right within the app. You can even stream your Xbox One games to a Windows 10 PC or tablet.

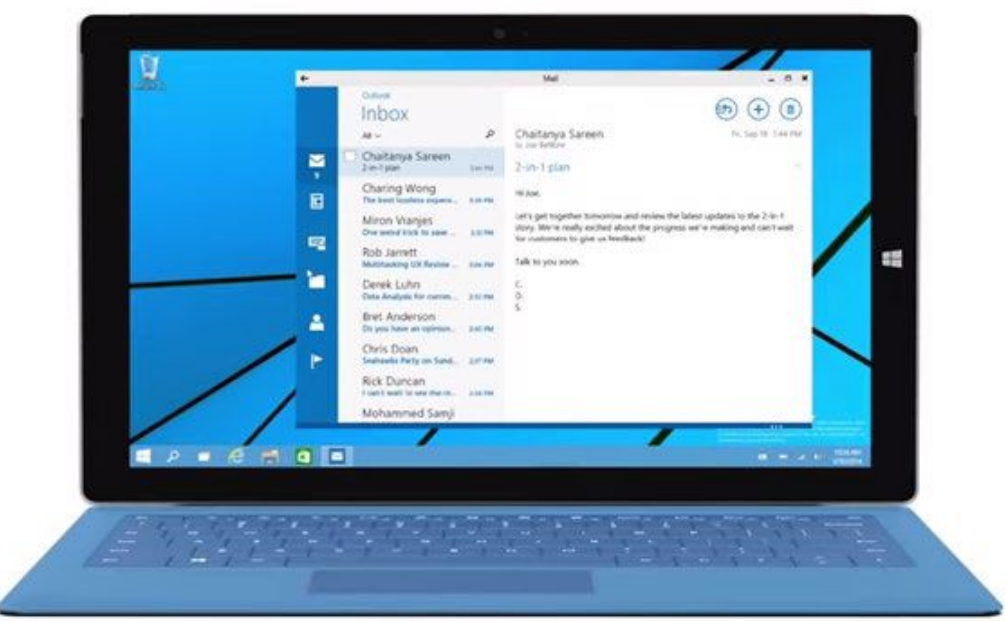
We can't help but shake the feeling that this app is more beneficial to console gamers who happen to have a PC than to true PC gamers, despite the Xbox app's Game bar, a system-wide tool that lets you snag screenshots and video clips of your PC games (and more). But it's a very handy tool indeed if you fall into the former camp.

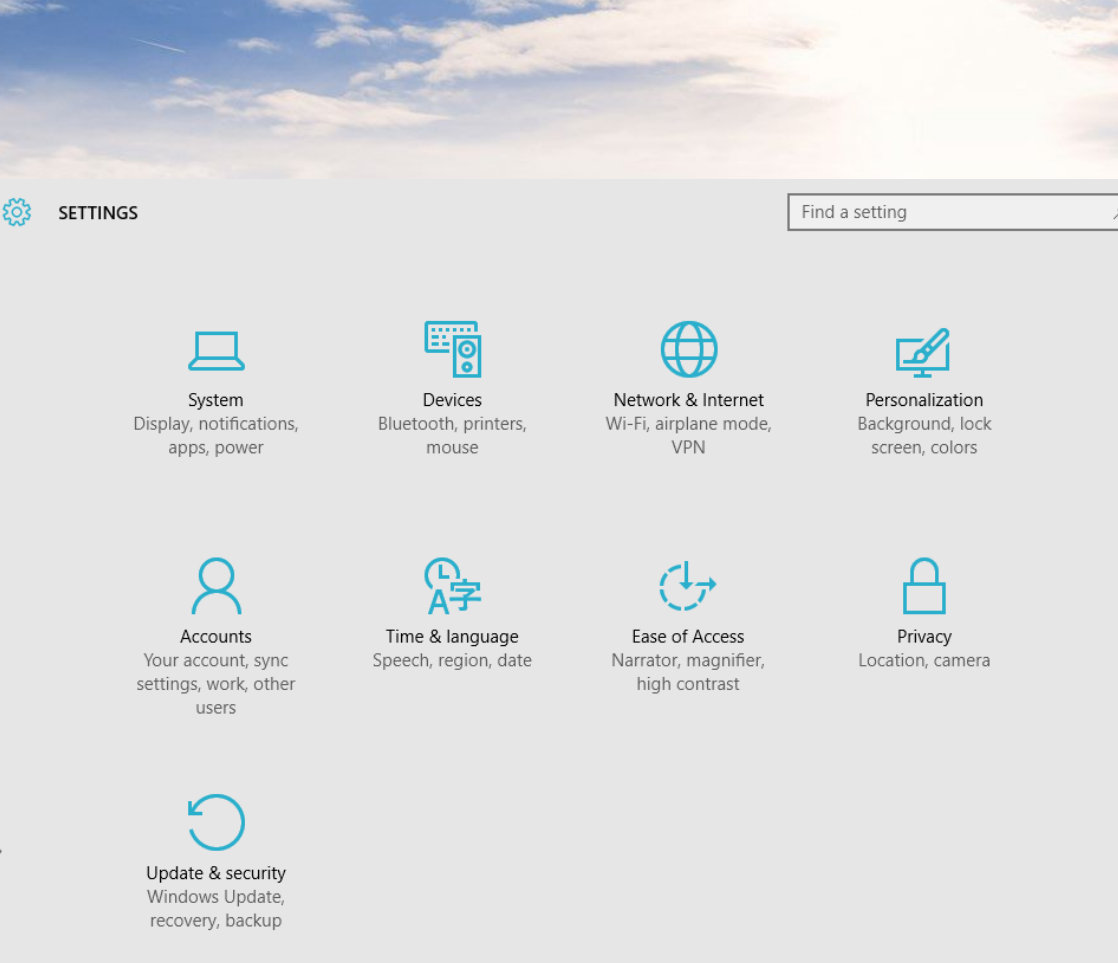
CONTINUUM

Yes, Windows 10 is vastly improved on PCs, but Microsoft didn't forget about touchscreen users. The operating system includes a handy "Continuum" feature that dynamically switches the interface between the PC-friendly desktop and a Windows 8-like mode that's better suited for fingers (pictured above), depending on how you're using the device.

Windows tablets will default to the latter; PCs to the former. Hybrids will intelligently switch between the two modes depending on whether you have a keyboard attached. Windows 10 Mobile phones will even ape a full-blown PC when they're connected to an external monitor (though Windows 10 for phones won't be released for a few more months).

In tablet mode, the Start menu expands to fit the full screen, as do Windows apps. If you'd like to force a switch, the new Action Center has a dedicated "Tablet Mode" button that you can enable or disable at will.





(MOSTLY) UNIFIED SETTINGS

Windows 8 split system settings down the middle, dropping some in the traditional Control Panel and some in the Metro-fied PC Settings app—forcing you to check in two separate places if you needed to tweak things. Windows 10 *mostly* does away with that irritation thanks to its options-stuffed new Settings app, though you'll still need to wade into the still-there Control Panel to tinker with some obscure power user options.

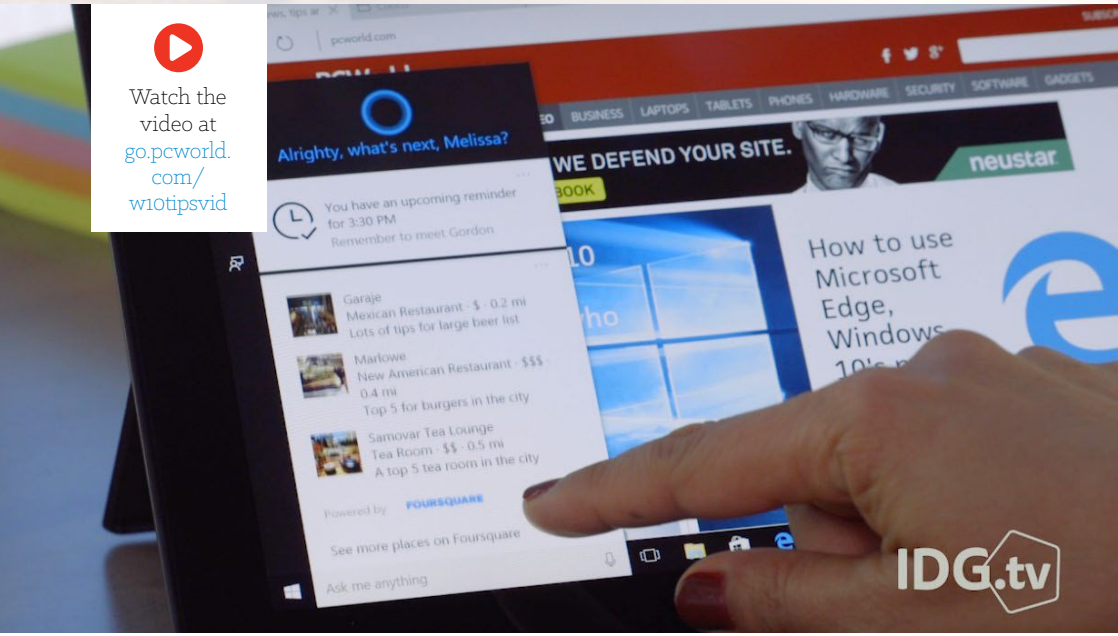
BUT WAIT, THERE'S MORE!

These 10 awesome features are only the tip of what's new in Windows 10. Check out our mammoth compilation of the best Windows 10 tips and tricks for info on how to make the OS your own. Finally, one of Windows 10's most major changes can't be overtly seen whatsoever: The new DirectX 12 graphics technology promises to revolutionize PC gaming.

5 must-know Windows 10 tips and tricks

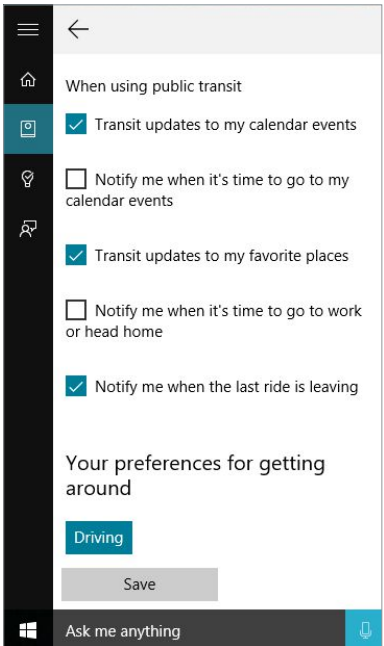
Dive right into some of Windows 10's coolest new features with these tips for the Start menu, Cortana, virtual desktops and more. BY BRAD CHACOS

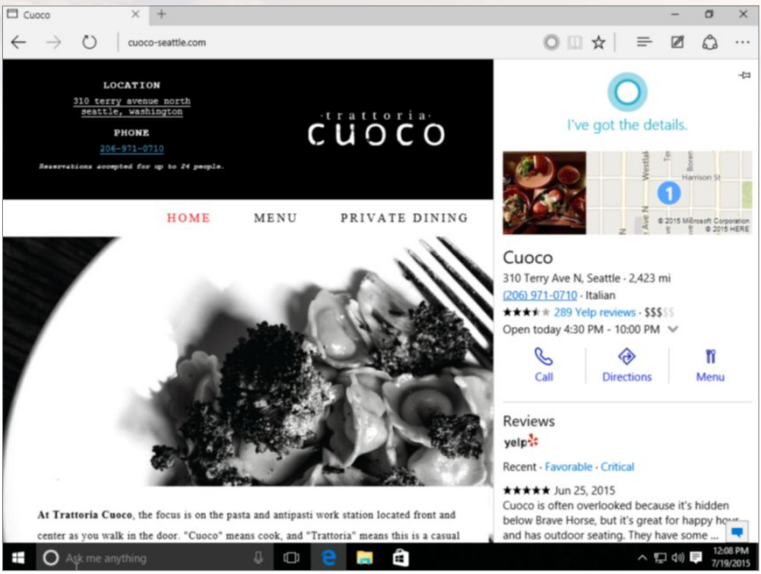
WINDOWS 10 IS finally here, and Microsoft's latest, greatest operating system is chock full of tricks and tweaks that can enhance your experience—and tailor Windows to your personal needs. Here's a look at five of the most useful.



MAKE CORTANA MORE USEFUL

The Cortana digital assistant is one of Windows 10's highlight new features, but she truly shines if you take the time to tell her your interests. Open Cortana and select the Notebook icon in her left-hand pane. From there, browse each section to tailor your preferences for specific news topics, alerts, and even the types of restaurants you like. You'll be glad you did.





TAP INTO CORTANA'S SMARTS WHILE YOU'RE BROWSING

Did you know Cortana's built into Windows 10's new Edge browser, too? You may have missed it, because the notification alert when she's available is pretty subtle.

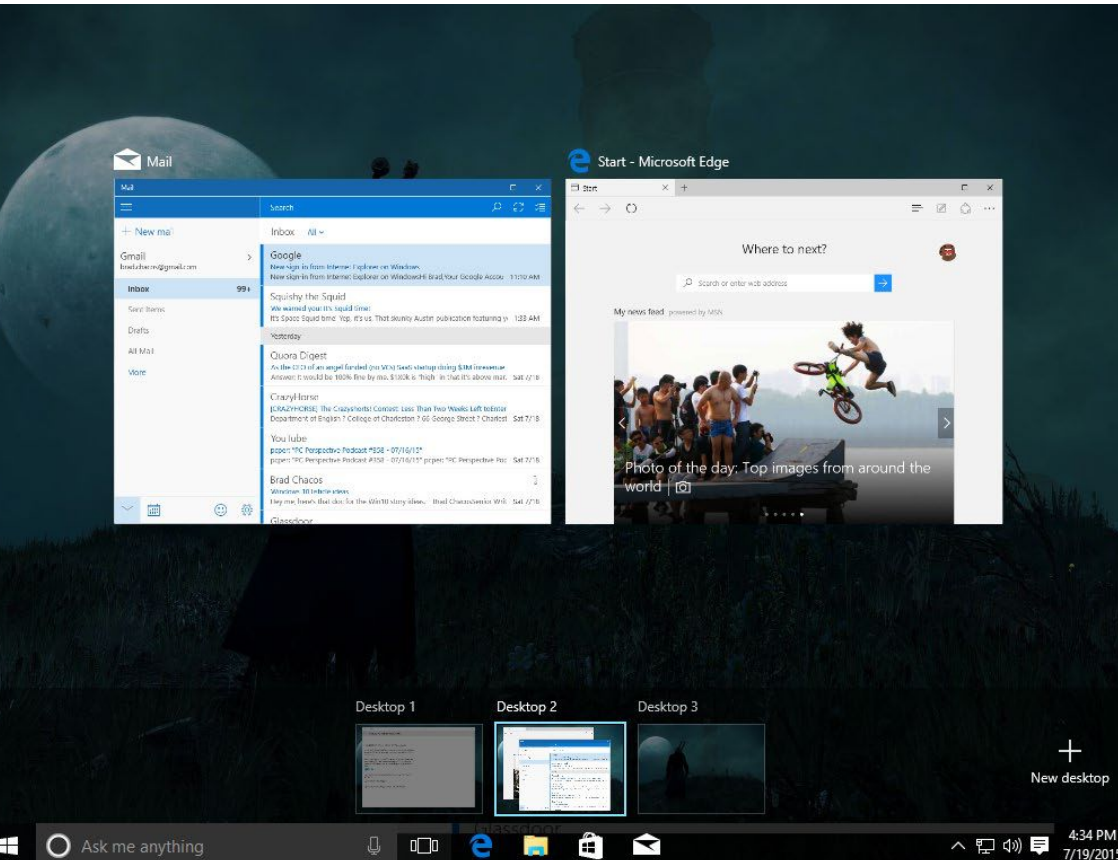
When you're surfing the web, Cortana will sometimes pipe up when she has helpful supplemental info. For instance, she may offer driving directions and Yelp review information when you're browsing a restaurant's site. Look for a blue Cortana icon with "I've got more info" to appear in the browser bar when it's available. There's no chime or in-your-face pop-up beyond the easy-to-miss text, however—so pay attention!

