

Exploring Nougat on Your Samsung Galaxy S7

By Eric Butow

For readers of *My Samsung Galaxy S7* by Craig James Johnston and Eric Butow

If the new Samsung Galaxy S8 doesn't interest you but you still want to use the latest and greatest Android version 7.0 (called Nougat) on your Galaxy S7, you may have already upgraded your S7 to Nougat. If so, or if you haven't and you're not sure what's included with Nougat that makes it worth upgrading, this article will help you decide about and/or get started with Nougat. Note that the apps I discuss in this article are ones that were discussed in *My Samsung Galaxy S7*.

The Always On Screen

Samsung realized that people love to check their phones often to see what time it is and if they have any notifications such as new text messages. So, just as with the previous version of Android (Marshmallow), Nougat on the Galaxy S7 has the Always On screen activated by default so your smartphone is (ahem) always on.

The Always On screen shows the current date and time. Underneath the time, you see any notifications that you may be interested in. For example, in Figure 1, you see the notification row that contains icons such as an envelope that tells you have an e-mail message in your inbox.

You can view as many as four notifications on the screen. If there are more than four notifications waiting for you, then you'll see the most recent three icons in the notification row from left to right. On the right side of the notification row, you'll see the number of additional notifications waiting for you as you see in the example in Figure 1.

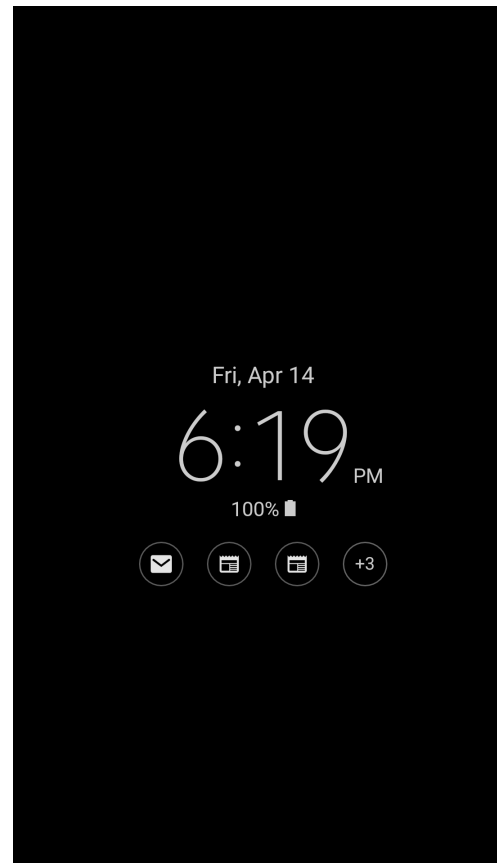


Figure 1. The +3 icon in the notification row tells you that you have three more notifications waiting for you in addition to the three notifications also within the row.

Turn off the Always On screen and view the Lock screen by pressing either the Power button or the Home button.

The Lock Screen

The Lock screen in Nougat shown in Figure 2 looks a lot like what you saw in Marshmallow. Your latest notification summaries appear below the time and date, and minimized notifications appear within an icon row below the notification at the bottom of the list. As with Marshmallow, swipe from left to right (or right to left) on the screen to view the Home screen.

Note

If your home screen was locked in Marshmallow, it will still be locked in Nougat so you'll still have to log in with your password or with the fingerprint sensor.

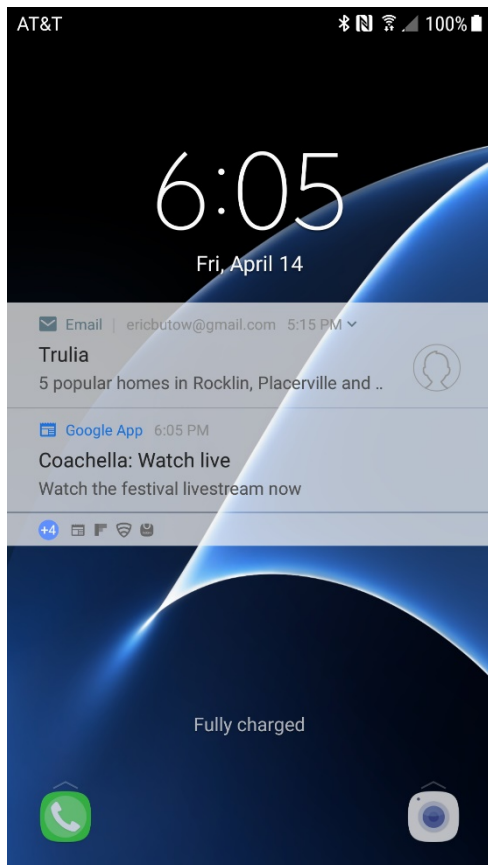


Figure 2. Underneath the notifications list, you'll see the battery charge status, which in this case is fully charged.

