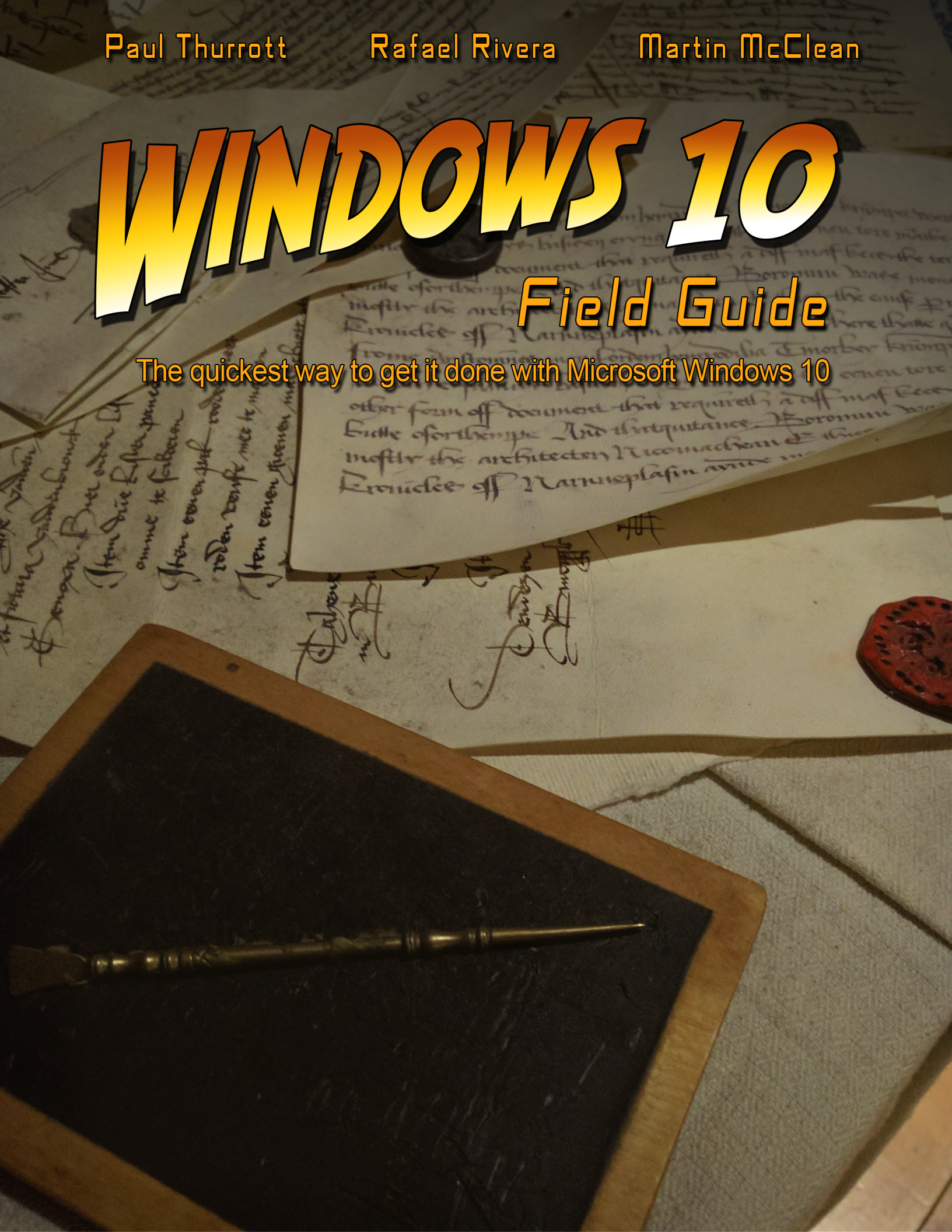Paul Thurrott   Rafael Rivera   Martin McClean

WINDOWS 10

Field Guide

The quickest way to get it done with Microsoft Windows 10

Windows 10 Field Guide

Includes Reference, Surface Pro 3, Surface Pro 4, and Surface Studio posters

Paul Thurrott, Rafael Rivera, and Martin McClean

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Trademarks and disclaimers

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YouTube

- Thurrott.com - Personal technology, with a focus on productivity, mostly Microsoft.
- Eternal Spring - Eat, drink, love Mexico City

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- Windows Weekly with Leo Laporte and Richard Campbell
- Hands-On Windows
- First Ring Daily with Brad Sams

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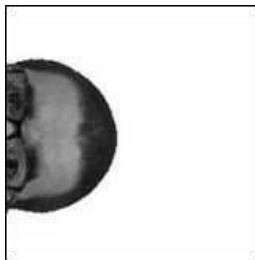
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Thanks!

This book is dedicated to you, our readers. Thanks for your support.

— Paul, Rafael, and Martin

Introduction

Welcome to the final version of the *Windows 10 Field Guide*

All good things must come to an end. This is the final version of the *Windows 10 Field Guide.*

My original plan was to support the *Windows 10 Field Guide* through at least Windows 10 version 1809, or late 2018, which would have amounted to about three years of support. But I ultimately provided updates for over five years, giving readers regular updates through several Windows 10 versions, including 1903 and 1909 (2019), 2004 and 20H2 (2020), and now 21H1 (early 2021).

So this will be the last major version of this book. Looking ahead, the next book will be the *Windows 11 Field Guide* and it will, of course, cover the next version of Windows.

In the meantime, I will continue updating this edition with up-to-date Windows 10 version 21H1 content as needed. But my expectation is that there will be no major functional changes to Windows 10 through the end of its support life cycle in 2025.

Thanks for all of the support over the years. It's been a fun if overly-long ride, and I'm ready to move on to the next book.

— Paul Thurrott

July 2021

Original introduction

Everything old is new again.

Faced with the overwhelmingly negative reception to Windows 8, its ambitious attempt to meld traditional PCs with mobile devices, Microsoft faced a moment of truth. On one side were about 1.5 billion disenfranchised PC users, many of whom rejected the "touch-first," full-screen mobile interfaces of Windows 8. But on the other was a smaller yet equally vocal audience of customers who had in fact embraced Windows 8, in particular on tablets and a new generation of "2-in-1" PCs for which those new interfaces were in some ways quite well-designed.

Microsoft decided it could please both audiences. More important, perhaps, it decided it could do so with a single platform, called Windows 10, which would provide users with the same store and apps, and a responsive user interface that would adapt or be custom-designed for the hardware on which it runs.

Like its predecessors, Windows 10 runs on PCs, 2-in-1s and tablets. But it also runs on an expanding range of new device types including embedded "Internet of Things" devices, phones and phablets,

the Xbox One video game console, and completely new form factors like the HoloLens augmented reality headset and the Surface Hub, an epic 84-inch all-in-one PC aimed at collaborative groups, not individual users.

The result is a system that is in many ways just as audacious as Windows 8, but without most of the downsides.

Windows 10 Field Guide, like its own predecessor, *Windows 8.1 Field Guide*, hits at the volume part of the Windows 10 user base: PCs, 2-in-1s and tablets. Put another way, *Windows 10 Field Guide* is a full-length e-book about the latest version of Microsoft Windows, aimed at those users who will upgrade from Windows 7 or Windows 8.1, or acquire Windows 10 with a new PC or device.

And like its predecessor, *Windows 10 Field Guide* is...

Self-published. We wrote this book ourselves and there's no publishing company to get in the way.

Transparent. This book is written and updated transparently and publicly, over time, so you can follow along, download any and all updates, and provide feedback as it is updated.

