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How to Turn Your Android Phone into a Fully-Automated Superphone

TECH   VIDEO   GAMES   TWO CENTS   DEALS   OFFSPRING   THE UPGRADE   APP DIRECTORY   HOW I WORK

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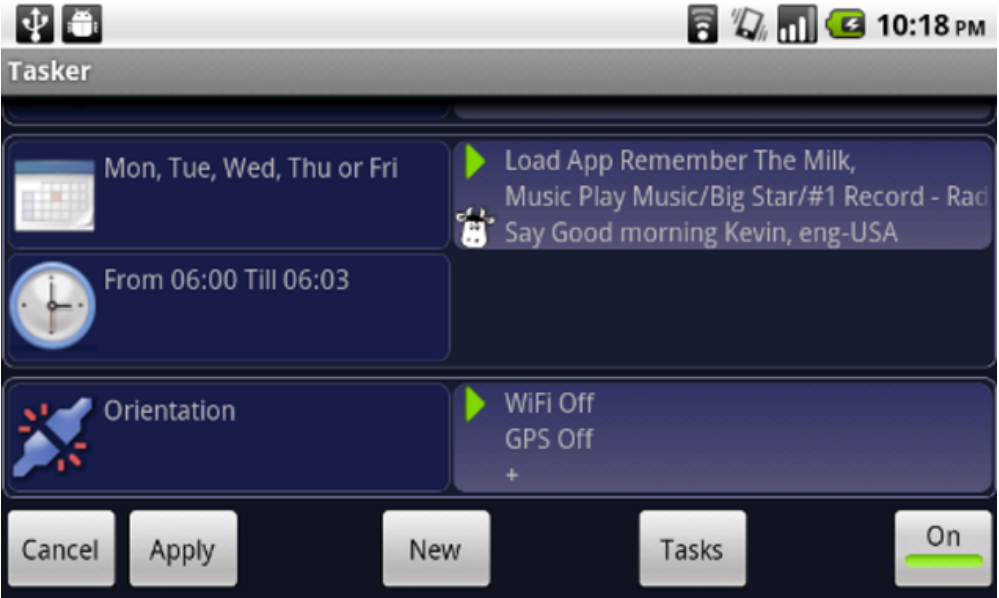7/29/10 12:00pm • Filed to: AUTOMATION ⌄

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What if your phone automatically went silent when you step into the movie theater? Texted your significant other when you finished your long commute? Or automatically turned down the volume when a particularly loud friend called? It can; here's how.

Android application Tasker gives you total rules-based automation for your Android phone. It's not free, but it offers a free 14-day trial download. In the Android Market, it's £3.99 in UK money—a little over $6 U.S. If you grab the trial, or shell out the cost of a Double-Double meal at In-N-Out Burger to buy it in the Market (scan the QR code at left), you'll discover it's worth the cost, even if you only have one super-specific use for it.

Tasker can do nearly anything on your phone. It's mostly limited by your imagination. Here are some up-front ideas about neat automations that come to mind:

· Set preferences for each application: Give the Kindle app a longer screen time-out. Make Maps or Foursquare automatically turn on GPS, and have a file browser launch when you trade out SD cards. Have your music and other audio apps lower the volume to 50 percent when you plug in headphones, so you never get a way-too-loud moment.

· Time of day automation: Make your phone go into airplane mode overnight, but re-connect for a few minutes every 30 minutes to grab messages. Set up your phone to play specific or random songs from your collection as an alarm, back up files from your SD card every day, load up an application at a certain time.

· Set up contact rules: If you've got a friend who talks too loud,

make your call's volume go down when they ring. Create a home-screen widget that sends an automatic SMS ("In the car," maybe) to the last person who called. Set your phone to pop up a more iPhone-style message box, rather than background notifications, when you miss calls or get SMS from certain people. Have your phone always record messages from a certain caller.

Here's a video demonstration of one of the Tasker apps I created, a "Face-Down Quiet Mode" that kills the volume on your phone, and shuts down Wi-Fi, Bluetooth, and GPS, when you turn the phone face-down:

Those use cases barely scratch the surface, really. Take the developer's tour, and you'll see there are variables, hundreds of events and triggers, and nearly infinite setups. Want to have Reddit.com launch on your browser if your alarm clock goes off on a Tuesday while Wi-Fi is on? You got it.

We'd need to write a research-paper-length treatise to cover everything Tasker can do for you, so we'll instead offer up a few examples of app models we've found handy.