The Phone and Camera icons appear at the bottom left and right of the Lock screen, respectively. Tap and hold on the Phone icon and then swipe upward to view the keypad and make a call. You can take a photo quickly by tapping and holding on the Camera icon and then swiping up to open the Camera app.

When you're done with either app, you can return to the Home screen by pressing the Home button.

The (Slightly) New Home Screen

After you upgrade to Nougat, you'll see the same Home screen layout that you were used to in Marshmallow with a few minor icon changes, such as to the Email and Camera icons that you see in Figure 3 on the next page. Swipe from left to right in the primary Home screen to see the Flipboard Briefing screen so you can start reading your Flipboard stories. When you're in the primary Home screen, you can also swipe from right to left to view secondary Home screens.

You may see a blue bar at the bottom of the Home screen. When you tap and hold on this bar and then swipe up, you'll see the Samsung Pay screen (Figure 4, also on the next page) so you can set up Samsung's online payment system for purchasing items with your phone. You can learn more about Samsung Pay by swiping left and right within the top half of the screen. Start the setup process by tapping Start in the lower-right corner of the screen.

Note

I won't cover using Samsung Pay on the Galaxy S7, but you can learn more about Samsung Pay on their website at <http://www.samsung.com/us/samsung-pay/>.

If you don't want to use Samsung Pay, then Samsung has pre-installed two other payment apps on your Galaxy S7: Android Pay and Plenti. If you don't want to use these apps and remove them from the Apps screen, you can disable them by opening the Apps screen, tapping and holding on the app icon, and then dragging the icon to the Disable icon at the top of the screen. Though you won't see the icon in the Apps screen and all functions of the app will be disabled, the app will still be stored on your Galaxy S7.

Quick Settings and Notifications

As with Marshmallow and other past versions of Android, you can view the Quick Settings and Notifications screen by tapping and holding on the top edge of the screen and swiping down. And like all upgrades in Android, the Quick Settings and Notifications screen has some changes from the previous version, and not just with the fonts and placement of features such as icons.

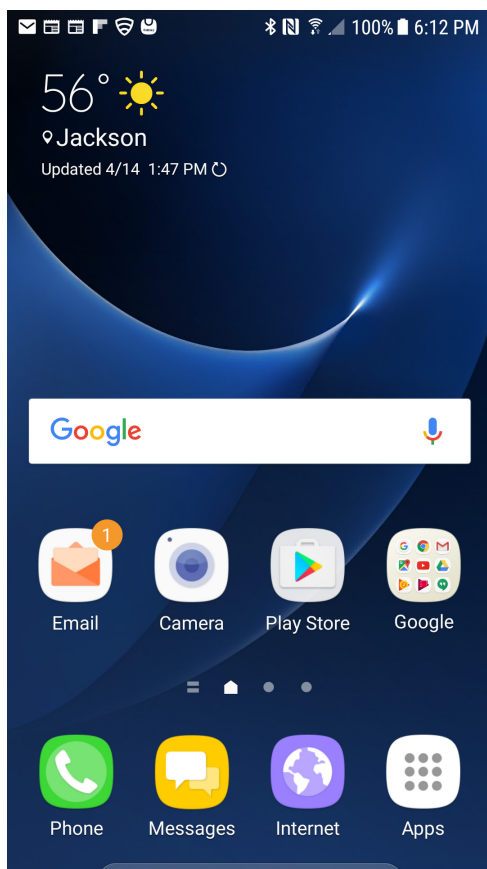


Figure 3. Google just can't stop tweaking the look of icons with each new version of Android, so in Nougat the icons are rounded squares.

SAMSUNG pay

Samsung Rewards

More purchases. More points.
Join now to start earning points.

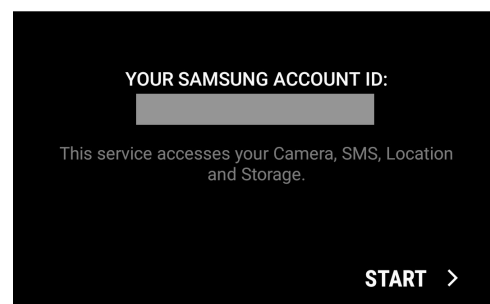
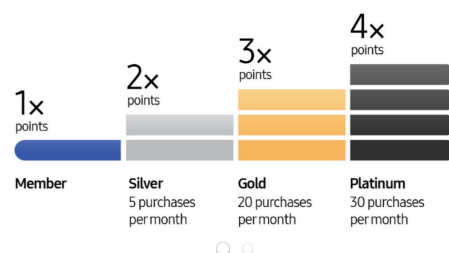


Figure 4. Your Samsung Account ID is the account e-mail address that has been hidden in this figure.

Each notification tile, an example of which is shown in Figure 5, now includes three separate sections, from top to bottom:

- The notification category, such as if the notification is from a specific app or the Android System (that is, Nougat).
- The notification title, such as if your Galaxy S7 is connected to Wi-Fi.
- The notification message, such as the Wi-Fi network to which your Galaxy S7 is connected.