Inexpensive. A traditional technical book about Windows 10 typically retails for $29.99 or more and is made available in print and e-book formats. But the authors receive only a very small portion of that price. With *Windows 10 Field Guide*, we are using the pricing model popularized by mobile apps, but with a twist: we're letting you, the reader, pick your price so you can pay more (or less) than our recommended price of $9.99.

Available in multiple formats. So what does $9.99 buy you these days? In this case, it provides you with the book in PDF and EPUB formats that will work anymore you want to read.

Not available directly from Kindle or other e-book platforms. Thanks to our previous experiences dealing with these organizations for *Windows 8.1 Field Guide*, we are only offering this book directly to you, the reader. No worries: it will always work properly with Kindle, Nook, or whatever other e-book software you use. We're just cutting out the middleman.

A how-to *and* a reference. This book provides tips, how-to's and reference information about Windows 10, and assumes only that you have used some version of Windows previously. But rather than cover every single little checkbox and option in all apps and features, this book focuses on the important stuff, on what's new and what's changed in Windows 10, so you can quickly get up to speed and master this new OS version and be productive as quickly as possible. There's no patter, and no fluff.
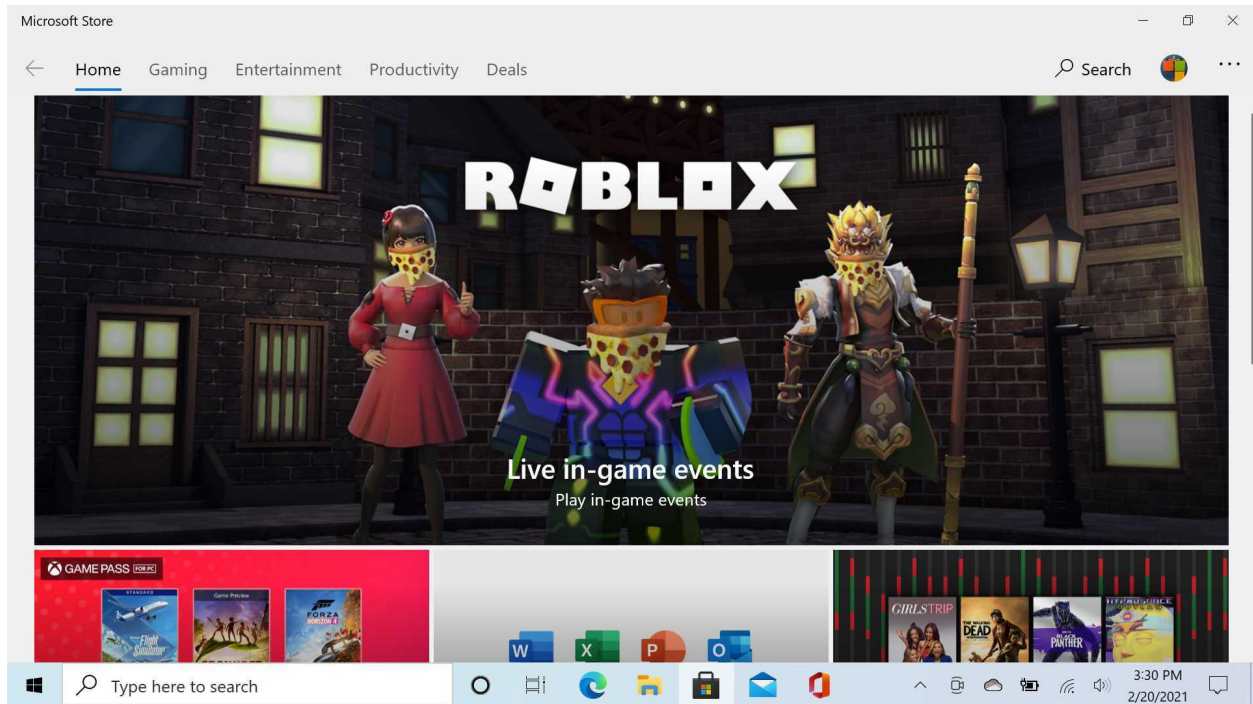
Windows 10 Field Guide is the only Windows book you'll ever need for your PCs, 2-in-1s and tablets.

Thanks for reading.

— Paul Thurrott, Rafael Rivera, and Martin McClean

November 2015/Updated January 2021 and July 2024

Microsoft Store and Apps

The Microsoft Store helps you can find, download, and buy apps and games, plus digital movies and TV shows and more.

> Throughout this book, we use *app* or *Store app* to describe any app or game you acquire from the Microsoft Store. These can include new *universal apps* that were designed specifically for Windows 10, Windows 8 apps, Xbox Live games, legacy desktop applications that were packaged for inclusion in the Store, and more. For the most part, you don't need to worry about the differences between these apps and the desktop applications that you may be used to downloading for Windows from the web. That said, we will sometimes differentiate between apps and games when it's important to do so.

Get to know the Microsoft Store

The Microsoft Store—which is often simply referred to as the Store or the Store app—provides access to a lot of different types of content. As such, it's a busy and dense app, with links to each of its major content areas—Home, Gaming, Entertainment, Productivity, and Deals—at the top.
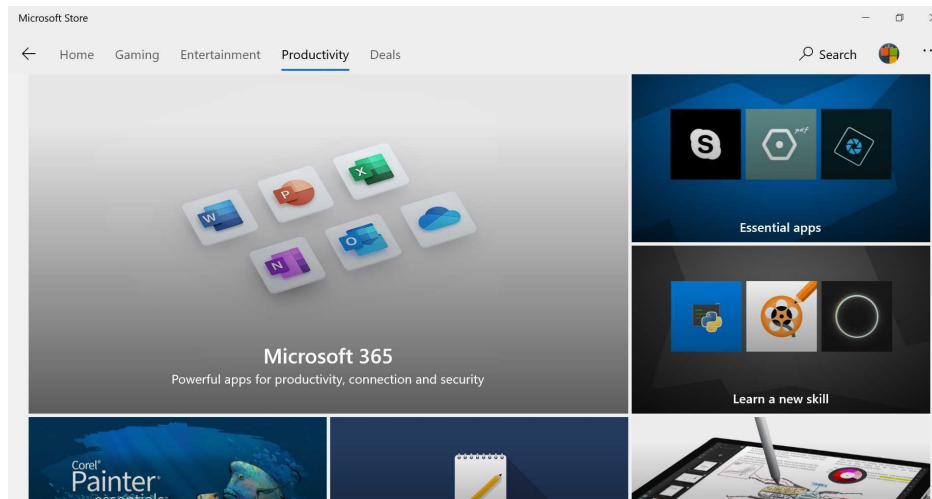
As you navigate into each of those content areas, you'll see that they each visually resemble the Home view, with promoted content, editorial picks, and so on. Navigation is straightforward, and the built-in search functionality lets you search across each of these content areas from a single place, and with various filtering capabilities.
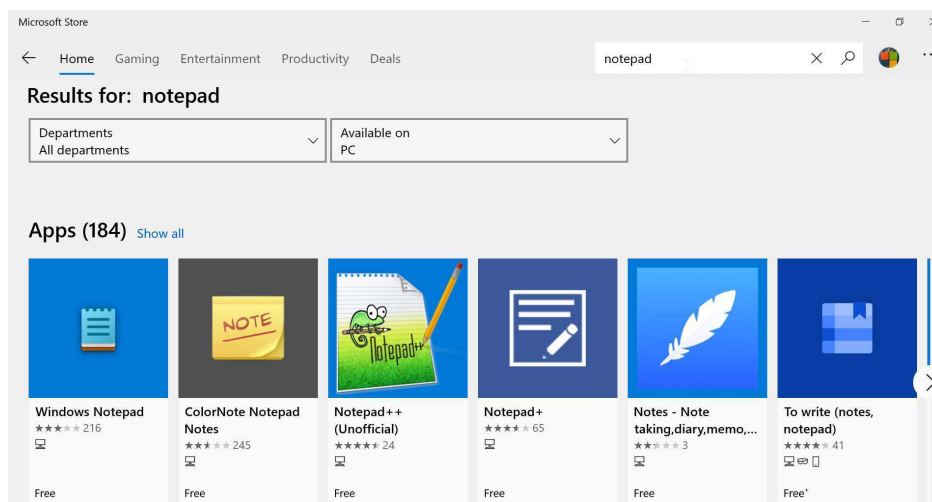
In this chapter, we focus only on apps and games. The purchasing of movies and TV shows is discussed in the Movies & TV Shows chapter.