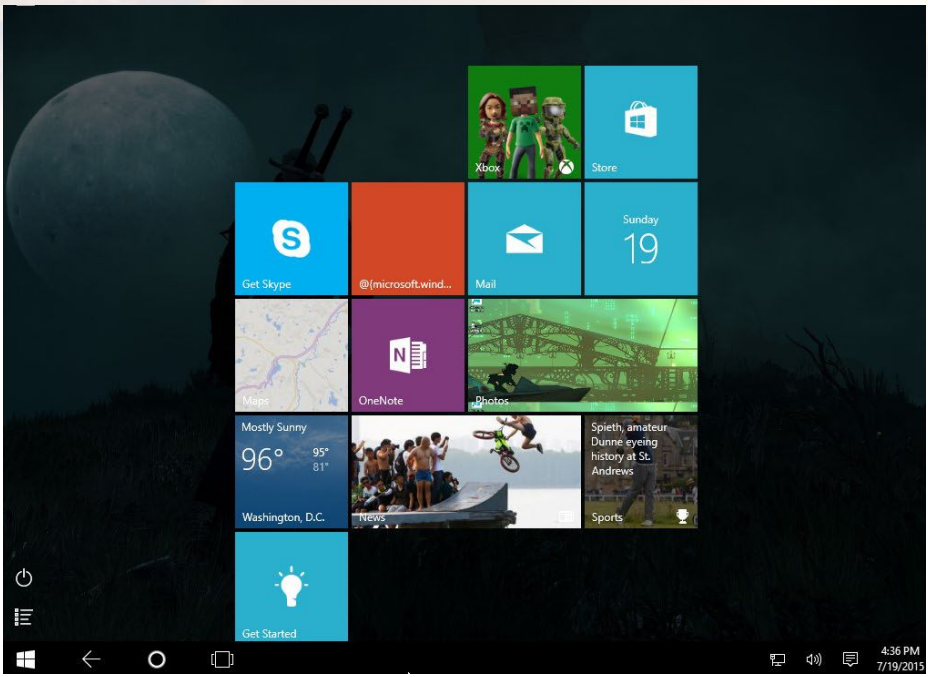
Try it for yourself by browsing to the Trattoria Cuoco restaurant's website.

MASTER VIRTUAL DESKTOPS

Rejoice, fellow geeks: Multiple, virtual desktops have finally made their way to Windows!

The Task View button in the taskbar will show all your created virtual desktops—you can seemingly summon as many as your hardware can handle—as well as windows showing the software currently open in your active desktop. You can move open windows from one desktop to another by opening Task View and simply dragging-and-dropping the program onto another virtual desktop. Dragging a program over to the New Desktop button will (you guessed it) create a new virtual desktop to house your open window.





BRING BACK METRO

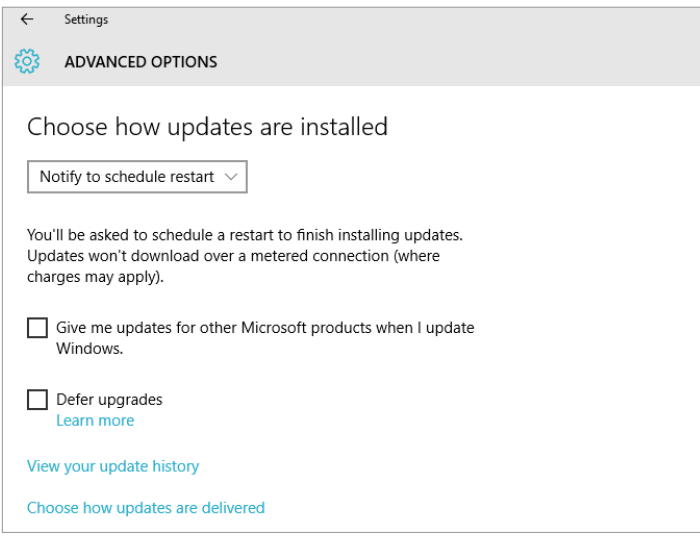
Does the return of the desktop make you yearn for Windows 8's Start screen? (You monster!) You can force Windows 10 to use the touch-friendly interface—replete with full-screen Windows Store apps—by opening the Action Center in the lower-right corner of the taskbar, then selecting Tablet Mode. (Don't worry, it looks less janky on actual PCs than it does in the low-resolution virtual machine I used to snag this screenshot.)

Search for "Tablet Mode settings" in Cortana for more options, such as the ability to enter Tablet Mode by default when Windows boots, or to shift to it when you're using a 2-in-1 device as a tablet. (Microsoft calls that Continuum.) If you like the Start screen-like effect but still want to use the rest of the traditional desktop, you can simply expand the Start menu to full-screen using the button in its upper-right corner.

SCHEDULE YOUR RESTARTS

Last but certainly not least, Windows 10 won't allow you to skip updates this time around, but it tosses enthusiasts a bone by finally—FINALLY—including an option to schedule *exactly* when those mandatory restarts happen.

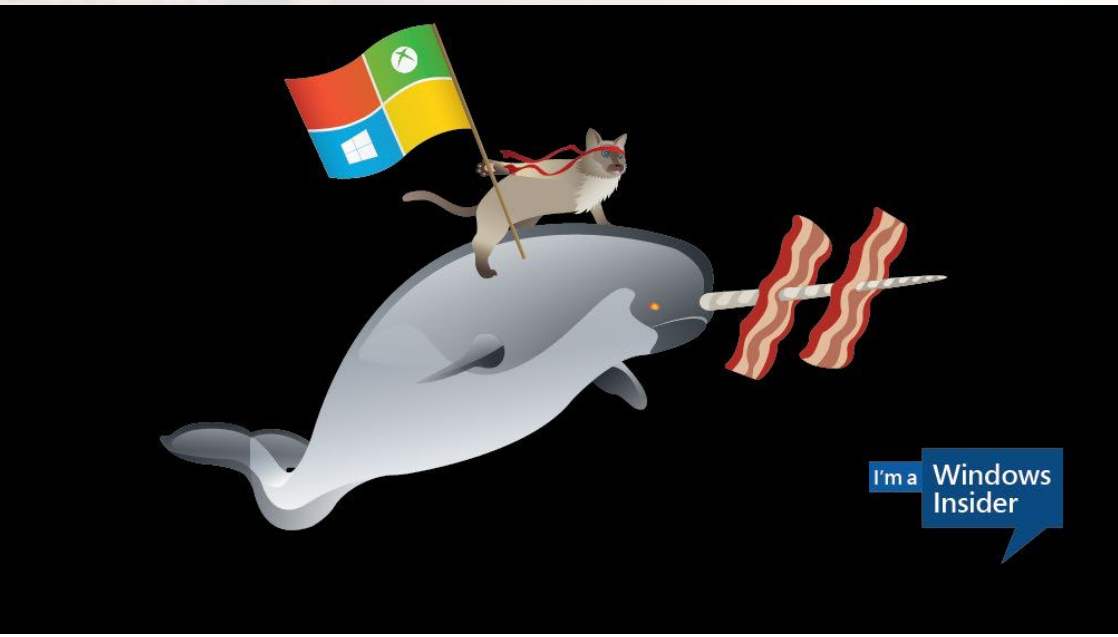
Once an update's been downloaded, head into the Windows Update section of the Settings app's "Updates & Security" section to tell your PC when it's got a greenlight to reboot. If you head into the advanced options you can tell Windows to notify you to schedule a restart whenever an update's ready to rock.



If you want to save some bandwidth, you can also download Windows Updates to a single machine in your house, then use it to spread the patch to other PCs in your network. To do so, head to the same Advanced Options menu for Updates & Security, then click on "Choose how updates are delivered." By default, updates are available either way—via direct download to an Internet-connected PC, or via other PCs on your network—but you can change it to accept Windows Updates only if delivered via your local network. Be sure not to enable the option on the PC you'll use to download the initial update!

The 10 best hidden features of Windows 10

Windows 10 isn't all Cortana and the Start menu, you know. Follow the ninjacat to find the best stuff under the hood BY MARK HACHMAN



FOLLOW THE NINJACAT TO THE BEST FEATURES

Windows 10 has officially been unleashed upon the world, but Insiders have lived with the operating system for months and know things the newbies don't. Insiders have even created their own mascot, a ninjacat with a variety of trusty steeds, to symbolize their pioneering, adventuresome spirit.

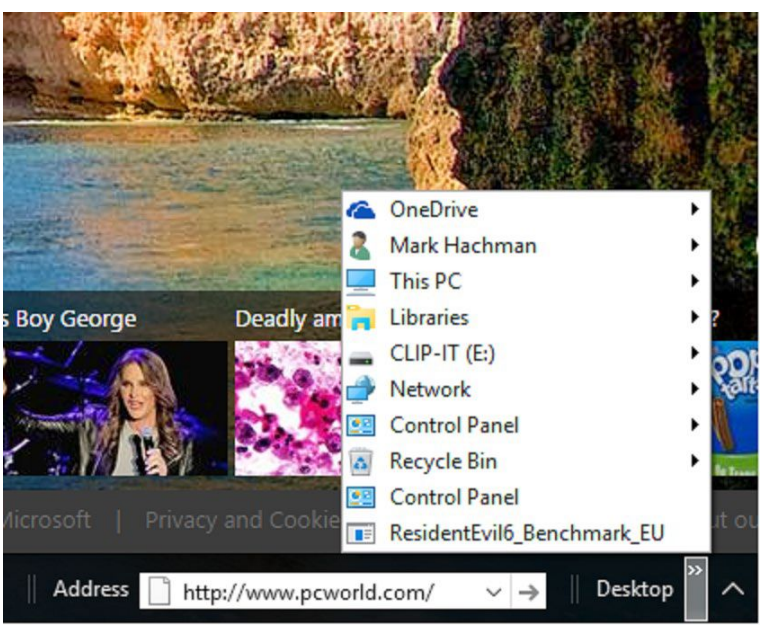
We've been playing with Windows 10 for awhile now. Let's follow the ninjacat deep within the bowels of Windows 10, where narwhal guides are eager to point out tasty bacon features you might otherwise miss. We think these ten are some of the most useful, productive, *hidden* gems you're going to find. Well, except for number five. You're probably going to think that one's a bug.

PUT THE WEB (AND DESKTOP) IN YOUR TOOLBAR

You can make your desktop toolbar even more powerful with a few tweaks in a configuration menu, adding a Web address bar and desktop links.

Click the toolbar, and right-click in any unused space you can find. Select the "Toolbars" tab. There, you can check off one of three options: Address, Desktop, and Links. With the address bar, you can quickly type in a Web site and launch your browser. Links allows you to do the same, but via saved bookmarks. Instead of launching your desktop directly, the Desktop link brings up folders and other locations on your PC.

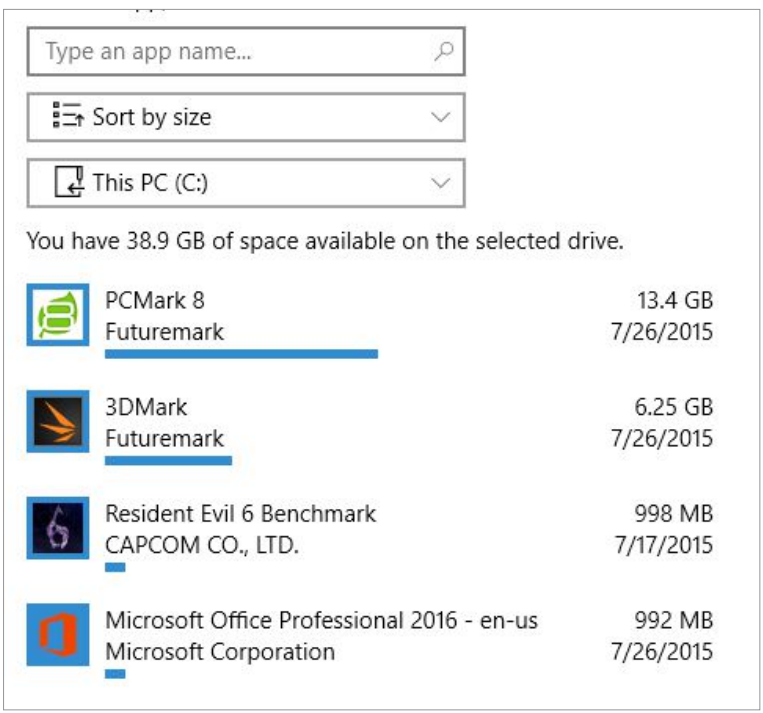
You might not want the extra clutter, but it can be pretty handy.