Viewing more information about the notification is the same as with past versions of Android: Tap the notification tile to open the app associated with the notification, such as the Wi-Fi page within the Settings app to view your Wi-Fi connections. Clear all notifications by tapping Clear All at the bottom right of the screen.

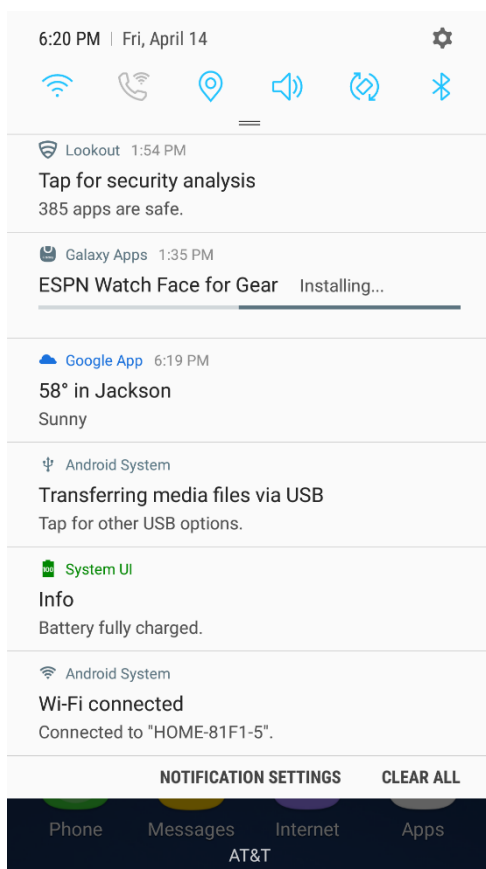


Figure 5. If there are more notifications than fit on the screen, swipe up and down on the screen to view all your notifications.

battery information and initiate power saving moves, and Performance Tools to optimize your Galaxy S7 performance. I'll talk about the latter a bit later in this article.

If you want to view the main Settings app screen, then tap the Settings icon in the upper-right corner of the Quick Settings and Notifications screen shown in Figure 5.

The icon bar at the top of the screen contains a row of six setting icons that represent the settings you may use most often. Those settings are, from left to right:

- Set your Wi-Fi settings
- Set up and use your Wi-Fi network to make phone calls
- Turn your Galaxy S7 locator on and off
- Increase or decrease the sound from your speakers
- Turn screen auto-rotation on and off
- Turn Bluetooth on and off

Swipe down within the icon bar to view the entire list of icons that you can change in Figure 6 on the next page. The icons in the first row and the first two icons in the second row are the ones that appear in the icon bar. The last two icons in the second row are Power Saving so you can view your

The third row of setting icons includes, from left to right:

- Set up your Galaxy S7 as a mobile Wi-Fi hotspot for other devices such as a tablet or laptop computer.
- Blue Light Filter to minimize blue light coming from your screen, which I'll talk about in more detail later in this article.
- Airplane mode to silence all calls and messages, turn off your data network if you use one, as well as turn off Wi-Fi and Bluetooth.
- Do Not Disturb mode to turn off all calls and alerts.

Swipe from right to left within the icon list to view more icons as you see in Figure 7. The seven icons on this screen include:

- Flashlight so you can turn your camera flash on and use it as a flashlight.
- Private mode to hide Gallery photos and other files from other users who use your phone.
- Smart View to view content stored on your Galaxy S7 on your Samsung Smart TV.

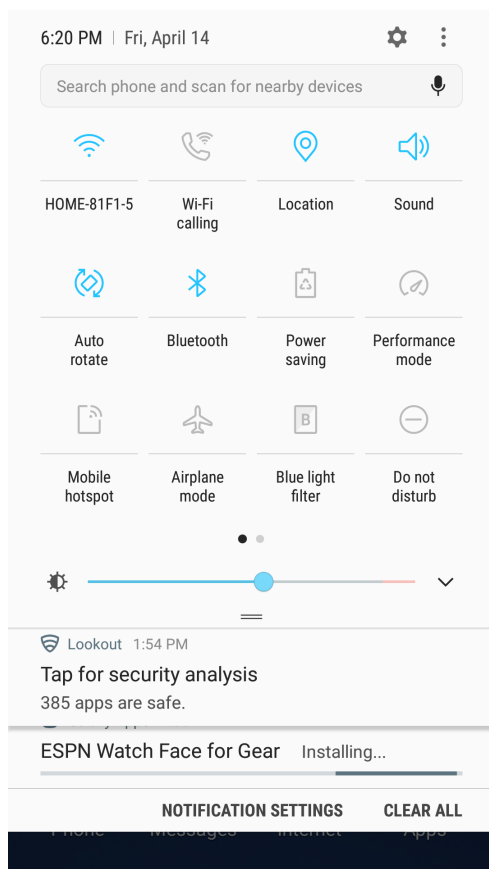


Figure 6. The Brightness slider appears underneath the list of icons.