Before you start

Before you download any apps or games, there are a few things you should configure.
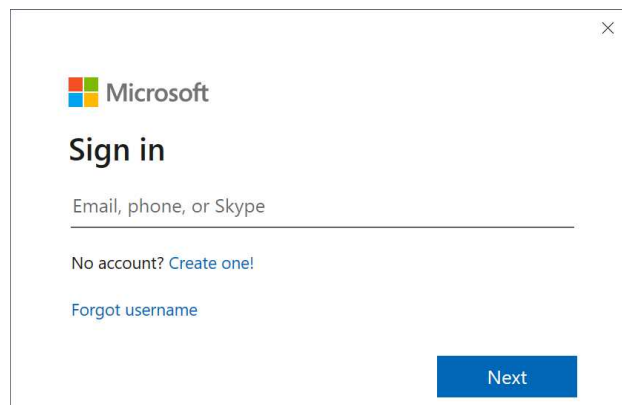
Sign-in with your Microsoft account

You must sign-in with your Microsoft account to purchase any paid content—apps, games, or videos—from the Store. If you use your Microsoft account to sign-in to Windows, you're all set: You are automatically signed in to the Store app as well. But if you're using a local user account, you will need to sign-in to the Store with a Microsoft account before you can proceed.
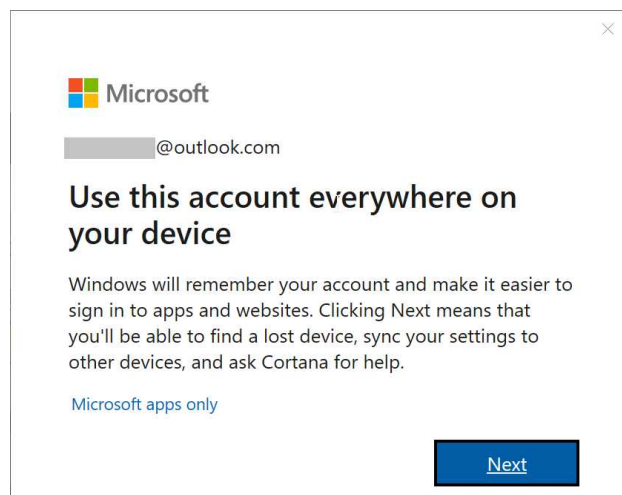
> ⚠️ If you intend to keep using a local account to sign-in to Windows, you will need to be *very* careful when you sign-in to the Store app with your Microsoft account. Be sure to follow the steps below precisely.

To do so, launch Store, select the little account picture to the left of the search box, and then choose Sign in from the drop-down menu that appears. A window appears prompting you to sign-in

After signing in to your Microsoft account—a process that will include entering your account name and either your password or a two-step verification prompt—you will be prompted to use this account everywhere.

If you select the Next button here, **Windows will switch your local user account to a Microsoft account**. So do not select Next if you wish to continue using your local user account.

If this isn't what you want, you can select the "Microsoft apps only" link. Then, in the future, when you use other Store apps that let you sign-in to your Microsoft account, you can optionally choose to do so using the account you just configured.

Contrary to the name of that link, choosing "Microsoft apps only" does *not* mean that Windows will automatically sign you in to that Microsoft account when you use other Store apps. However, now that you have signed-in to one app, the Microsoft account you used will be available to sign-in manually to other apps, and you won't need to re-authenticate.

## Manage your account and payment options

You should also spend a few moments to ensure that Store is set up correctly for your account and whatever payment method(s) you prefer to use for paid apps and other content. That way, you won't need to hunt around for credit card or other payment information the first (or next) time you want to buy something.

You configure this information from from Microsoft account web site at account.microsoft.com. Once signed in, navigate to Payments & billing > Payment options.

You can also find a link to this part of the site from within Store: Select the See more ("…") menu next to your account picture and then choose Payment options from the drop-down menu that appears.

From that web page, you can create, delete, and manage payment options tied to your Microsoft account. These include credit and debit cards, a Microsoft gift card account balance, mobile billing through your wireless carrier, and PayPal.
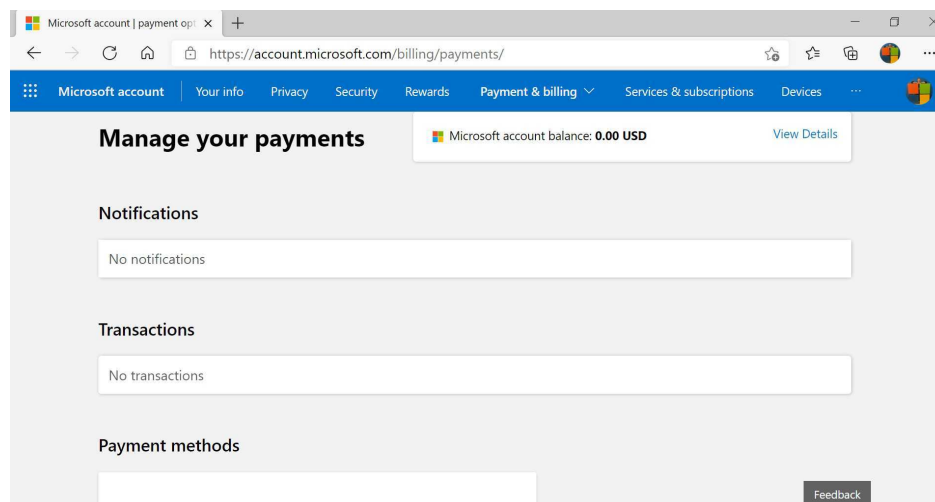
🔑 If you do get a Microsoft gift card, you can redeem the code it contains on the web at account.microsoft.com/billing/redeem. Or, you can use the Store app in Windows: Navigate to See more ("…") > Redeem a code.

Manage your connected PCs and devices

Microsoft lets you download Store apps and games to up to 10 Windows PCs at once. You can manage the list of those PCs from the Microsoft Account web site as well.