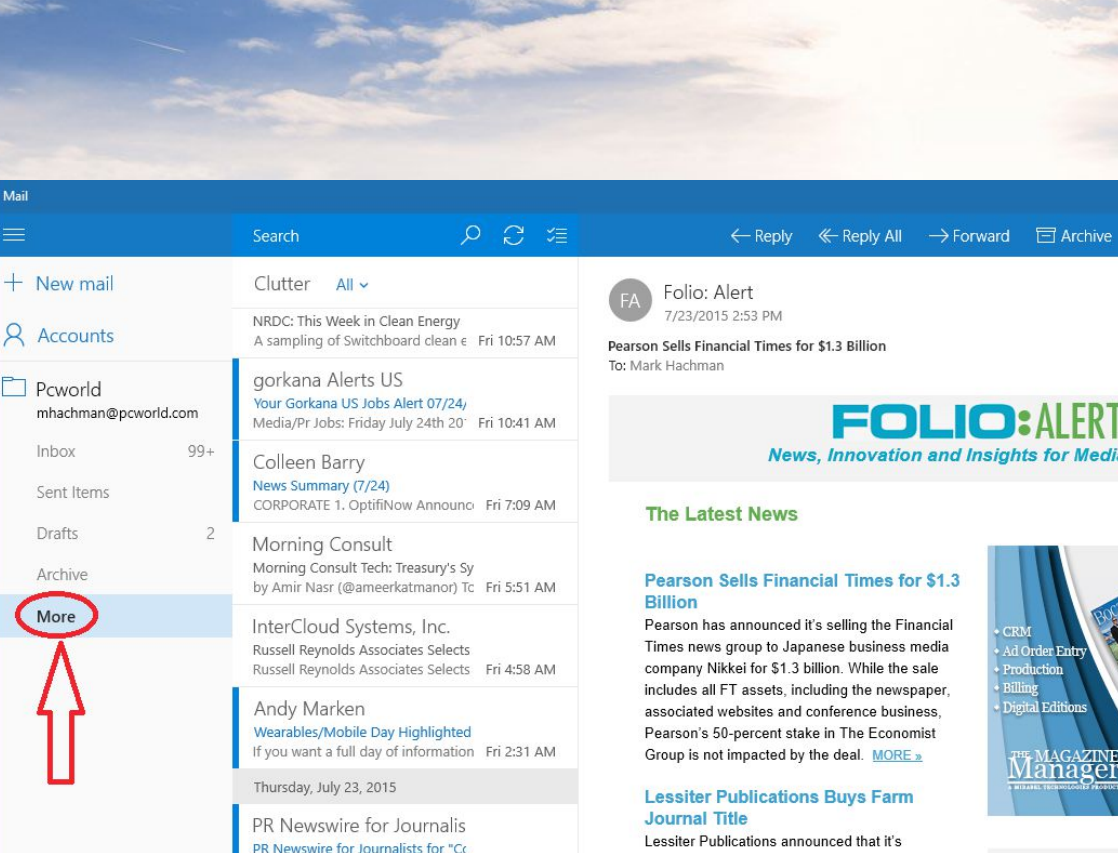


WHICH APPS TAKE UP THE MOST ROOM?

Hidden away within Settings → System → Storage is a list of the drives on your PC. Click a drive, and you'll receive a handy breakdown of how much space apps, photos, videos, and more take up on that particular drive. Click each of *those* subcategories to get even more detail.

We think you'll find the list of apps the most useful of all of these, especially as that SSD gets clogged. It's a great way to keep tabs on what's using up all of that space so you can quickly decide which ones get the heave-ho.

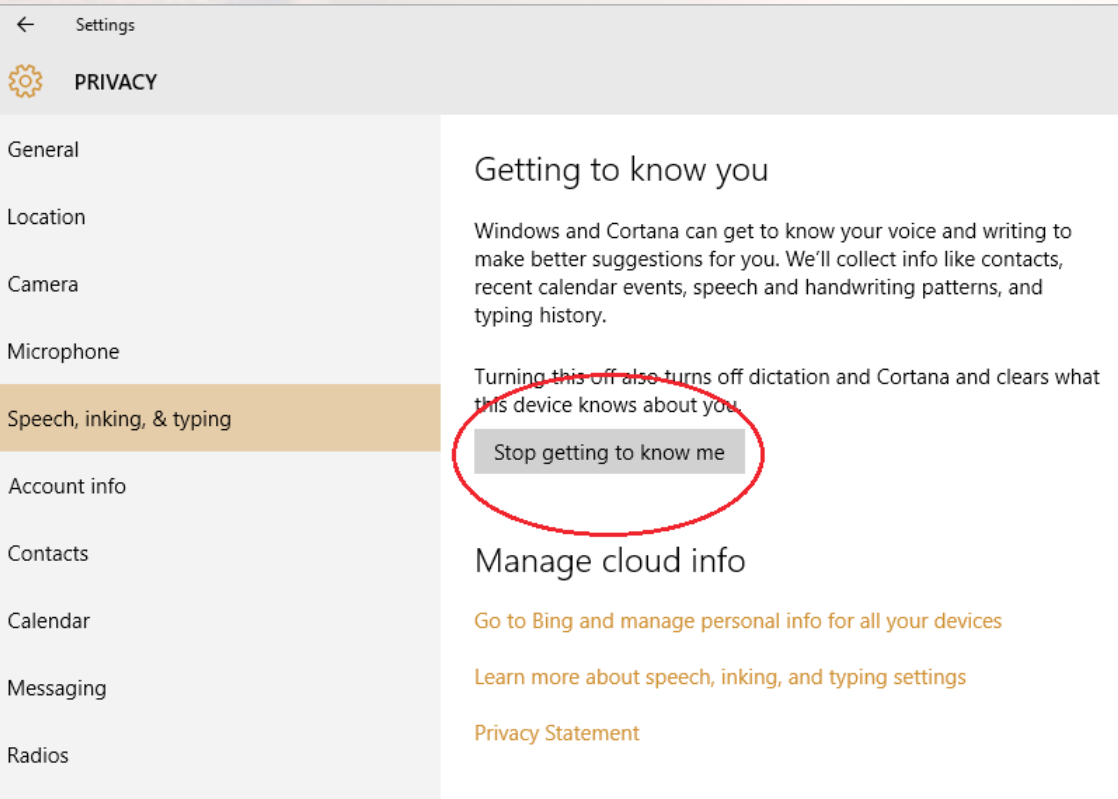




MAIL'S HIDDEN CLUTTER FEATURE

Microsoft filters out spam, but the company also places email that you probably don't care about in a "Clutter" folder, a feature that is now included in the Windows 10 Mail application. Clutter is not quite spam, but not quite relevant, either.

The Clutter folder hides out in the "More" subheading in Mail—where a number of other folders hide as well, incidentally. If you're worried that a critical email may be lost in Clutter, check often as you first use it, and drag anything important back into the Inbox. Clutter will learn which email is important over time. Microsoft will also email you periodically about what's gone into the Clutter folder.



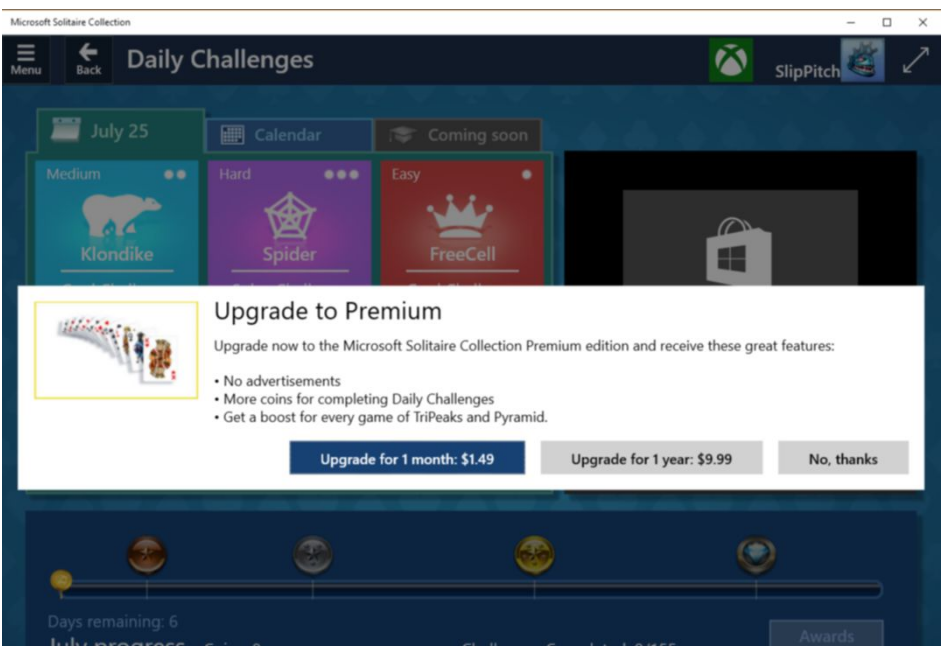
GO AWAY, CORTANA! I'M NOT YOUR FRIEND!

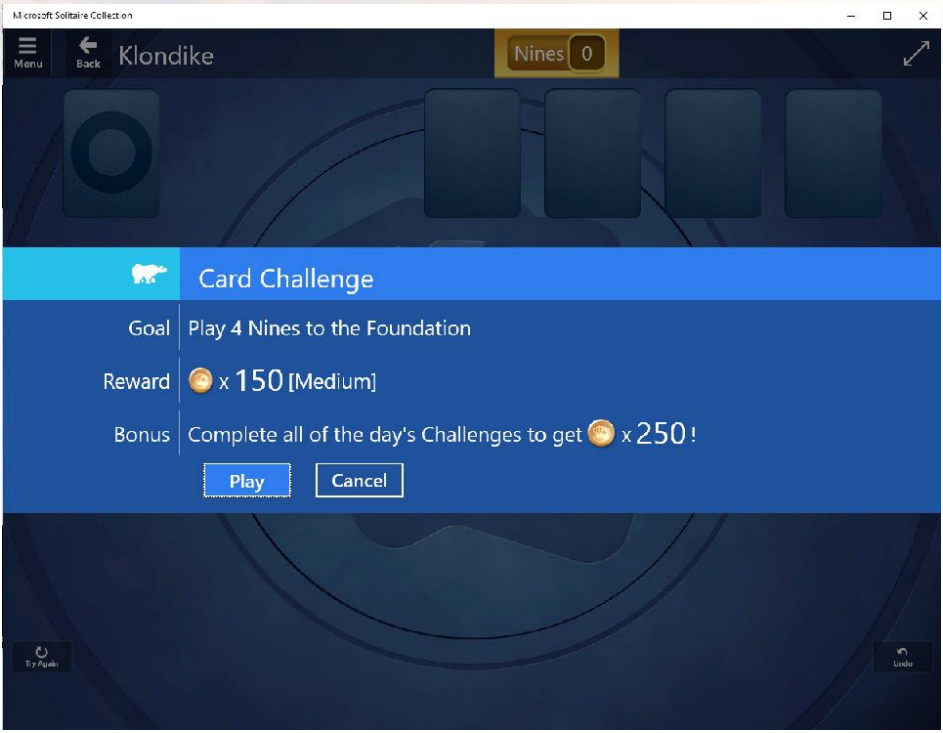
Yes, there's a toggle to turn off Cortana. And you'll probably want to ensure your information is erased from the Microsoft cloud, if you decide you want Windows 10 to preserve your privacy wholesale. But if you just want to erase Cortana's memory *and* turn her off, go to *Settings* → *Privacy* →*Speech, inking & typing*, and click the big gray button that says "Stop getting to know me."

WHOA -- WE'RE SUPPOSED TO PAY FOR SOLITAIRE?!

Solitaire has been one of those idle pursuits for people with a lot of time on their hands—receptionists, bored office workers, you know the type. But for some reason Microsoft now thinks that Windows 10 users will still pay, *monthly*, for premium Solitaire. Yes, Microsoft tried out premium Solitaire features in Windows 8 as well...but they're back. And they still only pop up when you try to access the daily Challenges. (An M&M's candy video ad popped up when I tried them out, just to assure me that yes, Microsoft is serious.)

Technically, this is a "feature." But we've stretched the definition of the term for this one.





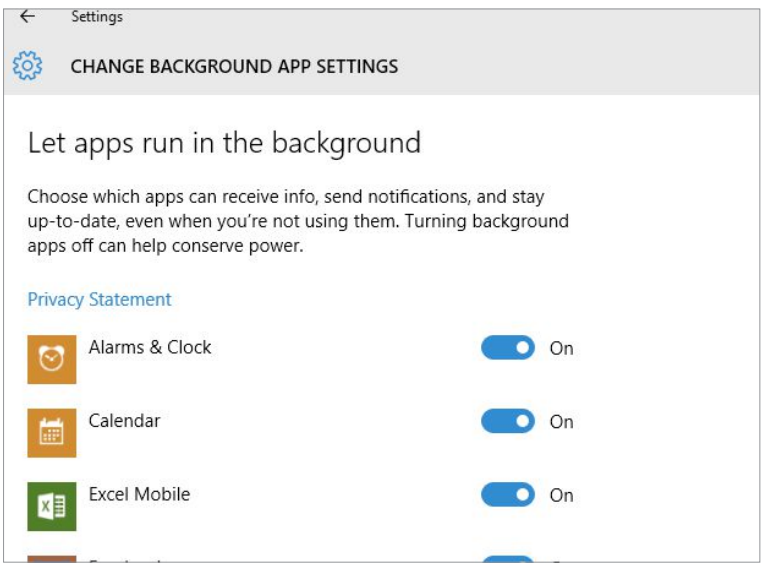
SOLITAIRE CHALLENGES!

Speaking of Solitaire, if you manage to make it past the ads in Windows 10's Microsoft Solitaire Collection app, check out the Daily Challenges. This is *serious business*.

Not only is someone at Microsoft coming up with these things, you get special e-currency (that does what?) as a reward for completing them. And in the future, there will be *leaderboards*. Big things are coming, we tell you.

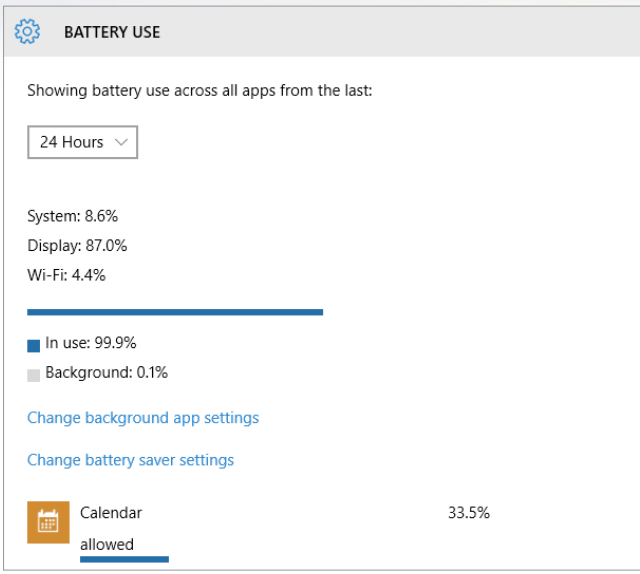
BACKGROUND APP MANAGER

Another carryover from Windows 10 Mobile, the background manager allows you to tweak the settings for apps that run in the background. You might think, nah, why bother? Well, do you really need all the hidden ads in your Web browser connecting to the Internet when you're not actively using it? It's something to keep in mind.



BATTERY USE/BATTERY METER

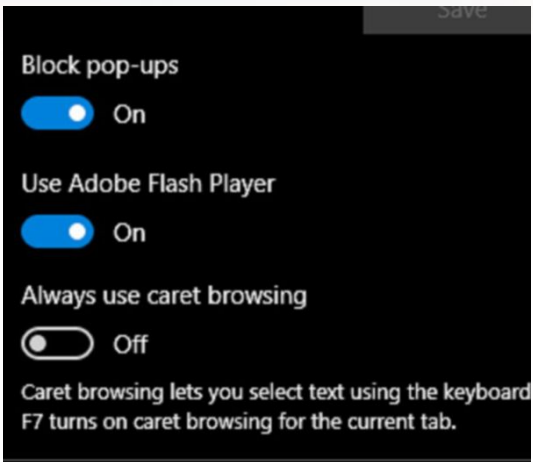
With Windows 10 running both on computers and on phones, we're seeing a lot more "mobile aware" applications running in Windows 10. Case in point: the battery management applications, hidden within Settings →System → Battery saver.