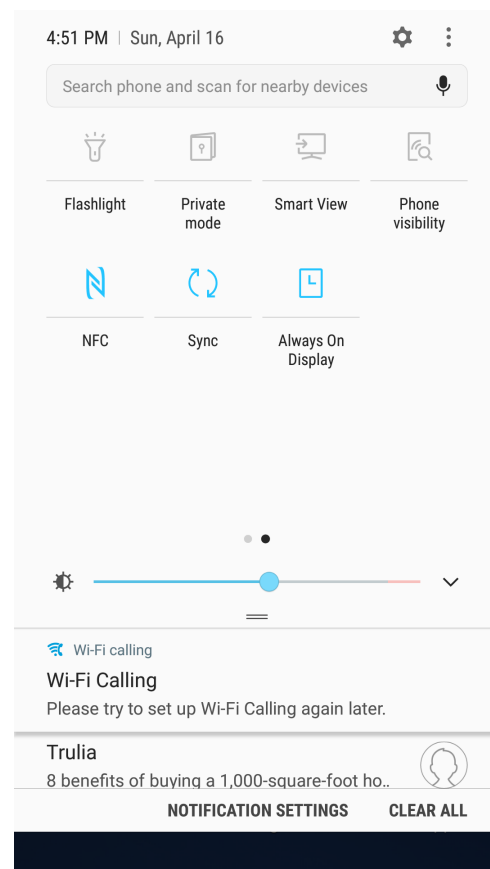


Figure 7. Search your phone for settings or nearby devices in the Search box above the setting icons.

- Phone Visibility so you can make your Galaxy S7 visible to other devices that can play your phone content such as TVs and headphones.
- NFC to turn Near Field Communication off and on. When you have NFC on, you can use the Android Pay, Plenti, and Samsung Pay payment apps on your Galaxy S7.
- Sync to turn auto sync of your accounts (such as email) off and on.
- Turn the Always On Display off and on.

If you want to view and/or change feature settings, tap and hold on the icon for a couple of seconds and then you'll see the available settings in the Settings screen.

Settings

Now that we've reviewed the quick settings, it's time to view the redesigned Settings screen in Nougat. As with Marshmallow, open the Settings screen by tapping the Apps icon at the lower-right corner of the Home screen and then tapping the Settings icon in the Apps screen.

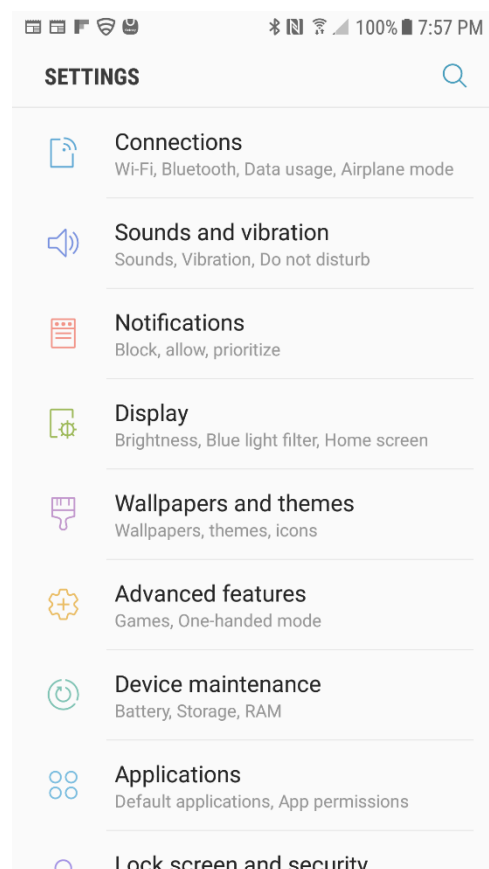


Figure 8. The first nine options of the Settings screen list, and each option comes with a colorful icon and description of some of the features you can change.

The Settings screen is now much easier to navigate as you'll see in Figure 8. Instead of having settings grouped in several categories, you can move up and down the screen to view each setting. The top of the screen includes settings you become accustomed to in previous Android versions including Connections, Sounds and Vibrations, Notifications, Display, Wallpapers and Themes, and Applications.

You also see the Advanced Features option for setting a variety of other settings, such as making it easier to use your Galaxy S7 with one hand, as well as the Device and Maintenance setting that I'll talk about later in this article.

Swipe up on the screen to view the remaining nine setting options shown in Figure 9 on the next page. Many of these options will be familiar to you from previous versions of Android, including Lock Screen and Security, Cloud and Accounts, Google, Accessibility, Help, and About Device. Nougat has grouped general options such as setting the date and time and the preferred language into the General Management settings page.