You do so from the Microsoft account website by navigating to Devices > Microsoft Store device management or by navigating directly to the Microsoft Store device management page.
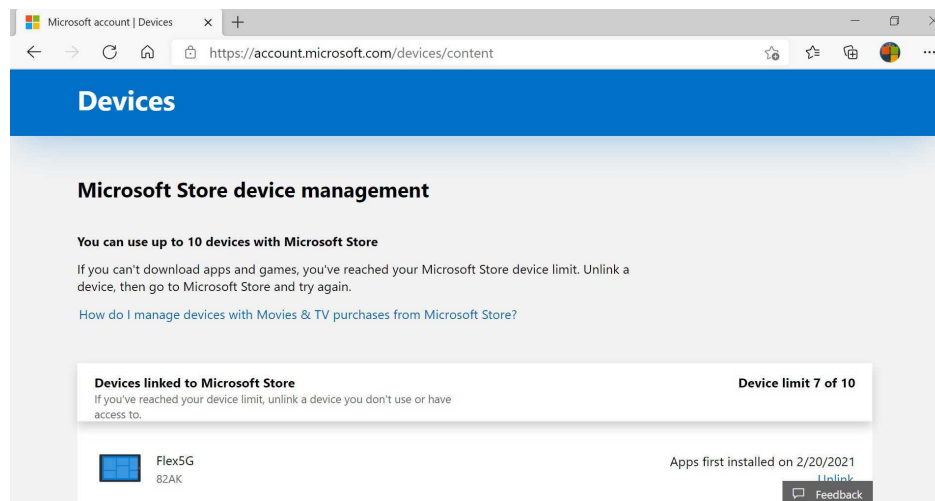
If you see any out-of-date PCs in this list, you can remove them by selecting the appropriate "Unlink" link.

Find and install apps and games

The Microsoft Store offers a variety of ways to find and then install apps and games. This process will be obvious to anyone who has used a mobile app store in the past decade. That said, there are a few unique items of interest related to acquiring apps and games from the Microsoft Store.

Find an app or game after you've downloaded it

Windows goes out of its way to make sure you can find apps you've just installed.

First, a pop-up notification banner will appear in the lower-right corner of the screen. If you respond to this notification quickly enough—it disappears after a few seconds—you can select it to launch the newly-installed app.
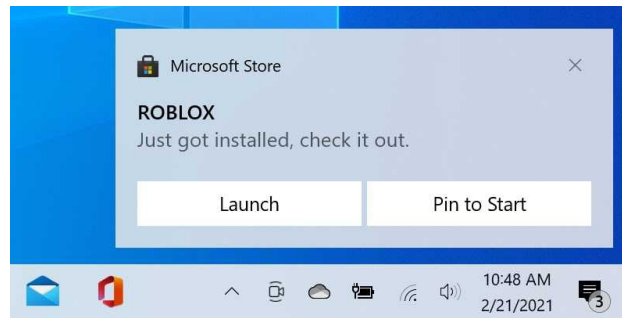
If you miss that notification, no worries: It is still available from the Action Center (which is described in a bit more detail later in this chapter). You can open Action Center by selecting its icon in the lower-right of the screen (to the right of the clock), or by typing WINKEY + A. You'll see the notification in the list, and if you select it here, the newly-installed app will launch.
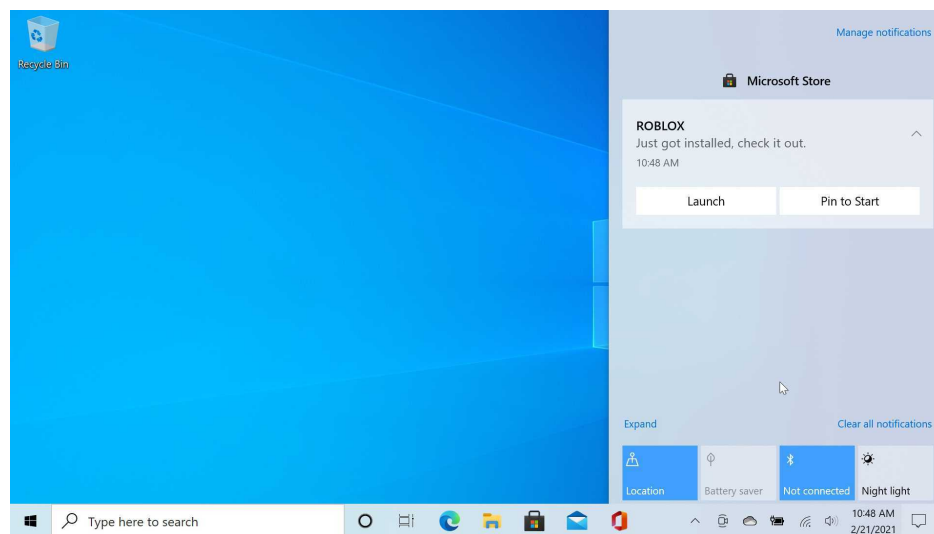

You can also access recently-installed apps in Start. Typically, these apps will appear in two places, the Recently added list at the top of the All Apps list and then alphabetically in that list. You will see a "New" tag next to its name in the list.
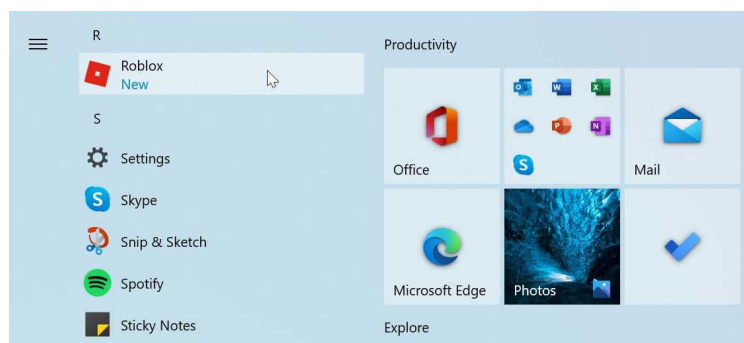
Find apps and games you've already purchased or downloaded

The Store app helps you find the apps, games, and other content you've already purchased and downloaded across all of your PCs. This makes it relatively easy to find them and download and install them again. This can be useful if you've received a new PC or have uninstalled an app and now wish to get it back.

To see this list, open the See more menu in Store and choose My Library. Here, you can see your most recent apps and games.
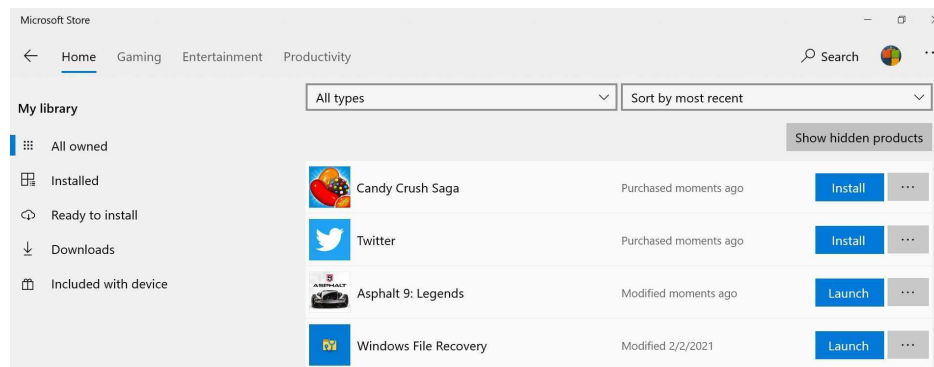
You can perform a number of useful actions here:

Download and install an app. To download and install a previous purchase or download, select the Download button next to that item.

Hide an app. Embarrassed by a poor app or game choice? Just select the More Actions ("...") button next to that item in the list and then choose Hide. Hiding an app doesn't remove it from your account, of course, and you can always access it from the web (at account.microsoft.com/billing/orders) or from your other PCs.

> You can also find your hidden apps and agames in the Store apps by navigating to See more ("...") > My Library and selecting the "Show hidden products" button.

Filter and sort the list. By default, the My Library view displays all of your content. But you can filter the list only to show apps, games, or video content. You can likewise sort the list by most recent (the default) or by name.

View other lists of your content. The options on the left—All owned, Installed, Ready to install, and Downloads—let you view certain parts of your library more easily.