Yes, there *is* a battery saver mode, but that's not the most useful tool. And no, it's not the hidden battery meter (with an estimated time to battery rundown), either—the first app I thought of when writing this piece, incidentally. The only reason I can think that Microsoft hid it in the Settings menu is that it doesn't actually work—it spent five minutes trying to calculate my remaining battery life before I gave up.

No, I like the breakdown of battery use by apps and device. Not only can you see what really sucks down power in your system (the display, by and large), but it's an insightful look into which apps are battery hogs, too.

EDGE'S CONVENIENT ADVANCED OPTIONS



Based on our Windows 10 review, you might think that I hate Edge. I don't. In fact, one of the most convenient things about it is a settings menu that allows you to turn on or off several useful features—no muss, no fuss.

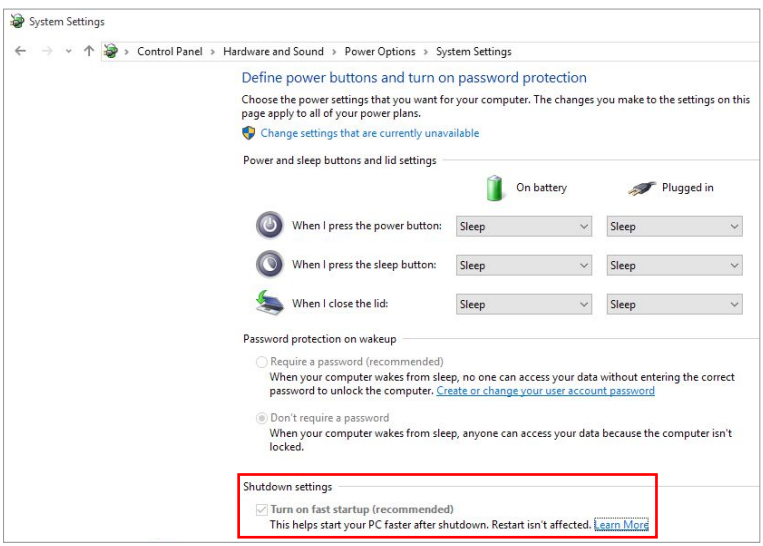
Dive into the Edge settings menu via the "ellipsis" menu to the upper right, then *Settings*, then all the way down to the *Advanced Settings* menu. There, you'll find these nice little options, which you may tweak at will. (Yes, I'll be turning off Adobe Flash.)

FAST STARTUP

While this may be old hat to Windows 8 users, Windows 7 users are in for a treat. Windows 10 should come pre-configured to enable fast startup, where certain system files are written to a master file, resuming them rather than restarting the entire system. Microsoft implies that this helps cut boot times to about 60 percent of where they were.

Combine fast startup with a SSD, and, man, reboots are *fast*.

Those are our ten favorite hidden Windows 10 features, but there's a lot more to this new operating system.



3 tips for a hassle-free Windows 10 upgrade

Windows 10 is coming soon, and it helps to be prepared. Here are three things you can do to be ready for your Windows 10 upgrade. BY IAN PAUL

The wait is over.

Microsoft started rolling out Windows 10 upgrades to Insider members, followed by users who've made a reservation, and then the general public. If you've got a Windows 7 or 8.1 PC, you're eligible for a free upgrade, and there's a lot to love about Windows 10, from new features to under-the-hood tweaks to a much-needed interface revamp.

Before you upgrade, however, there some things you can do to make your migration to the next chapter in Windows history as seamless as possible.

BACK IT UP!

Yes, it's boring and predictable, but backing up your data also happens to be the most important step you can take before upgrading to Windows 10. Even if you have all your data in OneDrive or another cloud storage service, having a complete local backup is much easier to deal with should the worst happen.

This is also a good time to think about your backup strategy. The basic rule of thumb is to have three copies of your data: the one on your machine, a local backup on an external drive, and an offsite backup. The best way to achieve your offsite backup is to use a paid cloud service like Backblaze or Carbonite. Many services offer an encryption option where only you have the key, but if you don't trust the mainstream services, there's also the encryption-focused SpiderOak.

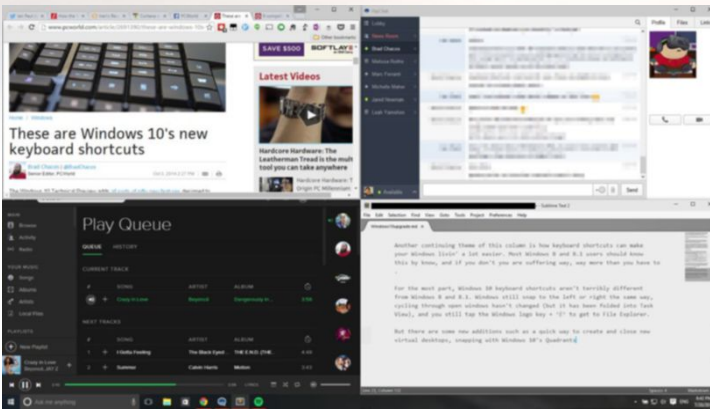
KNOW YOUR NEW STUFF

Windows 10 isn't just a return to something that more closely resembles Windows 7. Yes, there's a Start menu, and the Start screen is more or less banished, but there's so much more than that. You've got the smart, sassy Cortana personal assistant, Task View (a.k.a. virtual desktops), the new Edge browser, windowed modern UI apps, modern Office, and—if you've got the right hardware—Windows Hello.

GET ACQUAINTED WITH THE SHORTCUTS

A continuing theme of the Hassle-Free PC column is how keyboard shortcuts can make Windows livin' a lot easier.

For the most part, Windows 10 keyboard shortcuts aren't terribly different from Windows 8's keyboard shortcuts. Windows still snap to the left or right the same way, cycling through open windows hasn't changed (but it has been folded into Task View), and you still hit the Windows key + E to get to File Explorer.



Quadrants in Windows 10.

But there are some new additions, such as a quick way to create and close new virtual desktops, snapping with Windows 10's Quadrants, and working with Task View. Check out our primer on the new Windows 10 keyboard shortcuts (go.pcworld.com/w10keycuts) for more details.

In addition to keyboard shortcuts, Windows 10 also brings some new trackpad gestures to the table that are similar to what you'd find on a Mac. For example, you can use a three-finger downward swipe to show the desktop, or move three fingers upward to view all your open windows again. Microsoft has a quick rundown of all the new gestures on its site (go.pcworld.com/w10gestures).

SITTING PRETTY

And don't forget, now is not the time to run out and buy a new PC. Upgrade-eligible PCs should handle Windows 10 just fine whether you're running Windows 7 or 8.1 (for the most part). Plus, we've got a primer on how to speed up that aging PC (go.pcworld.com/oldpc) to keep it running longer.

How to install Windows 10 on your PC

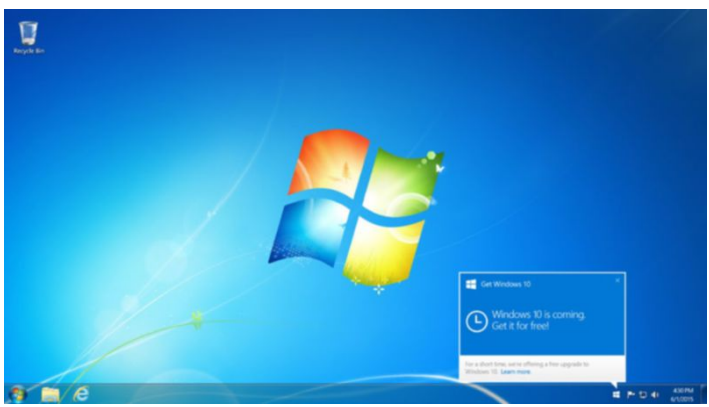
We'll walk you through what you'll need to do to upgrade to Windows 10. BY MARK HACHMAN

You've read the review, pored through the tips and how-tos, and have waited breathlessly for the day that you can download Windows 10.

So how do you do it, exactly? We've got you covered.

Before you do anything, however, we're going to give your our standard advice: back up your data. Microsoft will give you the option of wiping your files at various stages during the process. Whether you go that route or not, make sure you've backed up key documents and other data to OneDrive, a USB key, or something else—just in case.

There are three primary ways to obtain Windows 10: either buy a new PC with Windows 10 preloaded, buy a license key to Windows 10 online, or upgrade an existing Windows 8.1 or Windows 7 PC. We're going to ignore the first option and focus on the latter two, which we'll consider to be essentially the same scenario.

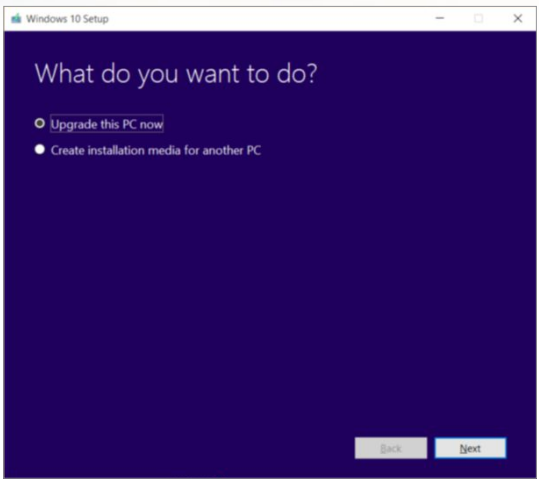


Let's assume that you're upgrading an older PC, then. If you own a qualifying Windows PC, you had the option of "reserving" a free copy of Windows 10, an offer which will expire a year from now. If you did reserve a copy, chances are that your PC has downloaded a copy of Windows 10 in the background. At some point, Windows 10 will invite you to begin the upgrade process.

That's the simplest option, especially if you don't have any immediate, desperate need to download Windows 10. Let Microsoft push Windows 10 at its leisure, and it will end up in your hands eventually.

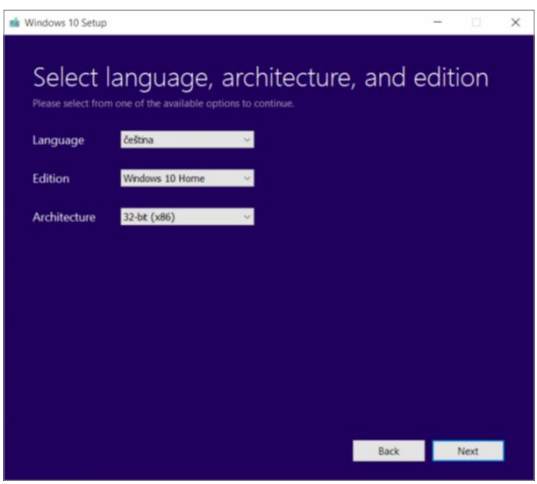
But there's a second option, one that's a bit more fun. And that's to download Windows 10 *right now*.

THE NEW WINDOWS MEDIA CREATION TOOL SHORTCUT



Traditionally, Windows users would upgrade by inserting an installation CD or DVD into their PC. Over time, users became trained to burn their own .ISO files on their own media. And starting with Windows 8, Microsoft offered the option of restoring a Windows installation from an ISO file stored on a DVD or even on a flash drive. With the new Windows 10 media creation tool (go.pcworld.com/w10iso), you don't even need to take that step—it creates a bootable flash drive that you don't need to futz with. Just make sure the USB drive's at least 3 GB in size.

On the media creation tool page, select the proper version—check the system settings to double-check whether you're running a 32- or 64-bit OS. Then download and run it. Though simple, the tool has a number of lovely features—including the ability to simply upgrade the PC. Yes, it's true—you don't *need* the Windows 10 reservation, as the tool will simply jump you to the head of the line. Even better, you can select whether you want Windows 10 Home or Windows 10 Professional, either 32-bit or 64-bit versions, and even the installation language.



Note that you can use this tool

not only to upgrade Windows 7 or Windows 8.1 PCs, but also Windows 10 PCs with older builds. Don't get sneaky, though. You won't be able to score a free upgrade to Windows 10 Professional if you existing license doesn't support it. Here's a recap of who gets what:

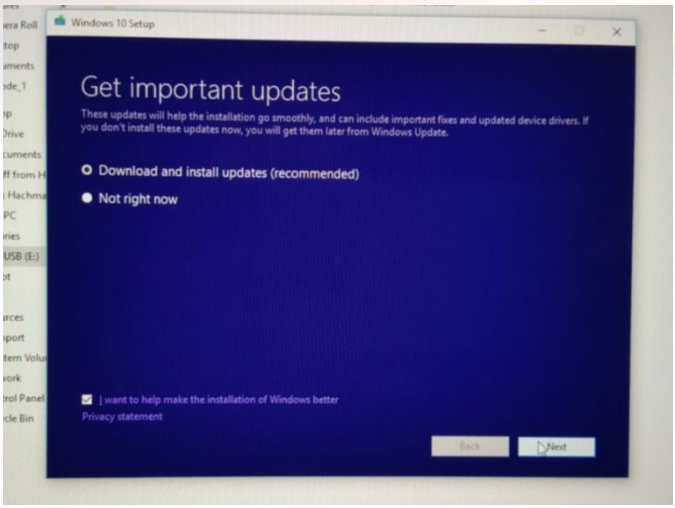
Host Operating System Edition	Windows 10 Edition
Windows 7 Starter Windows 7 Home Basic Windows 7 Home Premium Windows 8/8.1 Windows 8.1 with Bing Windows 10 Home	Windows 10 Home
Windows 7 Professional Windows 7 Ultimate Windows 8 Pro Windows 8.1 Pro Windows 8/8.1 Professional with Media Center Windows 10 Pro	Windows 10 Pro

You can try a clean installation by booting directly from the USB key or DVD; when you do so, you have the option of keeping your files or wiping out everything. However, I ran into an issue where Windows claimed my disk partitions were improperly organized and refused to let me go further. I tried an in-place installation instead.

From there, however, the installation proceeded smoothly. Make sure you allow Windows to download relevant drivers as the installation proceeds. You'll need to agree to a license agreement, and then the installation process will begin in earnest.

You may run into a situation where Windows asks for a license key. If you're upgrading from a licensed copy of Windows 7 or Windows 8.1, you can click the tiny "skip" option; Microsoft will dig out the license key from the depths of your machine. If this is a brand-new installation, of course, you'll need to enter the proper key.