Samsung has also broken out the Software Update option, which was previously available in the About screen in Marshmallow, into its own update. If you're a developer, you previously had to perform a little routine within the About

screen to enable developer mode. In Nougat, developer options (including USB debugging) are turned on by default and you can access and change these settings by tapping Developer Options in the list.

On many Settings screens, swipe up until you reach the bottom of the list. Underneath the list, you'll see a section (see Figure 10) called Looking for Something Else? This section provides links to related topics. Tap on the topic link to read more about that topic on the screen.

Camera Quick Launch

If you need to take a photo quickly to get that perfect shot, activate the Camera app from the Always On, Lock, Home, or any other screen by pressing the Home button quickly twice. When your Galaxy S7 is protected with a pattern, PIN, password, or fingerprint lock type, then you'll need to enter your security information (or put your thumb on the Home button) first.

The first time you do this, you'll see a message shown in Figure 11 on the next page that asks you if you want to keep Camera Quick Launch on by tapping Keep Turned On or turn it off by tapping Turn Off.

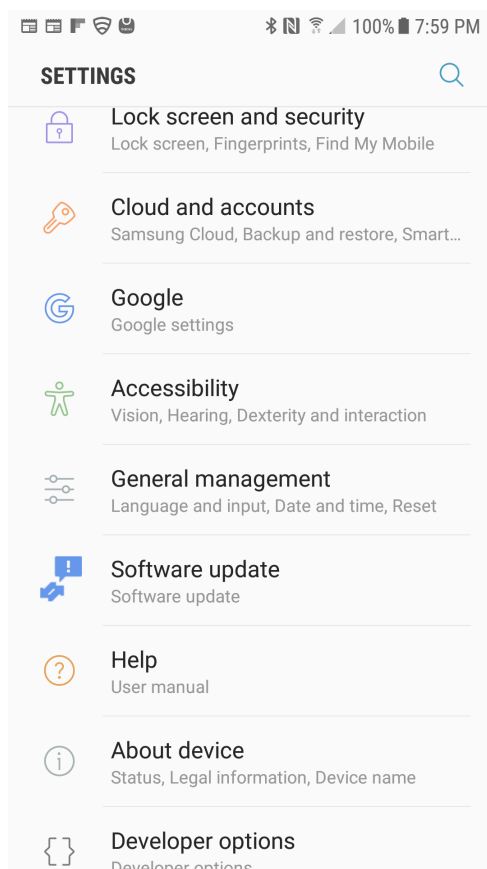


Figure 9. The last nine options in the Settings screen that barely fits on the entire screen.

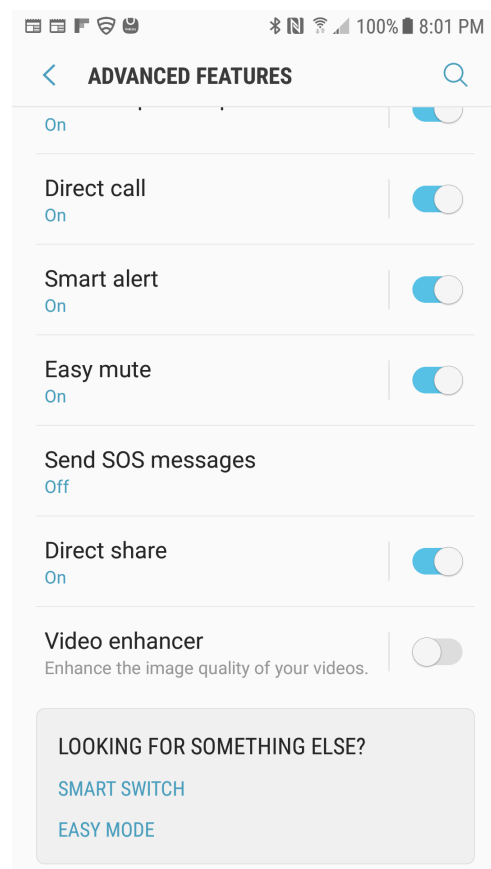


Figure 10. In the Advanced Features Settings screen, you can search for Smart Switch or Easy Mode by tapping the appropriate link.

When you keep Camera Quick Launch on, and you haven't set up the Camera app, you'll need to use the on-screen wizard to set up the app for your first use. So, if this is your first time using the Galaxy S7 camera, be sure to set up Camera Quick Launch and the Camera app when you're not under any pressure to get the right shot.

Device Maintenance

Nougat now comes with a Device Maintenance app pre-installed so you can check your Galaxy S7 and see how it's performing. If your performance can be improved, then you can tell the app to optimize your Galaxy S7 automatically.

Start by tapping the Apps icon at the lower-right corner of the Home screen, and then tap Settings. Next, tap Device Maintenance in the list within the Settings screen. The Device Maintenance screen automatically checks your system performance, such as how fast system functions are running, and rates it on a scale of 0 to 100 percent. In Figure 12, the performance is 79 out of 100.