Purchase an app or game

As you might imagine, purchasing a paid app or game requires a few more steps than downloading a free (or previously purchased) item. You will be prompted to sign-in—using your password or a

Windows Hello-based authentication action—and then asked to confirm which payment method you prefer to use.
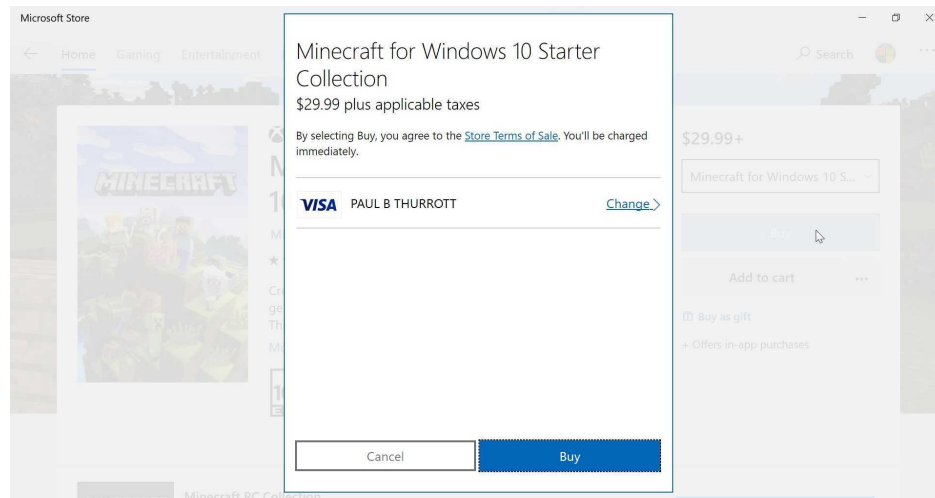
From there, the download process proceeds normally.

> ℹ️ If you'd like to streamline the app purchase process by removing the password requirement, you can do so in Store settings. We do not recommend making this change: It's always a good idea to carefully consider any purchase, and this authentication prompt will provide the necessary pause.

Make an in-app purchase

Some free apps—especially games—offer in-app purchases, which is one way for developers to monetize their work without requiring an upfront, one-time payment. (Another approach is to provide in-app advertising.) The types of in-app purchases you'll see will vary from app to app, but the purchase process is the same. Like any Store purchase, you will need to sign-in and choose a payment method.
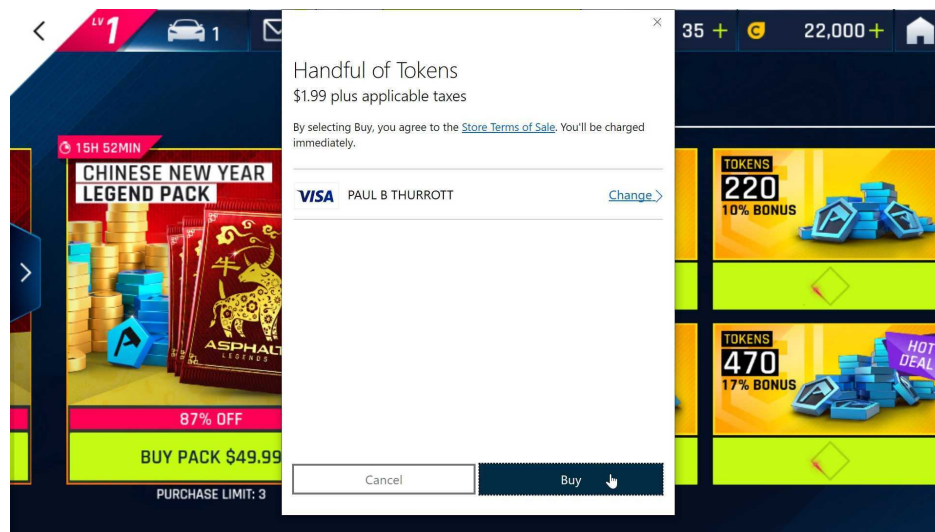
Update apps

By default, the Microsoft Store will automatically keep every Store app on your PC up to date, downloading and installing updates in the background as they appear. We think this behavior is desirable and beneficial for most users, and we don't recommend changing it.

However, some may wish to monitor app updates and manually install these updates when they become available. To do so, open Store settings (See more > Settings). At the top of this display you will see an option, "Update apps automatically." If you wish to disable automatic app updates for some reason, change this to Off.

> **ℹ** If you make this change, Store will now alert you to new app updates via a number on the Store live tile and a small textual notification in the upper right corner of the Store app.

You can also manually check for app updates: Open the Downloads and updates view (See more > Downloads and updates) and then select the Check for updates button.

Manage app notifications

Like mobile apps on Android and iOS, Store apps don't need to be running to keep you up-to-date: They can display pop-up notification banners to alert you when something happens.

For example, the Mail app can notify you when new email messages arrive. And the News app can be configured to display notifications when important news breaks. But these banners aren't the only place you can see app notifications: They will also display in Action Center, on your lock screen, and/or via the app's live tile in Start.

Configure how app notifications work

That's a lot of notifications, so you may wish to spend some time configuring how notifications work. You do so by navigating to Settings > System > Notifications & actions.
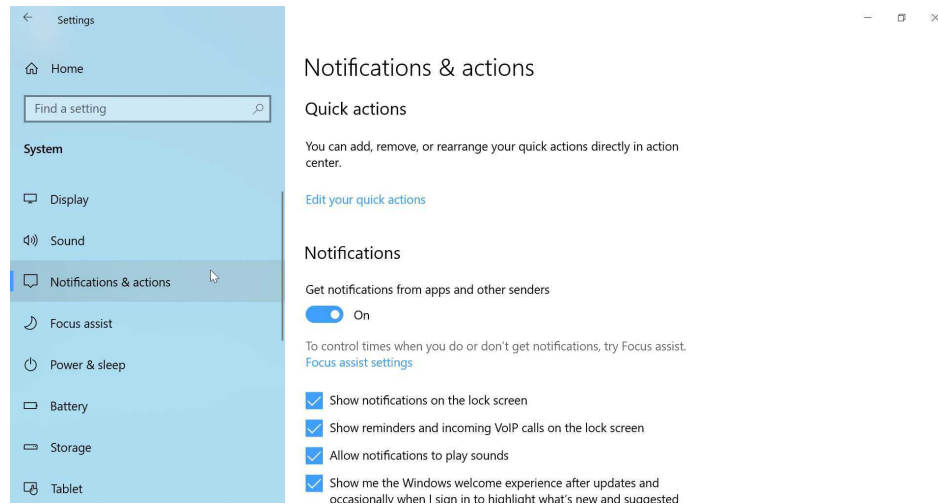
There are many options here. And while most are obvious enough—you can globally enable or disable pop-up notification banners and whether those banners appear over the lock screen, for example—the list of applications at the bottom is of particular interest. From here, you can configure how individual apps handle notifications.
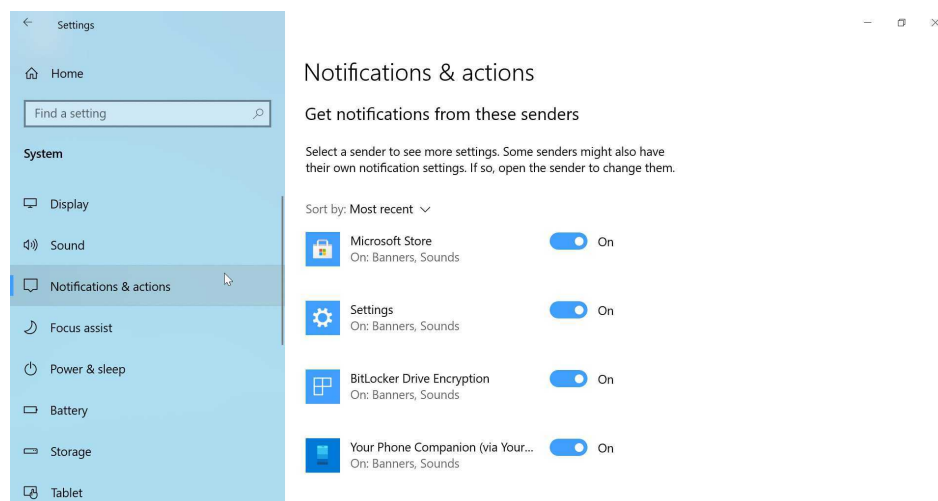
To disable all notifications for an individual app, just select the appropriate On/Off slider. Or, you can configure notifications in a more detailed way: When you select an app, you will see a list of notification options just for that app.
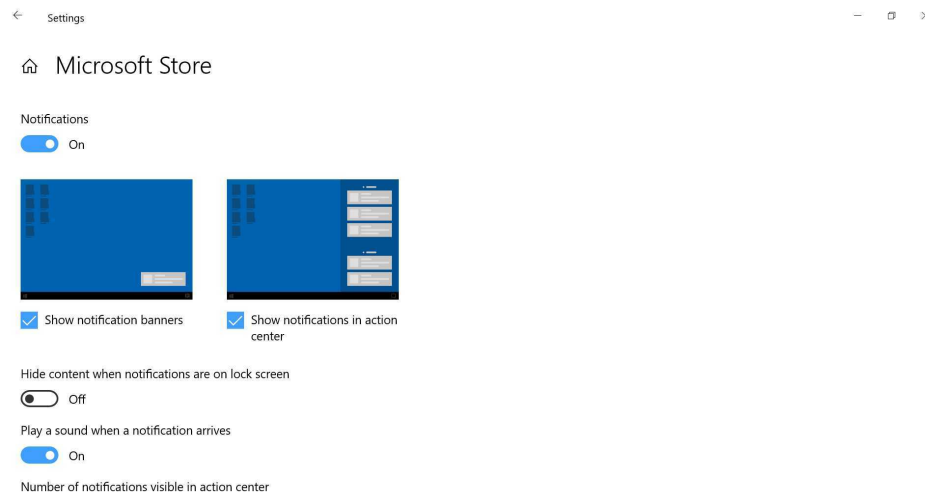
This page gives you much more control over app notifications: You can determine how and where they appear, whether a sound plays during a notification, and even an app's priority level in Action Center.