Microsoft encourages you to upgrade to Windows 10 first, and *then*—if you so choose—wipe the drive and reset Windows to improve performance. You can do in the *Settings → Update & Security* menu. There, you'll have the option to keep your personal files and



reinstall Windows, remove all your files and settings, or perform a factory reset, which will probably bring the PC back to Windows 8.1. (*Editor's Note: We tried it on an HP Spectre x360 that came preinstalled with Windows 8.1, it resets to 8.1.)*

That same menu offers a chance to roll back from Windows 10 to Windows 8.1, as well. That option expires a month after you upgrade to Windows 10. Are you still having problems upgrading to Windows 10? Try Microsoft's Windows 10 support page (go.pcworld.com/w10support), complete with chat and phone options.

One final note: you can upgrade an earlier Windows 10 Insider build to the "RTM" version using the tool. But doing so will take you off of the Insider track. If you want to hop back on to enjoy further beta upgrades, you can enable it in the Settings.

But downgrade to Windows 8.1? Why? Windows 10 is terrific, and well worth the wait.

Plant a Billion Trees
Join The Nature Conservancy to plant a billion trees, one tree at a time, in the fight to end climate change at plantabillion.org
The Nature Conservancy
Protecting nature. Preserving life.™

How many light bulbs
does it take
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It's no joke: climate change is a critical issue for all life on Earth. But can the actions of one individual really make a difference? Visit nature.org to calculate your impact on the world around you and learn about steps you can take to make the world a better place for us all.
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NEWS

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Firefox sticks it to Microsoft, redirects Cortana searches in Windows 10

Users who set Firefox as their default browser can use Cortana web search with whatever search engine they want, instead of just Bing.

BY JARED NEWMAN

After blasting Microsoft's attempts to set Edge as the default browser (go.pcworld.com/default) in Windows 10, Mozilla is enjoying some sweet revenge by steering Firefox users away from Bing.

With the newly released Firefox 40 (go.pcworld.com/ff4), users no longer have to use Bing for web searches from Cortana on the Windows 10 taskbar. Instead, Firefox will show results from whatever search engine the user has chosen as the default.

Using Firefox isn't the only way to replace Cortana's Bing searches with Google or another search engine. But Firefox is currently the only browser that does so without the need for third-party extensions. (It wouldn't be surprising, however, if Google follows suit.)

The story behind the story: Mozilla may be responding to Microsoft's own attack on third-party browsers in Windows 10, as the installation process sets Edge as the default browser for anyone who chooses Express settings. This resulted in a scathing open letter (go.pcworld.com/scathing) from Mozilla CEO Chris Beard, who said the move was a "dramatic step backwards" in respecting users' choices. While Microsoft is clearly using Windows to establish Microsoft services, competitors like Mozilla aren't going to let that happen without a fight.

What else is new in Firefox 40

Search engine drama aside, Mozilla is embracing some aspects of Windows 10. The new browser includes "thoughtful tweaks" to the user interface, with bolder icons that are more in line with the look of Microsoft's new operating system. Menus also take up a little less space than previous versions, leaving more room for the actual web content.

The other big change is creating a controversy of its own: With Firefox 40, Mozilla is starting down a path of mandatory security checks for browser extensions. As of the latest release, users will see a warning if they try to install an unsigned extension, and Firefox 41 will block these extensions outright unless users trigger an override in the

browers's config menu. In Firefox 42, the override will go away, and all unsigned extensions will be blocked.

Mozilla says the change is necessary to protect users from extensions that inject advertisements or malicious scripts, and tracking these malicious extensions from outside the official add-on repository (addons.mozilla.org/en-US/firefox) has become too difficult.

The other big change is creating a controversy of its own: With Firefox 40, Mozilla is starting down a path of mandatory security checks for browser extensions.

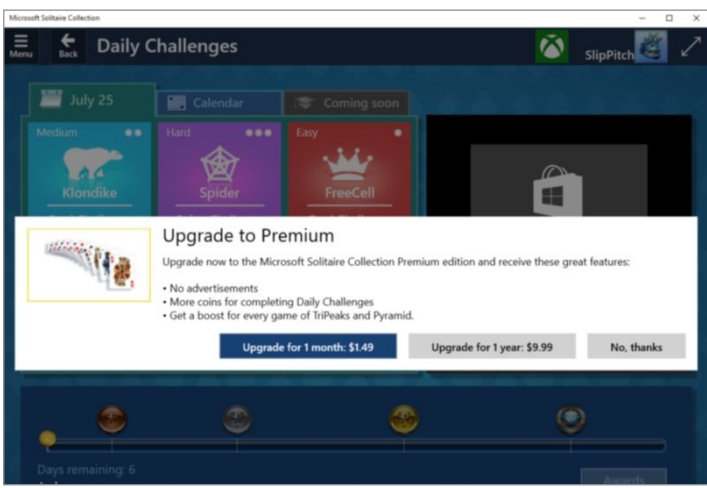
However, the comments in Mozilla's blog post on the changes (go.pcworld.com/mozilla) are largely negative. "It is essential that I continue to be able to use add-ons that may no longer be supported and which may not get the signing treatment," wrote one user. "Therefore, I strongly request that you make it possible for advanced users to adjust about:config settings to keep current functionality."

It seems, then, that even Mozilla believes the freedom to make your own choices has limits.

"SURE, AT FIRST I WAS A LITTLE TAKEN ABACK BY THE WHOLE PEEING STANDING UP THING. BUT I TAUGHT HIM TO THROW A STICK AND NOW HANGING OUT WITH HIM IS THE BEST PART OF MY DAY."
–EINSTEIN
adopted 12-09-10
A PERSON IS THE BEST THING TO HAPPEN TO A SHELTER PET
adopt
theshelterpetproject.org
Ad Council
THE HUMANE SOCIETY OF THE UNITED STATES
FUND

Microsoft wants you to pay for Solitaire, again, in Windows 10

BY MARK HACHMAN

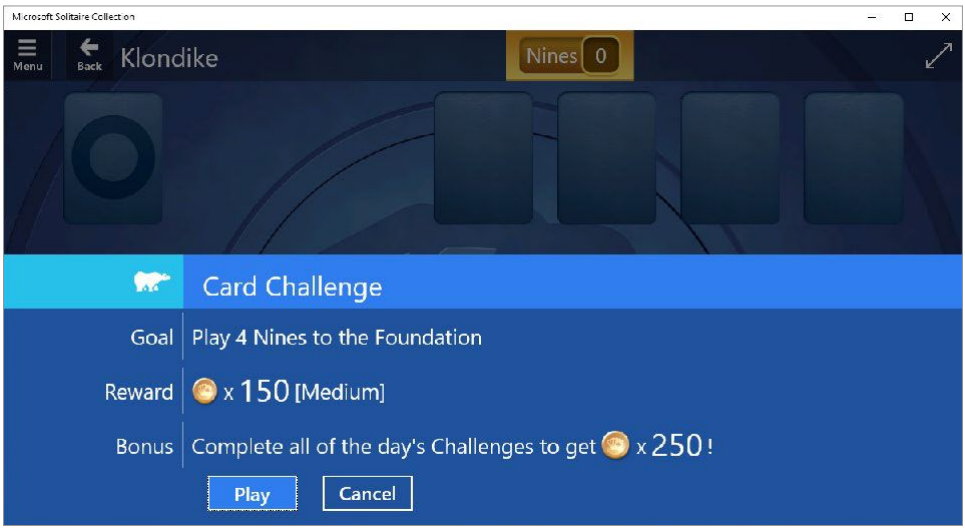


NETFLIX CHARGES YOU $7.99 per month for thousands of streaming movies and TV shows. Spotify, Slacker, Rdio, and others charge about $10 per month for unlimited music. And Microsoft? They want you to pay $1.50 per month to remove ads from Solitaire.

Deep within Windows 10 is one of the odder things you'll ever find inside a Microsoft product: Microsoft Solitaire Collection Premium Edition. No, you don't *need* it to play Solitaire. But launch the Microsoft Solitaire Collection app within Windows 10 and you'll see a splash screen that asks you to "upgrade to Premium."

To be fair, Microsoft made the same offer for Solitaire Premium Edition within Windows 8.1. There, however, the app was found within the Microsoft Store (at least on the PCs I've owned). On Windows 10, Solitaire has enjoyed a much more prominent role within Microsoft's new operating system, and has been part of the builds users have been able to download in advance of the launch.

So what does $1.50 per month buy you? As the splash screen notes,



that fee will strip ads from the Solitaire experience; add more (valueless) coins to the rewards for completing Daily Challenges; and get a "boost" for every game of TriPeaks and Pyramid, two versions of Solitaire found within the app.

To Microsoft's credit, there are no distracting banner ads within the Solitaire playfield itself, just an annoying full-screen video advertisement that appears when the Challenge options are loaded. Granted, there is absolutely no reason for ads to appear within Solitaire itself, unlike some mobile apps. Any advantage can be welcome in Solitaire—having played TriPeaks for 15 minutes (I was working, honest!), I cleared a board just by the skin of my teeth. Apparently Microsoft thinks others will trade the price of a small coffee for an easier time of it on their lunch break.

Why this matters: Honestly, if you want to pay for more energy in Farmville or an upgraded weapon in some online shooter, it's your business. But it does seem a bit odd that Microsoft can make Windows 10—an entire operating system, mind you—a free upgrade, while asking you to pay to remove ads. If this is the future of Windows as a service, count me out.

Microsoft makes it official: Windows 10 will receive security fixes for ten years

The company will offer "mainstream" support for its upcoming OS until 2020 at the earliest, and "extended" support until at least 2025.

BY NICK MEDIATI

BACK IN JANUARY, Microsoft first stated that Windows 10 would be free for the "supported lifetime of the device" you install it on. That wording caused some confusion: What the heck is a device's "supported lifetime," anyway? But we're now getting a better idea of what you can expect in terms of Windows 10 support.

According to an updated support document (go.pcworld.com/winupdate) published to Microsoft's site, the company will offer "mainstream support" for Windows 10 through October 13, 2020, and "extended support" (that is, how long you can expect Microsoft to

issue Windows 10 security fixes) through October 14, 2025.

For those keeping score at home, the five-year mainstream support and ten-year extended support periods are more or less in line with the support cycles for Windows Vista, 7, and 8, so you won't be cut off early, support-wise, with Windows 10.

If your computer is no longer supported by its manufacturer, you should be good to go as well. According to *ZDNet*'s Ed Bott (go.pcworld.com/bott), you'll be able to install Windows 10 "even on devices where the OEM does not officially support Windows 10 and has no plans to do so." Put another way, you'll still get Windows 10 software updates from Microsoft, even if your PC's manufacturer no longer offers support for your computer.

Even if your computer is no longer supported by its manufacturer, you can get Windows 10 updates.

Microsoft released Windows 10 for PCs and tablets to the masses on July 29th, and Windows 10 Mobile will follow sometime this fall (go.pcworld.com/10mobile).

FREEMAGS.CC

How to disable Windows 10's Wi-Fi Sense password sharing

BY BRAD CHACOS

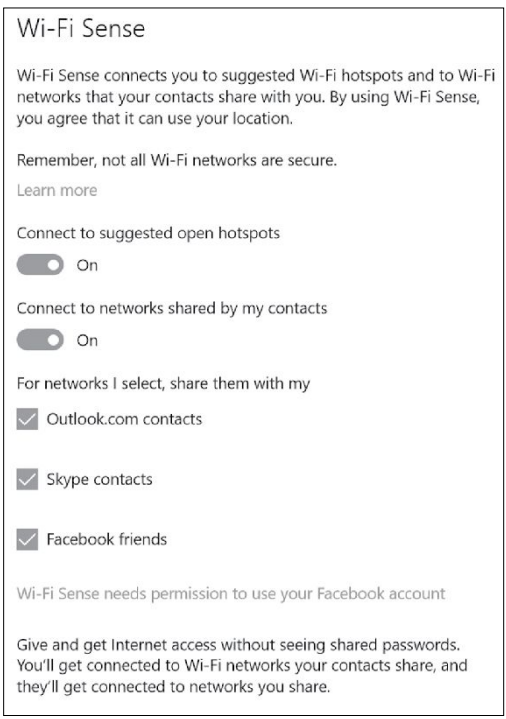
WINDOWS 10'S NEW WI-FI SENSE feature is a powerful tool that takes the headache out of managing Wi-Fi connections on the run. With Wi-Fi Sense enabled, Windows 10 will automatically sign you into open Wi-Fi networks, as well as private networks that your Outlook.com, Skype, and Facebook contacts have logged into—so you won't have to manually sign in to the network when you visit your buddy's house.

As convenient as Wi-Fi Sense is, however, not everyone's thrilled with it (go.pcworld.com/win10wifi). Windows 10 enables Wi-Fi Sense by default, but you can disable it. Here's how.

How to disable Wi-Fi Sense in Windows 10

First, open the Start menu and head to Settings ➜ Network & Internet ➜ Wi-Fi ➜ Manage Wi-Fi Settings. In here, you basically want to disable every option you see, as well as tell Windows 10 to forget any Wi-Fi networks you've signed in to in the past.

That's easy, and all well and good. But what if you don't want your friends sharing the information about your network's password with their friends? That takes some additional tinkering, and it's not obvious. There isn't a mere option toggle in Windows 10 itself. Instead, you need to dive into your actual router's settings and give your network a new name with "**_optout**" at the end. For example, a network called "WiFiSenseUgh_optout" wouldn't be stored by Wi-Fi Sense, while one that's just called "WiFiSenseUgh" would be usable with Microsoft's sharing feature. Yeah, it's a pain, but if you don't add "**_optout**" to your network and want to stay out of Microsoft's Wi-Fi Sense database, you'll need to manually enter your password on your friends' devices when they pop by your house and make sure to uncheck Windows 10's Share Network With My Contacts box when you do so.



The Wi-Fi Sense settings screen in Windows 10.

Optional Windows 10 utility blocks bad updates from messing with your PC

BY IAN PAUL

OF ALL THE CHANGES coming to your desktop with Windows 10, one of the most radical is that Microsoft will no longer let you pick and choose updates to download and install.

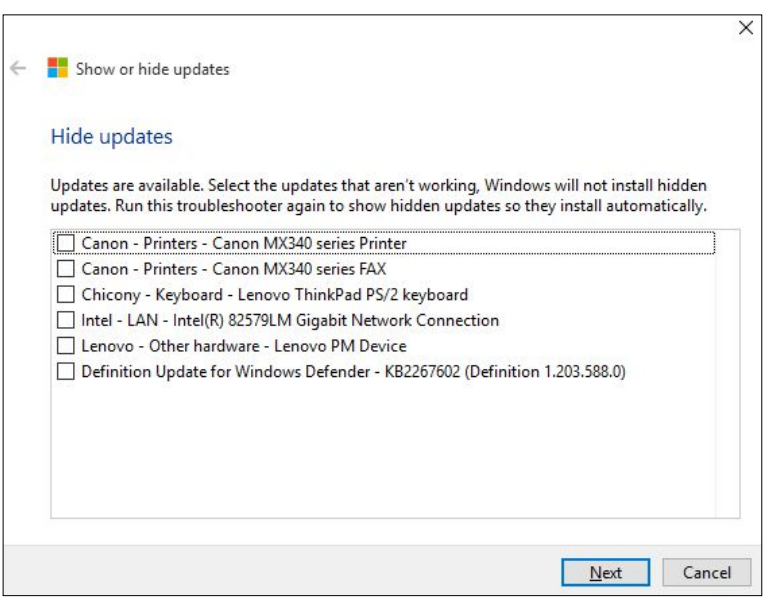
Instead, when an update is ready for download it will get pulled down to your PC and automatically installed. There are half-solutions you can use to make this situation more palatable, but for the most

part you're pretty much stuck with whatever Microsoft dishes out via Windows Update.