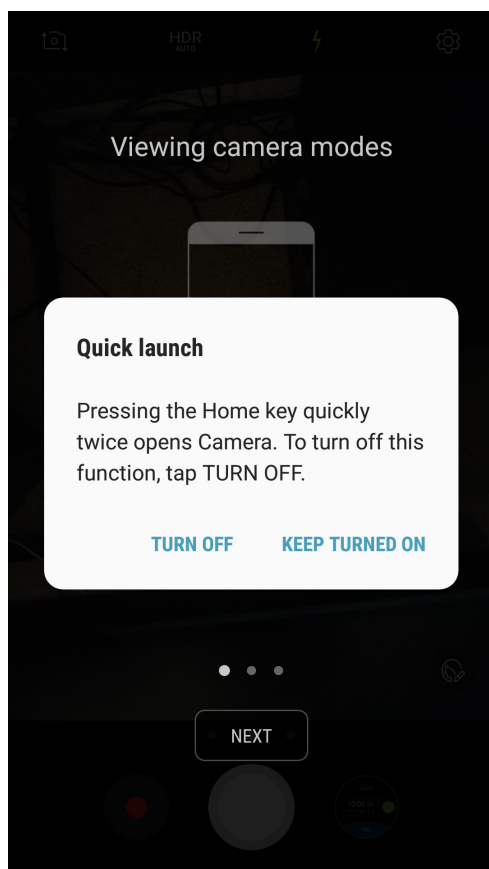


Figure 11. If you have a propensity to press the Home button quickly twice, then it's a good idea to turn off Camera Quick Launch.

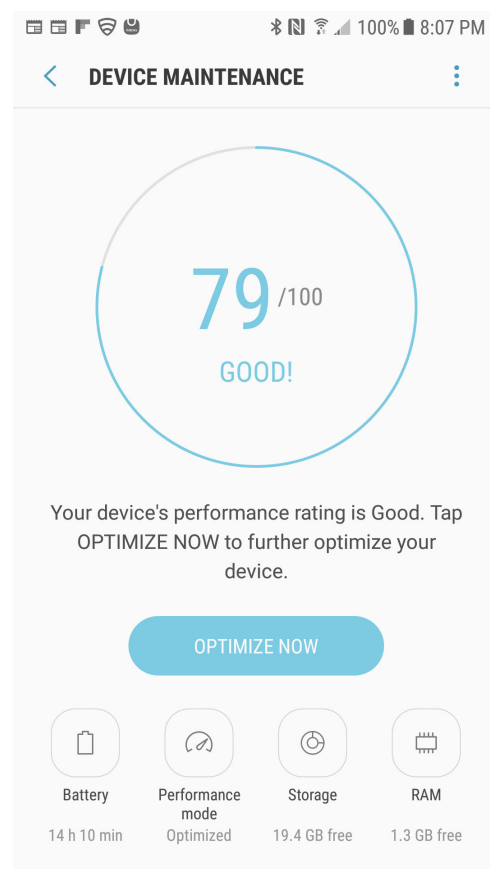


Figure 12. 79 out of 100 is good, but not good enough.

You can optimize your system automatically for the fastest performance by tapping Optimize Now. After a few seconds, the Device Management screen tells you that performance is now at 100 percent and a list of what the app optimized, such as how much storage space was freed up. Return to the main Device Maintenance app screen by tapping Done.

You can also change how the app optimizes your Galaxy S7 depending on how you use the device. View your optimization options by tapping the Performance Mode icon at the bottom of the Device Maintenance screen shown in Figure 12. Within the Performance Mode screen, the general (and recommended) Optimized mode is set by default. You can also select one of three performance modes:

- Game so your performance settings are as quick as possible.
- Entertainment with enhanced video and audio performance.
- High Performance so you have the highest video settings possible, which you'll learn about in the next section.

Make Your Galaxy S7 Look Its Best

Nougat now offers a wider variety of display options, which also includes three new video resolution settings. Open the Settings screen, as you learned to do earlier in this article, and then tap Display in the Settings screen list. Many settings, such as the brightness slider and the screen zoom and font, may be familiar to you from Marshmallow.

There are three new options for changing the brightness and look of your screen as you see in Figure 13, and for the first two, you turn them on by swiping the slider button for the setting from left to right.

Auto Adjust Brightness

This setting will automatically sense the lighting conditions and change the brightness automatically. If you're in a room with normal lighting, that means you'll see the screen at the brightness level shown in the Brightness slider bar. If the Galaxy S7 senses you're in a dark room, the screen brightness will be dim to save your eyes and brain from a rude shock.

Blue Light Filter

This setting reduces the amount of blue light that comes from the screen. When you're viewing the screen in normal mode, you may notice that the white screen has a bit of a bluish cast to it.