You might proactively scan the list of apps that can display notifications and configure them in one go. But it's more likely that you will handle this the way most do with their phones: You will determine that some app notifications are unnecessary when they start interrupting you, and then disable those notifications at that time.

Handle an app notification as it appears

Notification banners appear as little windows in the lower-right corner of the screen. They will appear regardless of what you're doing in Windows for the most part—they appear over the desktop, over apps, and over the lock screen by default—though their display is disabled during full-screen games.
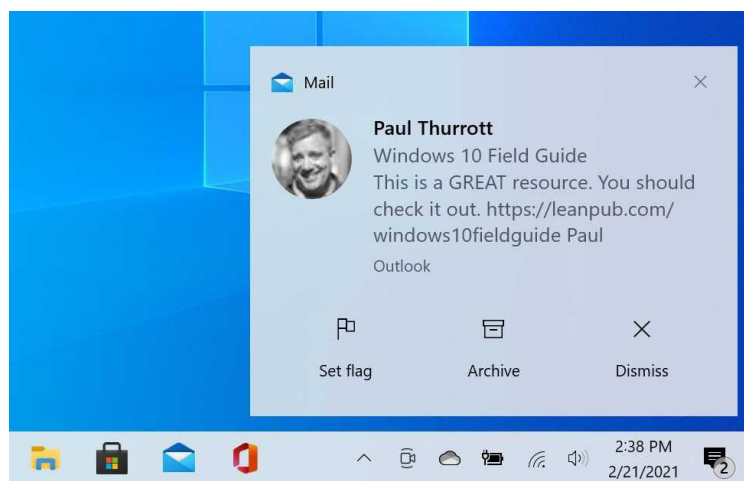
Notification banners vary by app. Some are interactive and provide options right on the window for dealing with the notification. In the image above, for example, you can see that Mail app notifications let you flag, archive, or delete a new email message right from the banner, without any need to launch the app.

As noted, if you select a notification banner before it disappears—they only stay visible for a few seconds—the underlying app that triggered that notification will open. But if you ignore or miss a notification banner, you can later view it and other notifications in the Action Center, as described below.

Handle previous app notifications

Action Center is the interface in Windows for managing notifications and *quick actions*, which are often-needed system functions like network settings, Airplane mode, and the like.

Action Center is a pane that appears on the right side of the desktop, but it is hidden by default. To display it, select the Action Center button towards the far right of system tray.
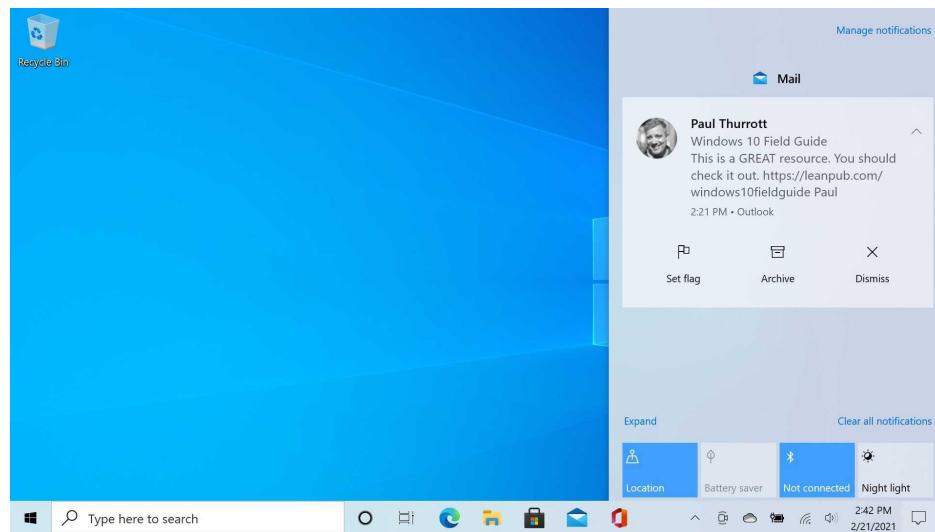
On a PC with multi-touch capabilities, you can open Action Center by swiping in from the right edge of the screen. And fans of keyboard shortcuts can type WINKEY + A.

You don't need to actively check Action Center for new notifications. It will subtly alert you when there are missed notifications via a number in a bubble overlay on top of the Action Center button. This number indicates how many new notifications await.

To access an app that triggered a notification, select the notification in the Action Center list. For example, if you select a newly-installed app as seen above, that app will launch.

When you access a notification this way, it is cleared from Action Center.

You can interact with many notifications directly from Action Center, just as you can with notification banners. When you mouse over a notification in the Action Center, two new icons appear: A Clear ("x") button, which is used to remove that notification, and a Settings (gear) icon.
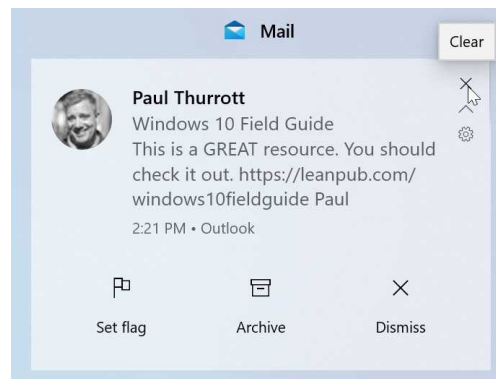
Selecting the Settings icon displays a menu with two choices: "Go to notification settings," which loads the Settings app, and "Turn off all notifications for [app name]."