Or at least that's what we thought until a Microsoft troubleshooter built for the Windows 10 Insider Preview popped up. This simple utility was designed to help you roll back updates for Windows or hardware drivers that mess up your system, and then block (Microsoft says "hide") those bad updates from downloading again, as ZDNet first reported.

It's not clear if the troubleshooter will continue to work with stable versions of Windows 10 that roll out on Wednesday. Based on tests with Windows 10's "RTM" version (a.k.a. build 10240), it appeared to work just fine.

To start, download the Show Or Hide Updates troubleshooter from Microsoft. Once it's downloaded, fire it up and the program will start searching for available updates. When that's done, click on Hide Updates and you'll get a checklist of updates for your system that you can block.

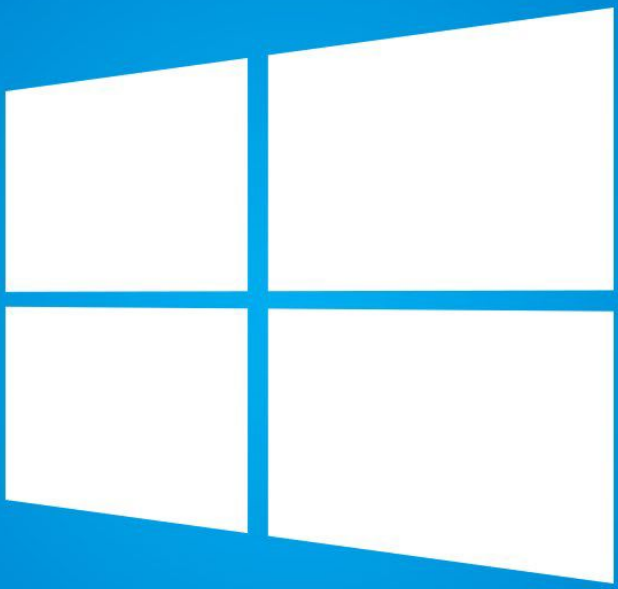


This should look familiar to anyone who's managed Windows Update.

Just remember that before you run the utility, you must first remove the troublesome update from your system by uninstalling it. Our colleagues at InfoWorld also report that after uninstalling an update you shouldn't reboot your system until after you've run the troubleshooter utility. Microsoft's support article has more details on prepping your system for running the troubleshooter.

The impact on you at home: Microsoft's troubleshooter is not the same as manually deselecting an update the way you could in previous versions of Windows. This is more of an after-the-fact fix.

The impact on you at home: Microsoft's troubleshooter is not the same as manually deselecting an update the way you could in previous versions of Windows. This is more of an after-the-fact fix. Nevertheless, it's better than nothing for those who care about controlling what's on their PCs. For power users and home IT support types, this is a handy utility to cart around on a USB key or keep stashed in a folder for those times you need it. Hopefully Microsoft will keep it around.



Don't get fooled into clicking phony Windows 10 upgrade emails

BY NICK MEDIATI

IF YOU'RE STILL WAITING for your reservation to come up as Microsoft rolls out Windows 10, we can't blame you for being eager to get your virtual hands on Microsoft's latest OS. But if you get an email encouraging you to upgrade to Windows 10, you'll want to exercise a little caution, lest you get taken by scammers.

A post published to Cisco Systems's company blog (go.pcworld.com/cisco) outlines how scammers are taking advantage of Windows 10's launch to push ransomware onto unsuspecting PC users. At first glance, the emails look reasonably legit: Cisco notes that scammers are spoofing the sender's email address to make it look as though the message is from Microsoft. Also, the blue-and-white color scheme used in the message nearly matches the colors Microsoft is using for Windows 10 marketing materials. So unless you look carefully, you could get fooled into thinking the email is actually from Microsoft.

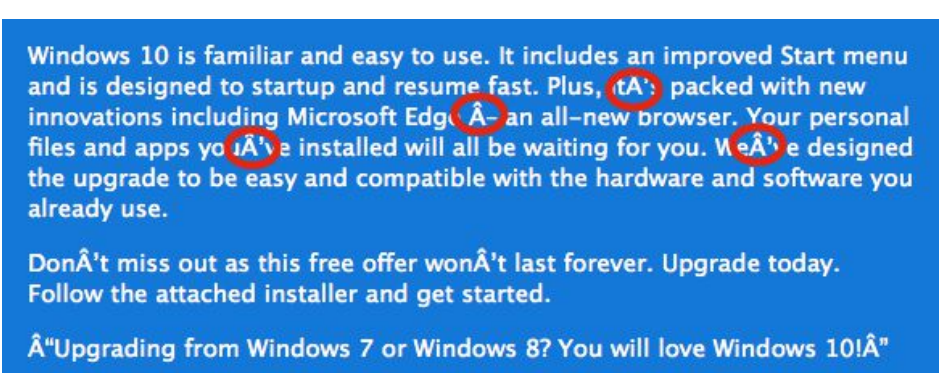
An attached .zip file purports to be a Windows 10 installer, but according to Cisco, the attachment contains a piece of ransomware called CTB-Locker that encrypts your files and requests payment within 96 hours, lest your files be encrypted forever.

Yikes.

Avoiding Windows 10 scams

Cisco recommends keeping a current backup of your files at all times—which you should be doing anyway—just in case you get bitten by ransomware. But it's best to avoid being taken by this malware in the first place.

First and foremost, don't click on any attachments you weren't expecting, and be wary of download links in email messages. Microsoft isn't distributing Windows 10 through email attachments or links



An example of mangled characters in fake Windows 10 emails.

embedded in emails. Instead, your reserved copy of Windows 10 will be automatically downloaded onto your system (go.pcworld.com/10upgrade) at some point in the next few days or weeks, and you will receive a notification on your PC when it's time to install.

Second, Cisco points out a few quirks in the phone emails you can watch for, such as mangled characters in the body text and a spoofed message assuring you that the email message had been scanned for viruses. Cybercriminals are very adept at shifting their tactics, though, so you shouldn't assume that an email message is safe just because it lacks these elements.

Cybercriminals are very adept at shifting their tactics, though, so you shouldn't assume that an email message is safe just because it lacks mangled characters.

Upgrade to Windows 10 now—safely

If you still haven't received your reserved copy of Windows 10 and are feeling a little impatient, you can download and install Windows 10 right now. All you need is a spare USB key with at least 3GB of free space, an activated copy of Windows 7 or 8.1, and some free time. Our Mark Hachman will show you how to go about it in this month's feature.

Be alert, be safe, and enjoy Windows 10!

"I want to be a bench. Recycle me."
IWantToBeRecycled.org
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KEEP AMERICA BEAUTIFUL

HERE'S HOW

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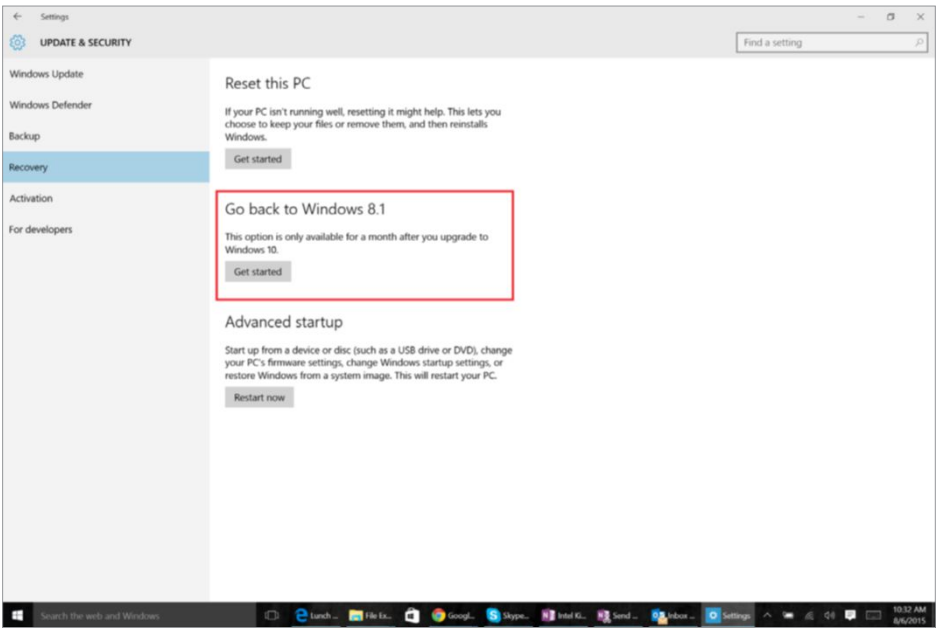
How to uninstall Windows 10 and go back to Windows 7 or 8

Did you upgrade to Windows 10 and regret it? You can go back to your older operating system in a few clicks.

BY IAN PAUL



YOU'VE HAD Windows 10 for more a bit now, but try as you might the new operating system's just not working out for you. Maybe a mission-critical program doesn't work properly, maybe you hate the new Start menu, or maybe Cortana is giving you the creeps.

If that sounds like you, it might be time to downgrade to your past operating system and try again later.

To make life easier on Windows 7 and 8.1 converts, Microsoft will allow you to roll back your Windows 10 installation to the previous operating system within 30 days post-upgrade. Don't worry—if you want to come back later, you can still take advantage of the free Windows 10 upgrade for the next year.

Keep in mind that downgrading to your older OS requires that you still have your Windows.old folder at **`C:\Windows.old`**. If you typically delete that folder after upgrading, or if you've done a post-upgrade clean install of Windows 10, you're out of luck.

Getting ready for the rollback

Before you use the rollback option, take the time to set a few things up. First of all, make sure all your data is backed up on an external hard drive, or with a cloud-based backup service like Backblaze (backblaze.com) or Carbonite (carbonite.com).

You may also want to make sure you have your old Windows 7 or 8 product keys handy, just in case. You shouldn't need them, but it can't hurt to have them on hand if you want to be careful. Don't worry about saving your Windows 10 product keys—those are handled differently than in previous versions of the OS.

The keys for your previous operating system should either be on a sticker on the back of your PC (under the battery if you're on a laptop), or included with the system discs that came with your PC.

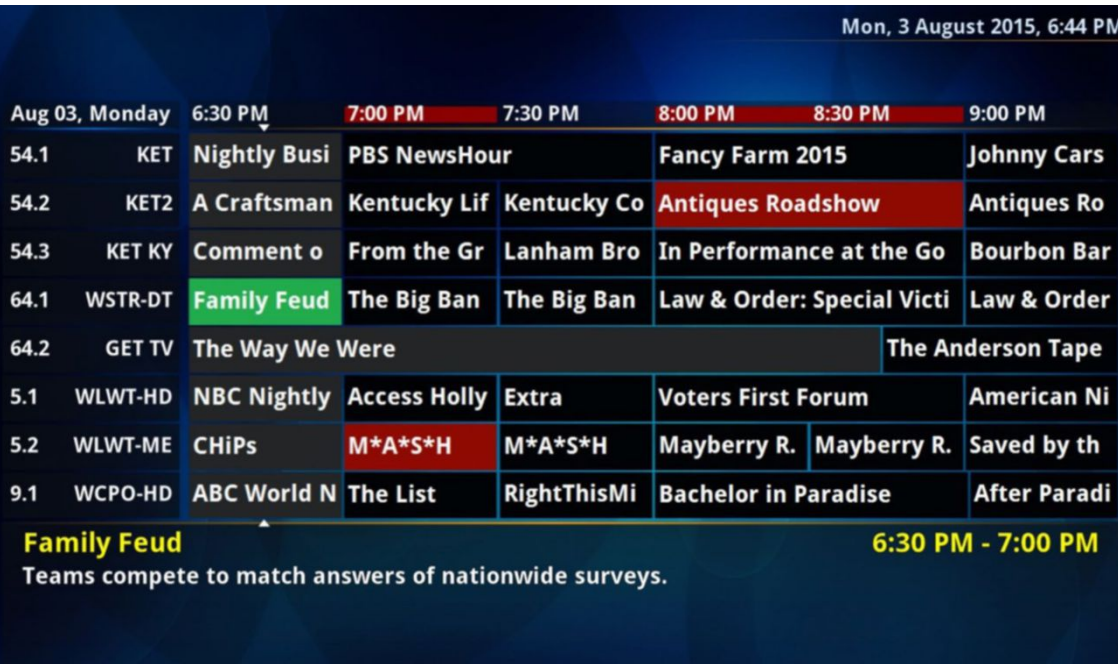
Once you've got all of that organized, it's time to get with the rollback. Open the Start menu, select the Settings app, and go to Update & Security ➔ Recovery.

If you're eligible to downgrade you should see an option that says Go Back To Windows 8.1 or Go Back To Windows 7. If you see it, click Get Started and follow along with the wizard.

Once you've returned to your previous version of Windows, you need to tinker with it to perfect your setup once again. Older programs may need to be reinstalled, and if you had a different password on the older system than you did with Windows 10, you'll have to sign in with that one.

Getting to this tutorial after the 30-day grace period has passed? If you need to downgrade to your past operating system and Windows 10's rollback option is gone, you'll either need recovery discs generated from your original Windows 7 or 8 machine to do a clean install of your old system (go.pcworld.com/reinstallwin), or have a system image backup (go.pcworld.com/imagebackup) stashed somewhere.

If that doesn't work, your last option is to install Windows 7 or 8.1 in a virtual machine on your Windows 10 system—if you can get your hands on a product key and the older system discs. It's a pain, but a VM will work surprisingly well for those times when only Windows 7 or 8.1 will do.



How to replace Windows Media Center's DVR features in Windows 10

BY JARED NEWMAN

MICROSOFT DIDN'T DO CORD CUTTERS any favors with Windows 10.