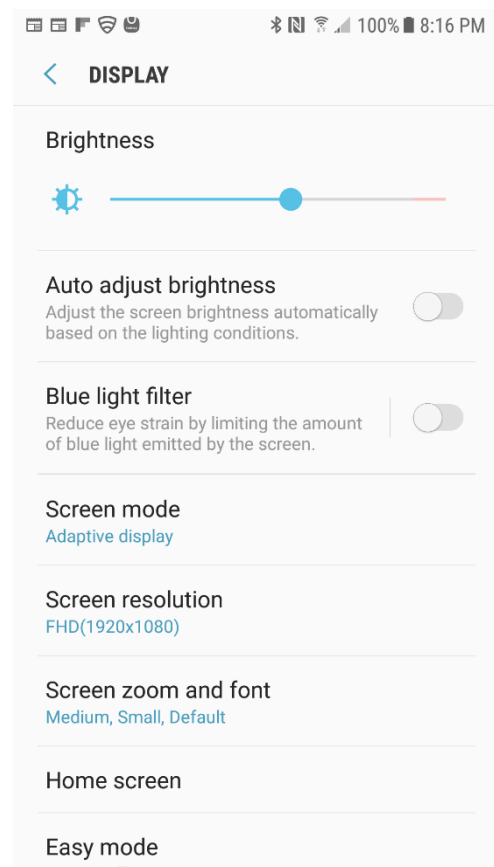


Figure 13. In the Screen Resolution setting, the default resolution is FHD, or 1,920 by 1,080 pixels.

When you turn on the blue light filter, you'll note that the white background has a beige cast to it, which is easier for your eyes and brain to process.

Screen Resolution

The default screen resolution on the Galaxy S7 is FHD, which stands for Full High Definition. That means your screen is $1,920 \times 1,080$ pixels per inch (PPI). You can choose from two other video modes. Tap Screen Resolution as you saw in Figure 13. Within the Change Screen Resolution page, move the slider to the left to change the resolution to HD, or High Definition ($1,280 \times 720$ PPI) or to the right to change the resolution to WQHD, or Widescreen Quad High Definition ($2,560 \times 1,440$ PPI).

When you set your desired resolution, tap Apply at the top of the screen. You likely won't see a change in how your screen looks unless you view a video or image on the screen. A video or image in HD format won't look as sharp, whereas you'll notice your videos and images look nicer in WQHD format.

However, be mindful of the effects that your video resolution will have on your battery life and system performance. HD resolution requires the least amount of processing power, and WQHD requires the most. That means if you view a video on your Galaxy S7 in WQHD

resolution, you may find that if you're running other apps at the same time you're viewing the video, the video playback may not be as smooth as you expect. And you'll run out of battery life much more quickly when you use WQHD.

So, your best option when you're viewing videos (or lots of images) in WQHD is to close any apps you don't need to run and have the Galaxy S7 plugged in so you don't have to worry about your battery running out of juice unexpectedly.

Change Your Home Page Layout

Nougat now lets you choose how many icons you can see on your Home screens. By default, you'll see a 4×4 layout. That is, you'll see four rows and four columns of icons for a maximum of 16 icons on a Home screen. However, you can see as many as 25 icons on your Home screens if you want.

Tap and hold on an empty area on a Home screen and then tap the Screen Grid icon shown in Figure 14. At the bottom of the Screen Grid screen, the default grid is 4×4 . You can also tap the 4×5 icon

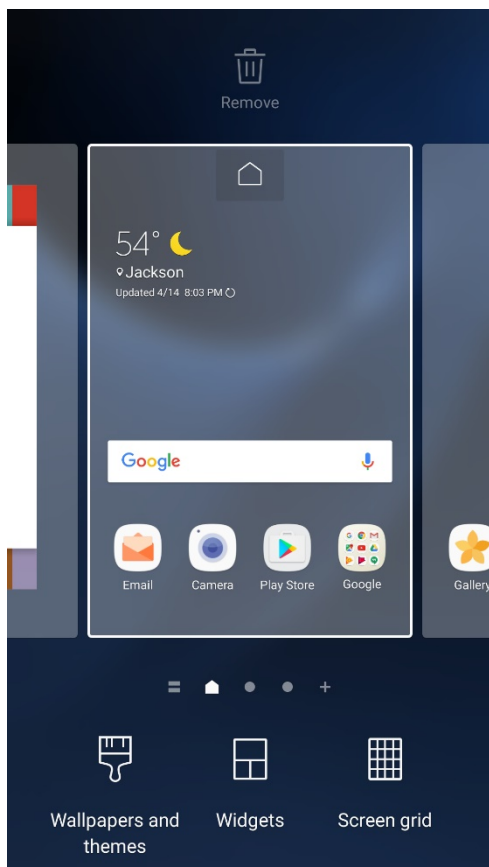


Figure 14. The Screen Grid icon appears in the lower-right corner of the screen.

(4 rows and 5 columns for a total of 20 icons) or the 5 × 5 icon (5 rows and 5 columns for a total of 25 icons). After you select a screen grid, you'll see a preview in the top part of the screen.

After you select your grid, tap Apply. The Home screens layout will change to match your new grid layout.