If you mouse over the notification header—"Mail" in the example above—another previously-hidden Clear icon will appear, letting you clear all notifications for that app.

See what's new from the lock screen

Apps can optionally provide notifications over the lock screen so you can see what's new when the PC is locked. But there are multiple places to look at if you wish to configure how notifications work on the lock screen.

Enable or disable lock screen notifications globally

In the section *Manage app notifications*, above, we described how you can manage how each Store app on your PC handles notifications. Among those options is one related to the lock screen. To see this, navigate to Settings > System > Notifications & actions. There, you will see an option titled "Show notifications on the lock screen."

When enabled—as it is the default—notification banners will appear over the lock screen. So if you're not interested in lock screen notifications, this is where you turn that off.

Determine whether individual app notifications appear over the lock screen

You can also determine whether apps can display content in notification banners over the lock screen on an app-by-app basis. That is, you might leave lock screen notifications enabled globally, but disable those notifications for some individual apps.

To do so, navigate to Settings > System > Notifications & actions. Then, select an app from the list under Get notifications from these senders. On the page that appears, you can enable or disable the option "Hide content when notifications are on lock screen."

Personalize how notifications work on the lock screen

As discussed in the *Personalize* chapter, the lock screen also provides another form of notifications, called *status updates.* These are configured in Settings > Personalization > Lock screen. If you scroll down a bit, you'll see a section called Choose which apps show quick status on the lock screen. Here, you can configure app icons for detailed status and quick status updates.
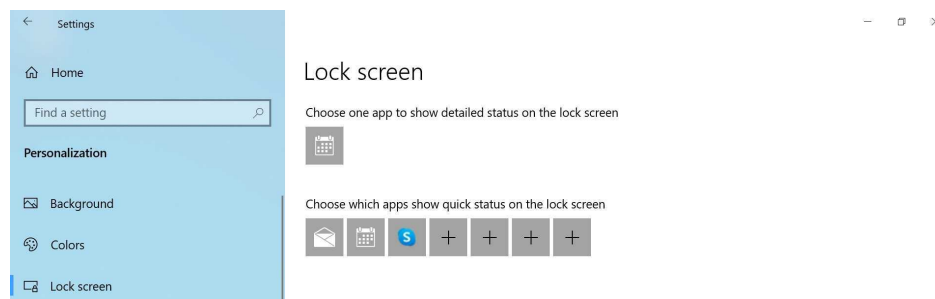
Windows lets you to have just a single app configured to display a detailed status, which isn't really all that detailed; it's usually just a short line of text. But lock screen status updates are pretty limited, too. You can configure up to seven apps that can display quick status notifications, and these are even less useful, and generally just provide an app icon with a number indicating how many notifications you've missed.

You can also choose an app that can show alarms on the lock screen

Worse, none of these lock screen notifications are actionable. That is, you cannot tap one, sign-in and go right to that app. Instead, you will need to manually find and launch any app that provided a notification.

See notifications in Start

Windows displays live tiles on the right side of your PC's Start menu, and you can add and remove tiles and further customize their behavior as you see fit. By design, these tiles are more dynamic than the static icons of the past, and many are configured to display live, at-a-glance information.

Live tiles help apps communicate what's going on without forcing you to manually open each of them in turn. For example, the Weather app's tile will display the forecast on its Start tile. And the News app will display recent headlines.

ℹ Be sure to check out the *Personalize* chapter to learn about the various ways in which you can customize each tile.

In addition to this behavior, some apps let you pin *secondary tiles* to Start as well. You do this from within the app, and how you do so varies from app to app.

The Mail app, for example, lets you pin individual email folders to Start. And Weather, shown here, lets you pin a favorite location to Start. In this way, you can see multiple forecasts at the same time.

Uninstall an app

Windows lets you uninstall apps—and desktop applications—in a variety of ways. But the easiest, perhaps, is to do so from Start.

To get started, just find the app you wish to remove anywhere in Start—the All Apps list, the tiles area, whatever—right-click (or, with touch, tap and hold) and choose Uninstall (or More > Uninstall) from the pop-up menu that appears.
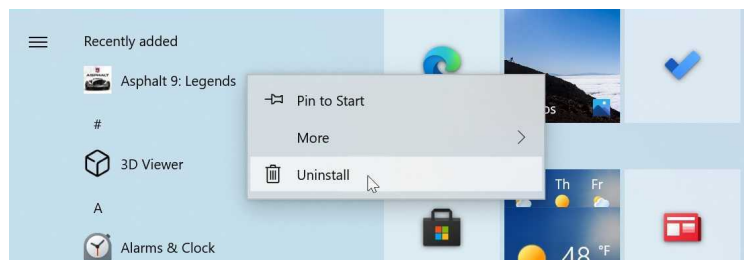
If you are uninstalling a Store app, you'll be asked to confirm this decision.

Store apps are self-contained and don't require special files to be installed in different locations all over your PC's file system like some legacy desktop applications. As such, they are very easy to uninstall. And doing so doesn't leave an unsightly (technical) mess behind, as can be the case with many legacy desktop applications.

Don't see an "Uninstall" option in the pop-up menu? Some of the Store apps that come bundled with Windows cannot be uninstalled normally. But there are some workarounds to this issue, including using a third-party application. One such solution is a free utility called CCleaner Free. Just navigate to Tools and then select the app(s) you wish to remove from the list. Then, click Uninstall.

If you are uninstalling a desktop application, the process is slightly different. The Programs and Features control panel will appear so you can then uninstall the application from there.
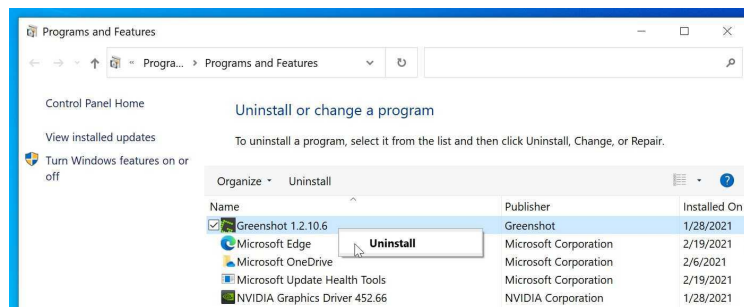

What you see next will vary somewhat according to the application, and some desktop applications also provide other options, such as the ability to add or remove features or fix a problem. Some will also require you to reboot the PC to complete the uninstall process.

You can also uninstall an app from Settings. Navigate to Settings > Apps> Apps and features. Then, select the app you wish to uninstall from the list. As you do, it will expand to reveal Move and Uninstall buttons. Select Uninstall. If you choose to uninstall a desktop application from Settings, its uninstaller will run directly without any need to invoke Programs and Features.