As revealed a few months ago, the free upgrade for Windows 7 and higher wipes out Windows Media Center, a decade-old program that provides a TV-friendly interface for multimedia files. While most people won't notice WMC's absence—Microsoft says the software is barely used for anything other than DVD playback these days—for some users it's the backbone of

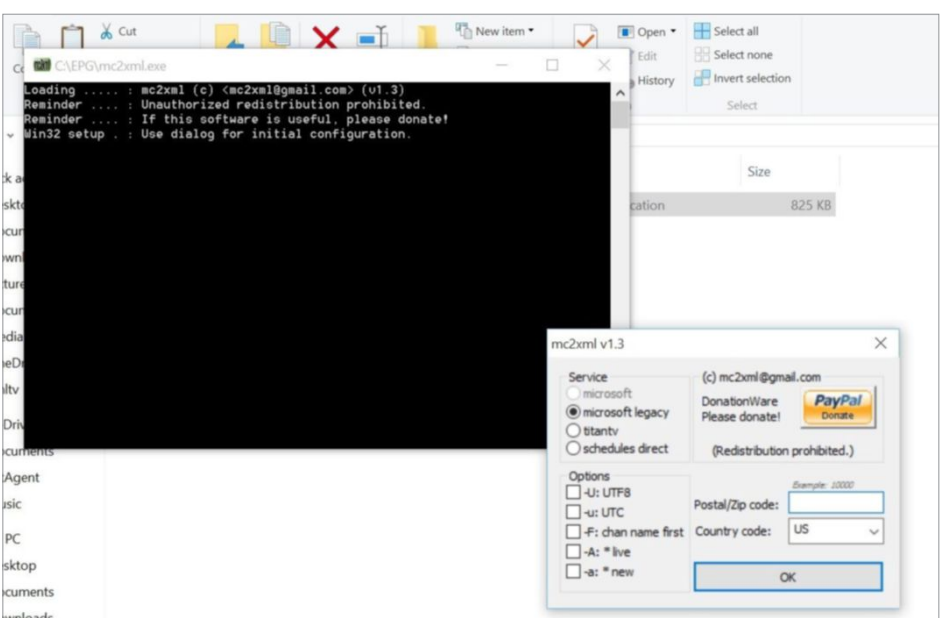
their entire living room setup, thanks to its ability to play and record live TV.

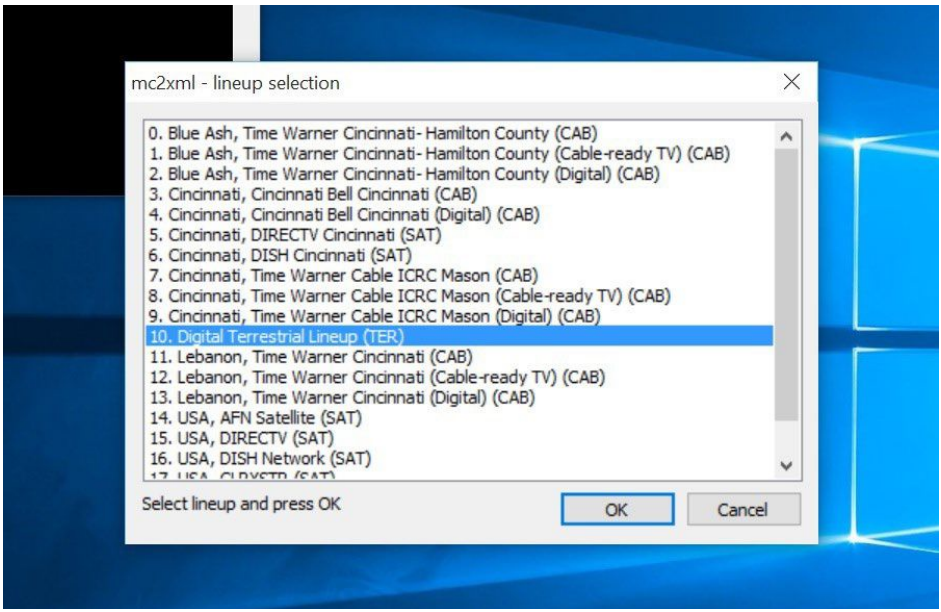
Excited as I am about Windows 10 in general, I've been torn about whether to upgrade my own desktop PC, as I like the ability to record shows from free over-the-air channels like ABC, CBS, Fox, and NBC. So before upgrading, I searched for a Windows Media Center alternative that was easy to set up and use.

So far, I haven't found anything as simple as Windows Media Center, especially when it comes to setting up TV guide data. Still, broadcast DVR is doable in Windows 10, so if you're itching to upgrade, here's how to set up the best Windows Media Center alternative I've found:

NextPVR: The most painless of the lot

After examining a bunch of options, I settled on NextPVR as a replacement for Windows Media Center's DVR features. It's not the slickest program around, but I found the setup process easier to follow





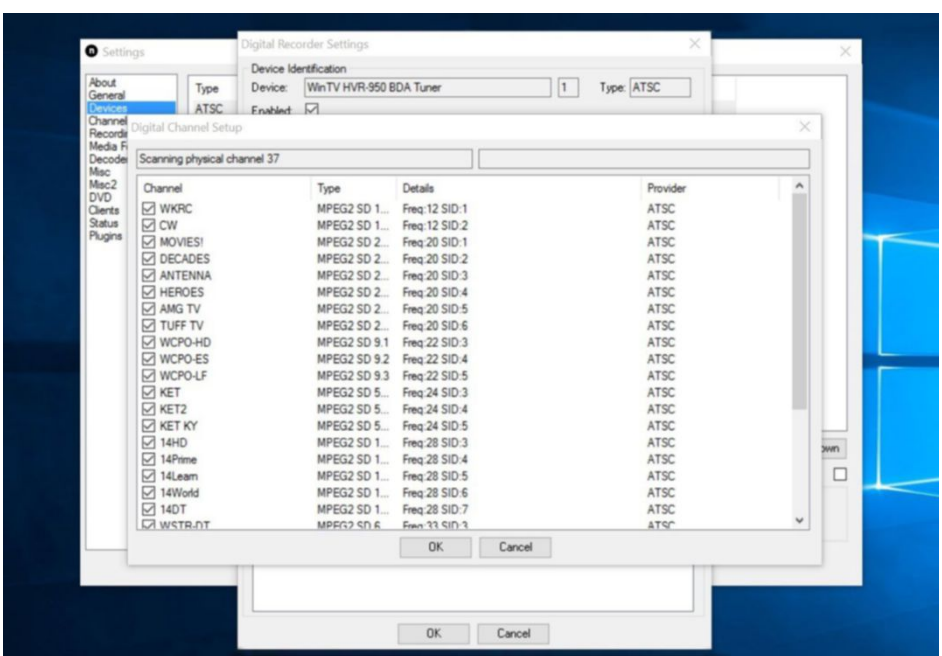
than that of other programs like Kodi and MediaPortal (which isn't saying much, by the way).

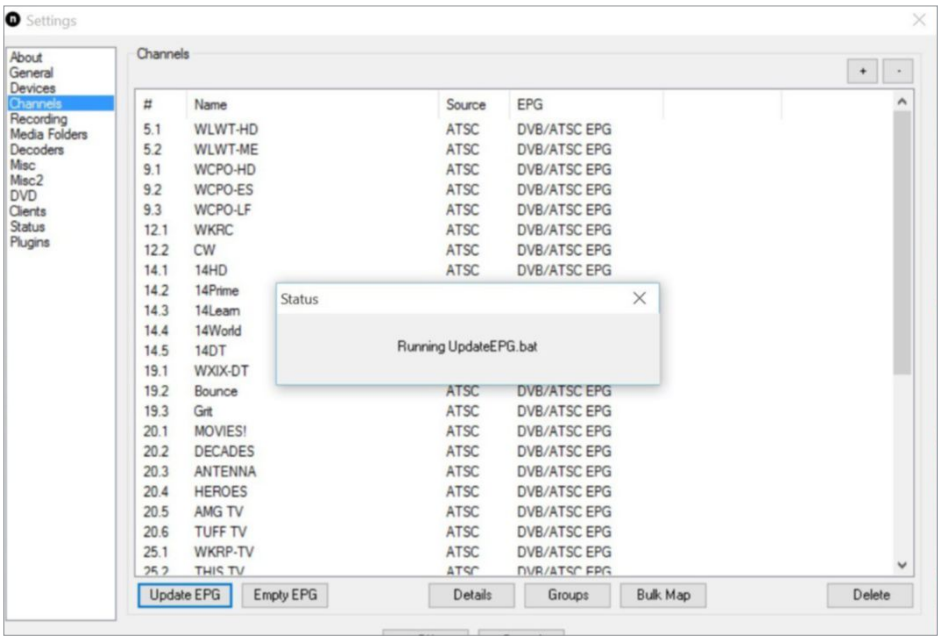
All you need to get started is a TV tuner for the PC—such as a SiliconDust HDHomeRun (silicondust.com) or Hauppauge WinTV USB (go.pcworld.com/wintvhvr955) tuner—and an over-the-air antenna. Just follow these steps, and you'll be fine:

1. **Before installing NextPVR**, download MC2XML (mc2xml.hosterbox.net) for Windows. You'll need this program to retrieve TV guide data.
2. **In File Explorer**, create a new folder at **`C:\EPG`** and place mc2xml.exe inside. You can choose a different folder, but will need to modify step 7 below.
3. **Run mc2xml.exe**, and a screen will appear where you can enter a zip code to get local channel listings. Leave the other options as is, and press OK. (More discussion on this at the end of this guide.)

4. **In the lineup selection** prompt, look for the Digital Terrestrial Lineup option and press OK.
5. **Download and install** the latest version of NextPVR (go.pcworld.com/nextpvr). Don't launch it just yet.
6. **Before launching NextPVR**, navigate to C:\Users\Public\NPVR\Scripts in File Explorer. Create a new text file, and rename it to UpdateEPG.bat. (Make sure you can see the full filename extension (go.pcworld.com/win-ext), and that there's no *.txt* on the end of it.)
7. **Open UpdateEPG.bat** with NotePad or another text editor, and type the following (changing the second line if you used a different folder in step 2):

```
C:
cd "C:\EPG"
mc2xml
```





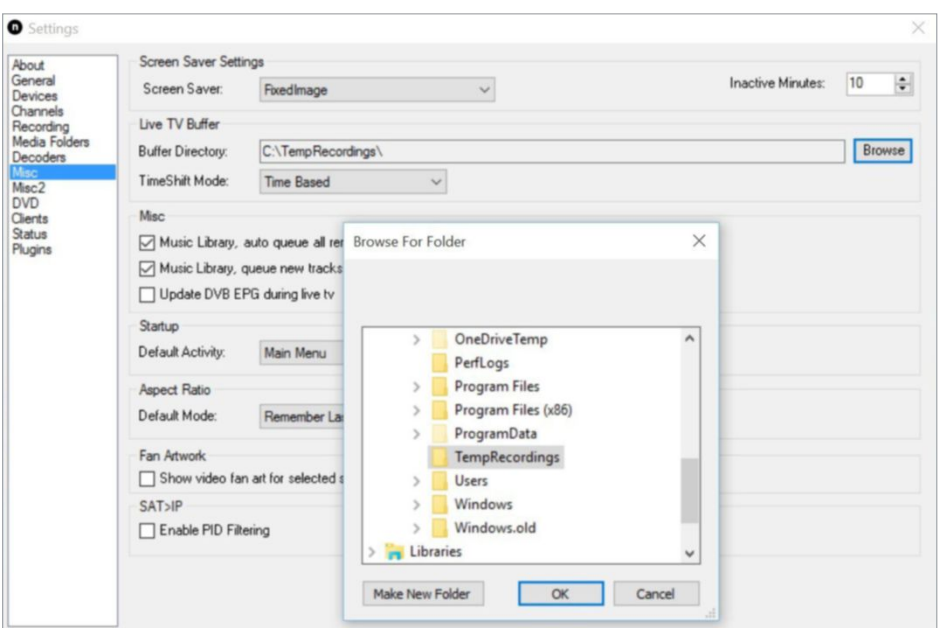
8. **Open NextPVR**. It should run Settings on first launch, but you can always get to Settings by right-clicking anywhere on the screen.
9. **Head to the Devices** section, select your TV tuner, click Device Setup, then click Scan. Wait a few minutes while the tuner looks for broadcast channels.
10. **Go to the Channels** section, and click Update EPG. You should see a pop-up box telling you that UpdateEPG.bat is running, thereby grabbing the TV guide data you got through MC2XML. This will take several more minutes.
11. **In the Misc folder**, you may need to change the Buffer Directory to a folder of your choosing. Alternatively, you can create a **`C:\Temp`** folder if one doesn't already exist on your machine.

12. **Go to the Recording folder**, and choose where you want DVR shows to be stored.
13. **You may need to experiment** with the Decoders menu if you're not getting any audio or video playback. (I've had luck using the LAV decoder for both audio and video.)
14. **Close the Settings menu**, and head to the Live TV section of NextPVR to start watching and recording broadcast TV.

TV guide headaches, lots of possibilities

As if setting everything up wasn't enough of a hassle already, Microsoft recently made matters more complicated by switching TV guide providers in Windows Media Center. Because mc2xml relies on grabbing that data, you may have trouble getting up-to-date TV listings this way. (I haven't had any problems so far.)

If this happens, you have a couple options:



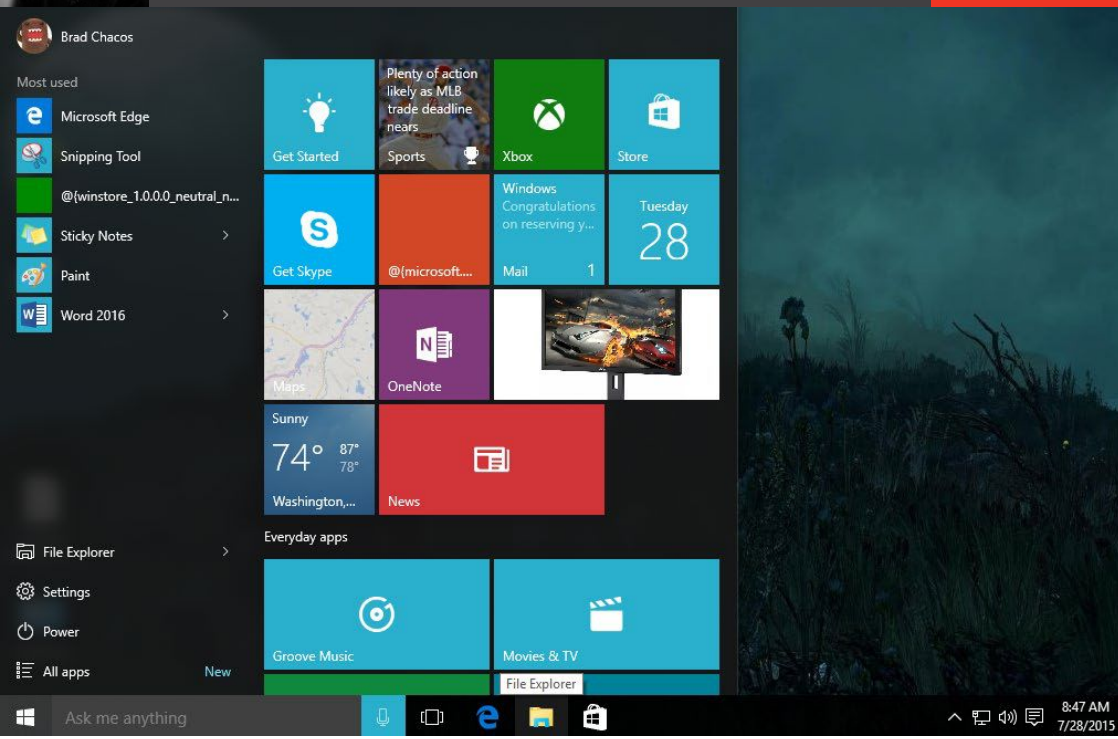
For $25 per year, you can subscribe to Schedules Direct (schedulesdirect.org). After setting up an account, return to step 3 of this guide (you'll have to delete the mc2xml.exe file and start with a new copy of the file), select Schedules Direct from the Services menu, and plug in your login details. Repeat step 9 to update the channel guide.