Don't Forget Widgets

No Android update comes complete without changes to the widgets you can choose from. Your phone/data carrier may also include some widgets of its own, such as the DirecTV widget you see in Figure 15 as my carrier is AT&T. Here's a quick review of all the widgets you can add to one of your Home pages:

- **Calendar:** A group of three different types of calendars: List, Month, and Tasks.
- **Chrome Bookmarks** so you can access your Chrome web browser bookmarks from within the widget.
- **Clock:** A group of three different clocks: Alarm, a Digital Clock, and a Dual Clock for viewing times in two different cities.
- **Contacts:** A group of three widgets that allow you to place a specific contact on a Home page for quick dialing; you can select Contact (to open the contact information), Direct Dial (to call the contact), and Direct Message (to send a text message to the contact).
- **Device Maintenance:** A group of two widgets that contains a link to the Device Maintenance Settings screen and another widget with several optimization settings you can access within the widget.
- **Drive:** A group of three widgets to access Google Drive including Drive to change your Drive account settings, Drive Scan to scan a document into PDF format with your Galaxy S7 camera and store the file in your Drive account, and Drive Shortcut to open your Drive account.
- **Email** for reading your new e-mail messages from within the widget.
- **Galaxy Essentials** for viewing and downloading suggested Samsung apps for your Galaxy S7.
- **Gmail:** A group of two widgets that allow you to view Gmail messages within the widget and Gmail Label for creating a new label in the Gmail app.
- **Google App:** A group of three widgets that show you the Google Feed, the Google search widget, and Google Sound Search so you can search for a song in Google Play Music based on a few notes you remember.
- **Google Play Music:** A group of three widgets to play songs in your Google Play Music playlist within the widget, a widget to open the Google Play Music app, and a widget to open your music playlist.
- **Google Play Store:** A group of three widgets including Play My Library to access your multimedia files, view Play Recommendations, and view featured Play Store apps.
- **Magnifier:** Opens the Camera app so you can use the camera lens as a magnifying glass.

- **Maps:** A group of five widgets that provides Directions, goes into Driving Mode, shows you a friend's Location, lets you share your location with a friend, and view current traffic information.
- **Memo:** A group of two widgets that allow you to create a memo as well as view your latest memo within the widget.

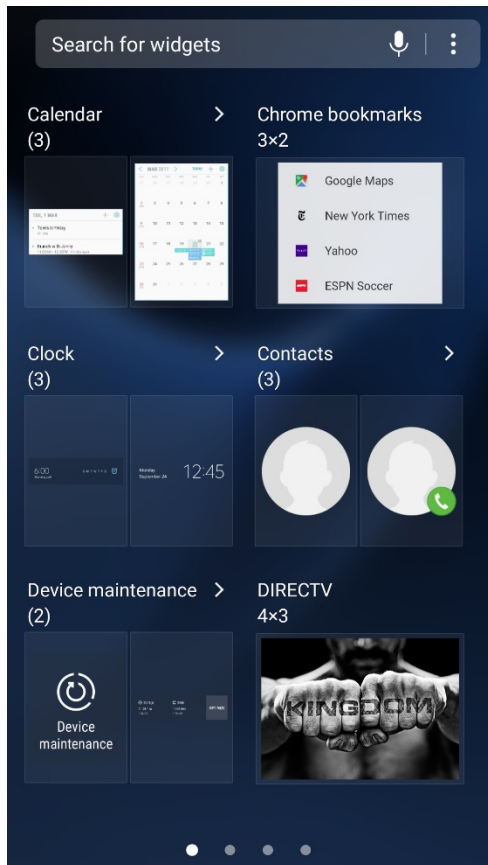


Figure 15. The name of widget groups includes the number of widgets within each group in parentheses after the group name.

- **Messages:** Allows you to view your most recent text messages within the widget.
- **S Bookmarks:** Shows you a list of bookmarks in the Internet app so you can find the bookmark within the widget and tap the bookmark to open the associated website.
- **Samsung Health:** A group of two widgets that shows you the number of steps you have taken since you started tracking your steps in the Samsung Health app. One widget shows the number of steps with a black background, and the other widget shows the number of steps with a white background, so you can choose which widget appears clearest on top of your screen wallpaper.
- **Samsung Milk Music:** Though Samsung Milk Music has been discontinued, for some reason Samsung continues to offer both the app and the widget in Nougat. It's safe for you to ignore this widget.
- **Usage Manager:** Allows you to view information about and change the usage of resources on your Galaxy S7 including the battery, memory, and number of active apps that are currently open.
- **Weather:** A group of two widgets that shows the current weather conditions for your current city as well as the weather combined with the current date and time.

With that, you've ended your not-so-quick tour of the many important new features in Nougat. These changes aren't the only ones but those changes aren't as big as the ones I've discussed, so enjoy finding these small changes for yourself as you explore Nougat on your Galaxy S7.