Configure default apps

Windows provides a Default apps interface in Settings so that you can determine which apps respond to specific actions, such as opening common file types. To see this, navigate to Settings > Apps > Default apps.
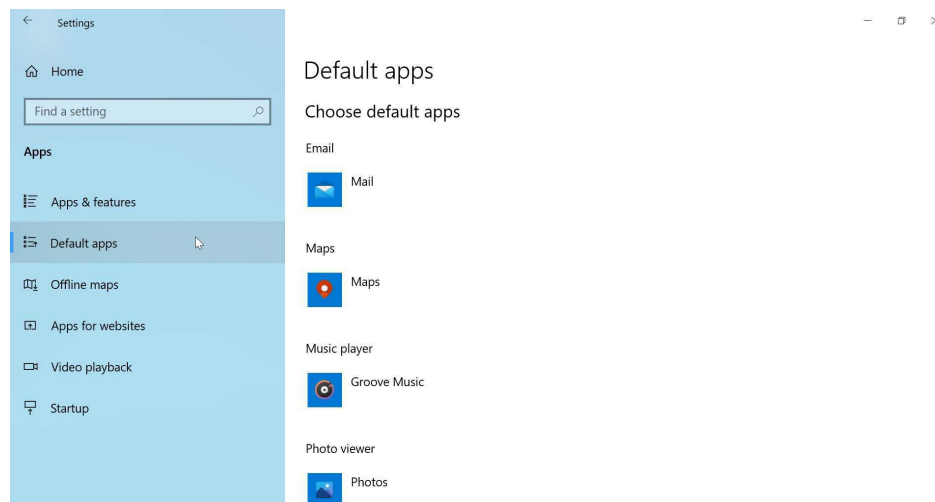
To change the default app for a particular action—Email, Maps, Music player, and so on—simply select the app that is currently configured. A pop-up will appear, providing you with a list of the available options.
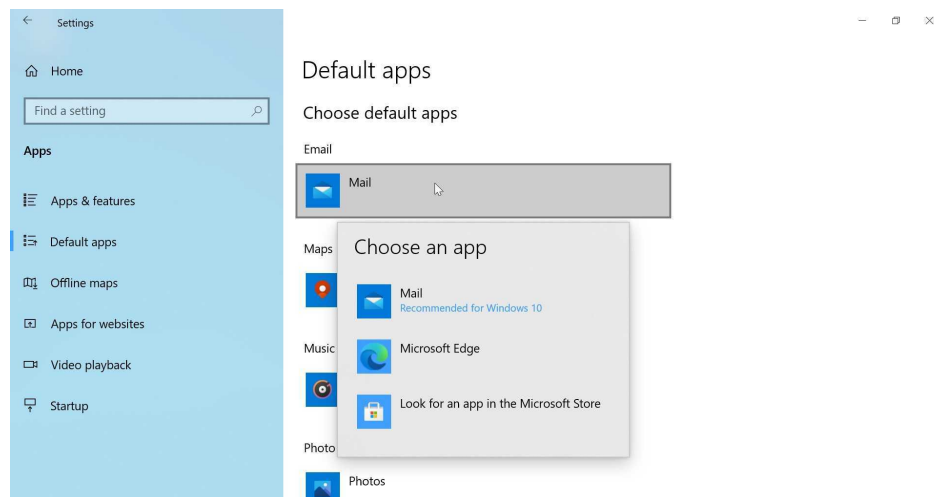
In previous Windows versions, Microsoft offered a Set Default Programs control panel that offered a more complete way to change default apps. Today, this interface has been replaced by "Set defaults by app," which is available via a link on this Settings page.

You will also be given the option to choose a default app the first time you open certain file types for the first time. You can use the pop-up that appears to choose an app for just this one time. Or you can also select the "Always use this app" link to make it permanent.
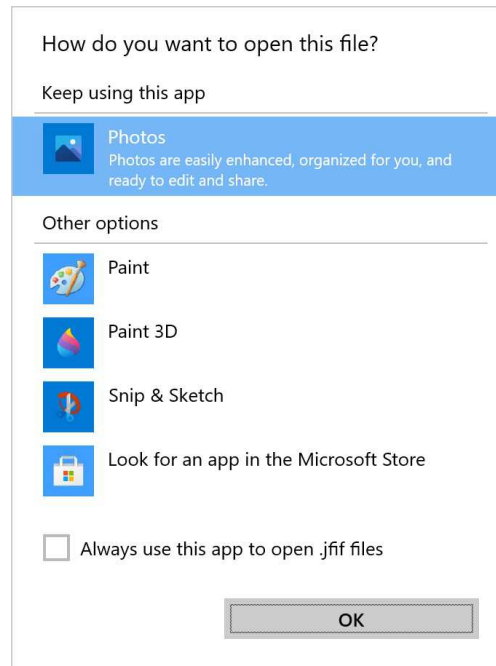
You can choose to open any document or other data file with a different app—or choose a different default app on the fly—but right-clicking it in File Explorer (or on the desktop) and choosing Open with > Choose another app from the pop-up menu that appears.

Configure where apps are located

By default, apps are installed on your C: drive. But if your PC has multiple drives or partitions, you can change the default location and, in many cases, move Store apps to a new location.

Determine where new app installs are located

To determine where apps are installed by default, navigate to Settings > System > Storage. Then, select the link "Change where new content is saved" under More storage settings.

To change new app installs to another drive, select the drop-down under "New apps will save to:" and change the location.
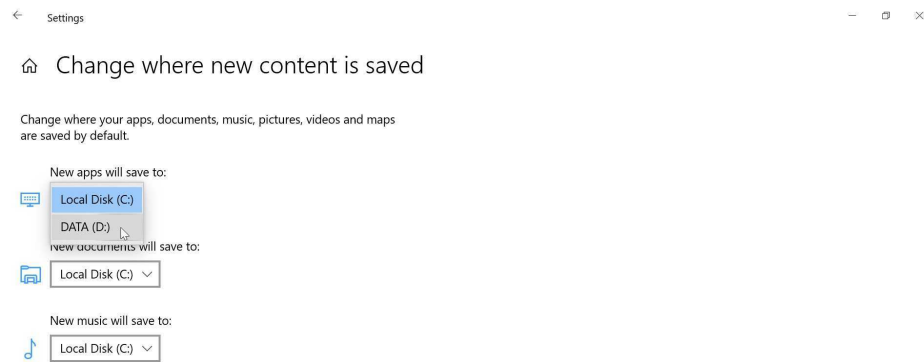
Move an app to a new location

You can also move most Store apps to a different drive. This is helpful if you are running out of space on a drive, or have installed a new drive for this purpose.

To do so, navigate to Settings > Apps > Apps & features. Then, select the app you wish to move. When you do, it expands to reveal Move and Uninstall buttons. Select Move and then, when prompted, the drive to which you'd like to move the app.
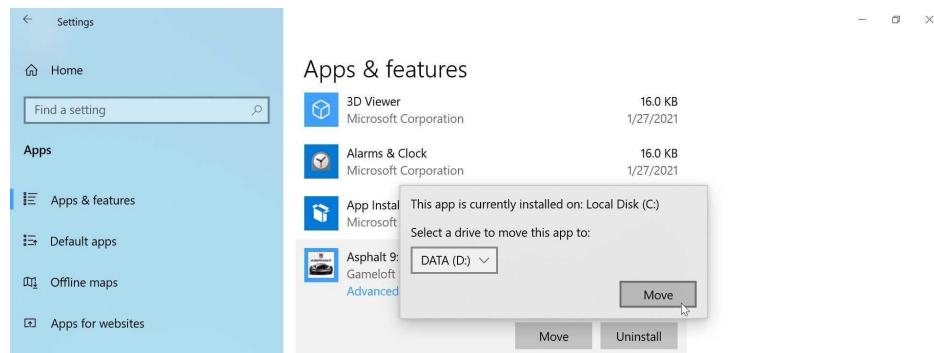
You can change the list of apps displayed here so that it sorts by size. To do so, select the "Sort by" item at the top of the list.

Some Store apps, including many that come with Windows, cannot be moved. In that case, the Move button will be grayed out.