Once you have everything set up, NextPVR can be a pretty powerful program. It offers several plug-ins, skins, and utilities, including a way to auto-detect and remove commercials.

For a $20 "donation," mc2xml says it'll let you pull down newer listings from Microsoft. Return to step 3, and select Microsoft from the Services menu. I have not tested this myself.

Once you have everything set up, NextPVR (go.pcworld.com/config) can be a pretty powerful program. It offers several plug-ins, skins, and utilities, including a way to auto-detect and remove commercials. It supports various media extender devices for watching TV on additional televisions, and you can even use NextPVR as a back-end service for other media center software, such as Kodi (kodi.wiki/view/NextPVR).

I haven't even started experimenting with most of these customizations. My main usage for TV recordings is to stream them on other devices using Plex (go.pcworld.com/plexdevices). For that, the basic NextPVR setup is enough to upgrade my desktop to Windows 10 with confidence.



How to customize the left side of the Windows 10 Start menu

Hate those Most Used and Recently Added sections of the Windows 10 Start menu? Here's how to get rid of them and add items that are actually useful.

I DON'T KNOW ABOUT YOU, but I didn't realize how much I'd missed the Start menu until I moved from Windows 8.1 to Windows 10 (stop looking so smug Start8 users). It's a fantastic feeling to have it back, and I really like the live tiles addition.

One thing I can't stand is how Microsoft uses the left side of the Start menu in Windows 10. It's filled up with the "most used" apps that are anything but, and I really don't need that Recently Added section

for newly installed apps and programs.

If you feel the same way, you can turn all that off, and fill it up with items you actually might use.

Dump *Most Used* and *Recently Added*

Get started by hitting Start and opening the Settings app. Then go to Personalization ➔ Start. Now just slide to Off the options for Show Most Used Apps and Show Recently Added Apps.

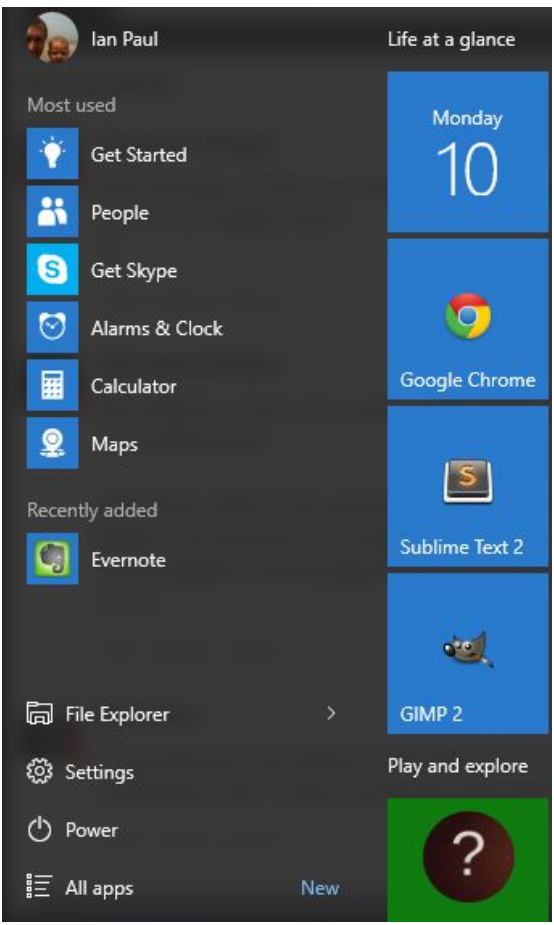
Fill it up

Now that we've done that, there's a big empty hole on the left side of the Start menu. We can't fill it up with just anything we want, but we do have a few options.

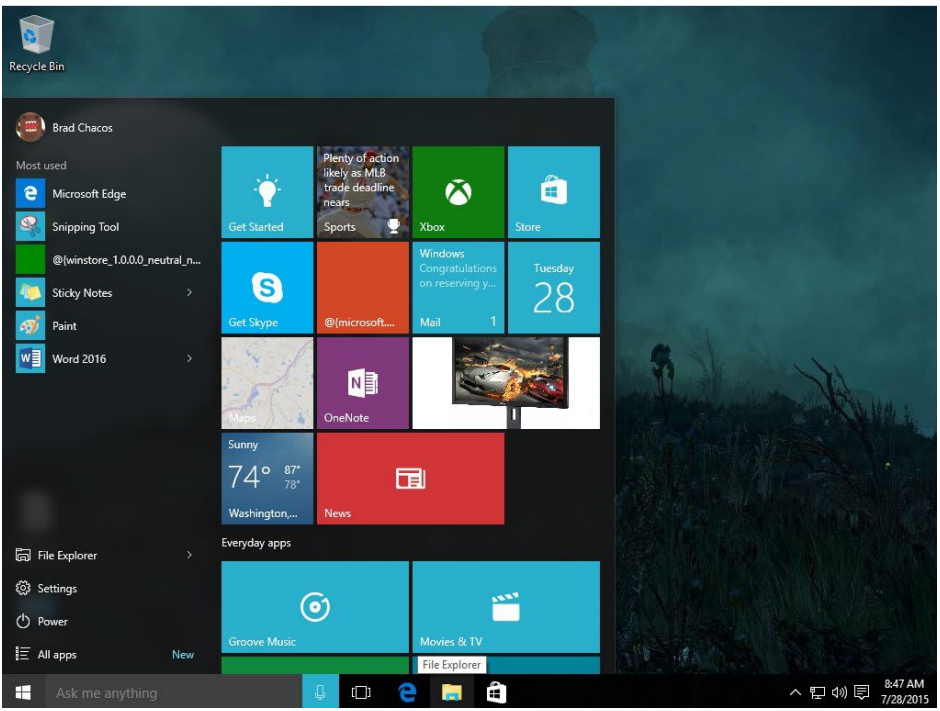
In the Settings app again, navigate to Personalization ➔ Start ➔ Choose Which Folders Appear On Start. This screen is just a set of sliders to make specific folders appear in Start. It's kind of similar to what you see in the Windows 7 Start menu such as the documents, pictures, and music folders. Only this time the folders show up on the left instead of on the right.

There are also some system settings you can add to this list that aren't folders, such as quick access to Homegroup and network settings.

Personally, I went with a bunch



The default view of the left side of the Windows 10 Start menu.



The left side of the Windows 10 Start menu post-customization.

of folders including Documents, Downloads, Music, Pictures, and Videos, as well as the Personal folder, which is just a fancy name for the root of your Windows user folder.

As you can see in this image, that does a pretty good job of filling up the dead space. Perhaps I'll turn on the Recently Added section again, but for now I'm content with it as is.

Want more Start-menu tips? Check out Nick Mediati's look at the right side of the menu and how to tweak the live tiles area (go.pcworld.com/w10startmenu).

Upgrading to Windows 10: One good reason to wait

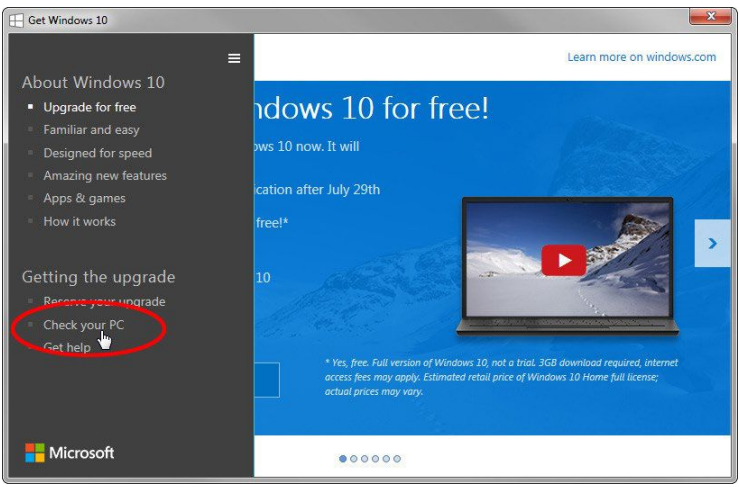
New software always carries some risks. Here's what to consider before you decide.

PATRICIA HARDY *worries that some of her programs may not work in Windows 10.*

Chances are that if a program runs successfully in Windows 7 or 8.1, it will run just fine in Windows 10. And if it doesn't, the developers will fix the problem as soon as possible.

But really, we can't be sure before the official release. And frankly, we can't even be sure immediately after the release. It will take time for bugs and incompatibilities to surface. (For more details, read Mark Hachman's article on how to upgrade on page 104.)

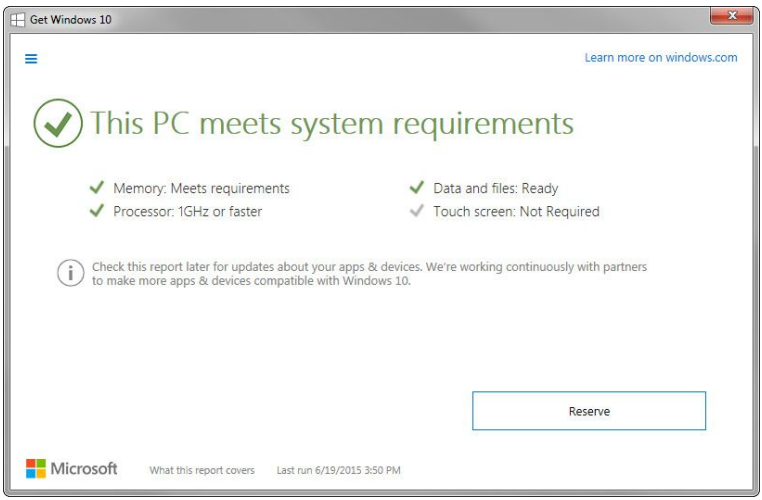
Microsoft can tell you now, with what I suspect is reasonable accuracy, whether your hardware or software is compatible. If your Windows 7 or 8.1 PC is up to date, you should have the Get Windows 10 icon in your notification area. Click it. Once the program is up, click the menu icon in the upper left corner, then click Check Your PC for details. (The wording of this option may change. It did while I was writing this article.)



Most likely, the program will tell you that everything is OK. But a statement like "Check this report later for updates about your apps & devices" should give you pause. (An earlier version told me that there were "0 known issues found," indirectly reminding us that Microsoft doesn't yet know about the unknown issues.)

If you have professional obligations that require you to upgrade, or if you enjoy riding on the bleeding edge, go ahead and upgrade as soon as possible. Otherwise, I recommend you wait until the new OS has been out for about three months (around Halloween). Follow the news about Windows 10 while you wait. If there's a particular program you're worried about, set up a Google News alert on Windows 10 and the name of that program; for instance, **Windows 10 Adobe Bridge**.

You will definitely lose one application: Windows Media Center (not to be confused with Windows Media Player) will disappear with the upgrade. Microsoft is discontinuing this DVR/streamer/DVD playing



program. If you use it, you may want to wait for other options to appear before upgrading. (Windows 10 will have DVD-playing software.)

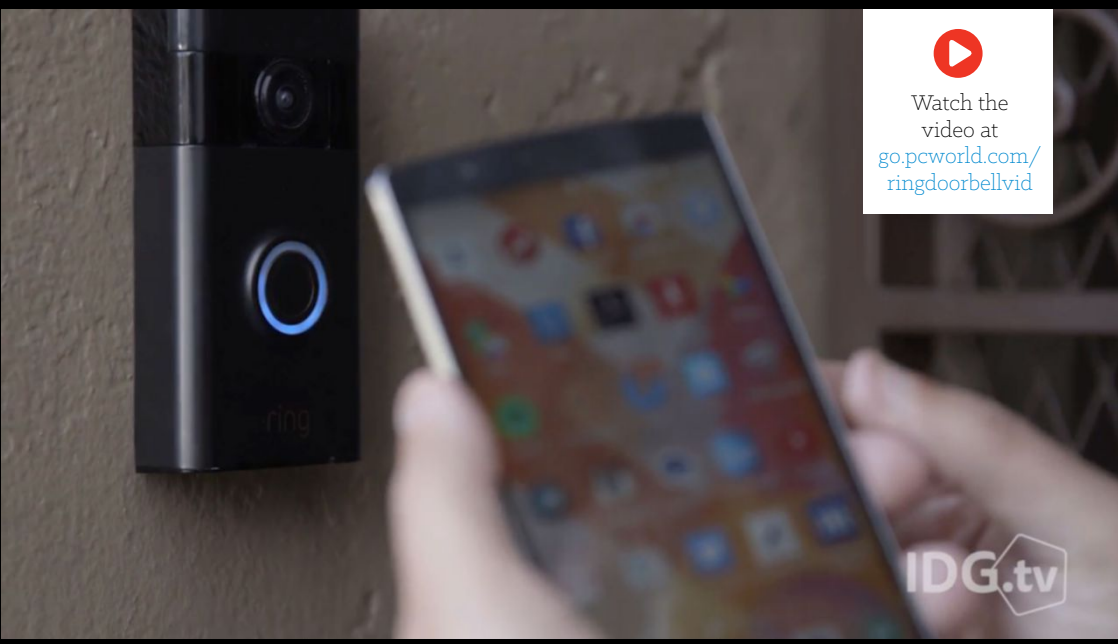
Don't get me wrong, I'm looking forward to Windows 10. But I've seen too many new operating systems to trust one as soon as it's out the gate.

Am I personally going to wait? On my main computer, yes. But I will update as soon as possible on a secondary PC. It's my job.

Have a tech question? Ask PCWorld Contributing Editor Lincoln Spector. Send your query to answer@pcworld.com

Tech Spotlight

A video showcase of the latest trends



Watch the video at go.pcworld.com/ringdoorbellvid

The **Ring Video Doorbell** helps keep robbers always guessing

» The Ring Video Doorbell links to your smartphone so you can "answer the door" from wherever you are (assuming you have Wi-Fi). You get a video view of whoever's on your doorstep and can talk to them through your phone. The app could be more responsive and it doesn't offer an ongoing surveillance feature, but it's a useful way to track who visits your home.