Task 1: Turn on GPS/Bluetooth/Wi-Fi for Certain Apps Automatically
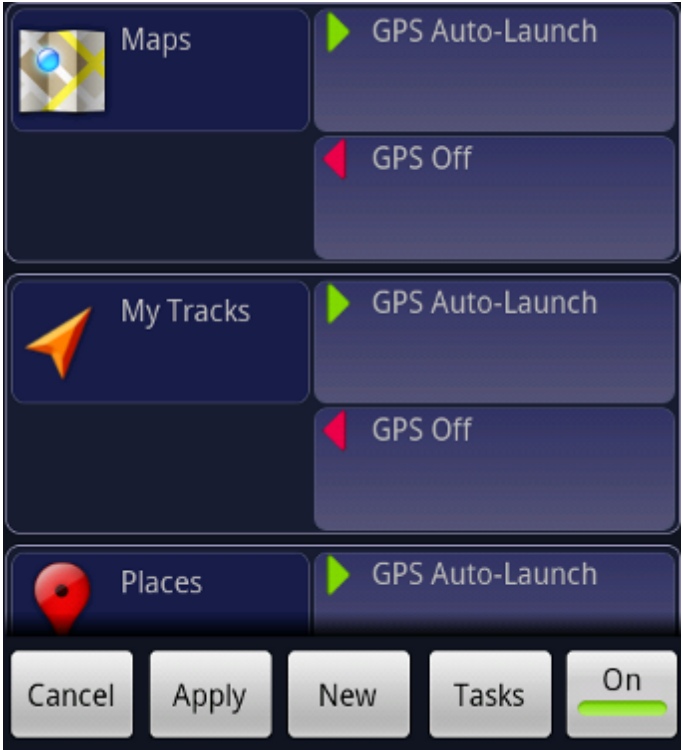
I don't keep GPS positioning on all the time, both for battery efficiency and a niggling sense of privacy. At the same time, I dislike when Maps, My Tracks, Navigation, or Foursquare ask me to turn on GPS, and I'm required to click "OK," then make the toggle in Settings, then head back. For *just* those apps, I want my GPS to automatically click on. When I'm done with those applications, the GPS should shut off, too. You can easily pull the same trick for Wi-Fi, Bluetooth, or most any system function, but we'll just show how GPS works.

From Tasker's main screen, hit "New." You'll be presented with six options, or "Contexts": Application, Time, Day, Location, State, and Event. Think of "Context" as an "If"—"If X is happening ..."

In this case, we're going to choose Application, then pick out the app we want to apply a rule to. You can pick out apps one at a time and apply your "Tasks" to them, but you can also apply Tasks to all applications, or pick out apps you *don't* want your Tasks to apply to with the "Not" button at bottom. We'll just pick out one app, Maps, which I almost always want GPS to be turned on for.

After you pick your Context, now it's time to add one or more Tasks. Thinking ahead though, we're going to apply this kind of action—turn GPS on when the app launches, then turn it off when it's moved away from—to a few different apps after this. So hit the "New" button in the upper-right corner, then type in a name for your Task that you'll easily grasp later, like "Auto-Launch GPS."

Now it's time to tell Tasker what Task we want to fire when this Context is happening. As you can see at left, you basically get your whole system

to play with. The thing we want, is under "Misc."

In the bar under the GPS "Set" option, you've got three options: On, Off, and Toggle, the last of which just flips the setting the other way, whichever way it is. There's also a checkbox for an "If," which, if clicked, drops down a box where you can enter in a variable and make it a condition. You could, for example, only have GPS turn on if airplane mode is set to off ("%AIR - Isn't Set"). Our needs, for now, are simple—just have GPS set "On," no matter what.

Well, that was pretty easy. Now you'll see that "GPS Auto-Launch" has just one task: "GPS - Set On." Let's say you were a little more protective of your GPS chip, though, and you wanted Tasker to ask you about GPS, Wi-Fi, or whatnot. The gear-and-screwdriver logo in the lower-right corner gives you that option. Set your "Task Type" to "Menu," and you'll get options to set how long the menu stays up, if there's a default option selected, and even set a background image, if you're feeling extra-custom. But we're just having Tasker take care of the GPS switch for us, so get back to the Tasks screen.

You could hit "Test" in the lower-right corner to see how Tasker handles launching Maps and turning on GPS automatically, but we're going to specify one more detail of our auto-launcher. Hit "Done" to get back to the main Tasker menu, then tap on the right-hand side of the process you created, the side with "GPS Auto-Launch" and a green arrow. From the menu that pops up, choose "Add Exit Task." When we told Tasker to do something when Maps launched, we created an "Enter" task. By adding an "Exit" task, we can have something else happen when Maps is closed down or put away. You can add these Exits to all kinds of conditions—when you're no longer near a certain location, when it's no longer a certain time, etc.

Update: Not all Tasker tasks *need* an Exit task—in general, whatever settings you've changed while a task is running will set themselves back when you're done. In this case, though, we're getting a little more extra-cautious control over

After hitting "Add Exit Task," you'll run through the same process you used to create the GPS turn-on: create a new name template, add the task GPS from the Misc menu, then set it to Off and hit "Done." Now, back at the main screen, you can see that there's a Context (Maps launches), an Enter task (GPS Auto-Launch), and an Exit task (GPS Shutdown).

Hit the "Apple" button at the very bottom, and now Tasker will be watching for Maps to launch, then do its auto-GPS thing.

This trick worked fairly well on my Nexus One, despite Tasker providing a pop-up note that application exit watching wasn't as stable on Android 2.0 and later. Worst case scenario, it doesn't launch GPS, and I do it myself.

Task 2: Create an Ultimate Morning Alarm

The next step, adding multiple tasks to a time condition, isn't all *that* different, but it does show off how far Tasker can go in automating your phone. So let's create Kevin's Ultimate Alarm.

Hit "New" and choose Time as the Context. I'll have this alarm go off at 6 a.m. and, if I don't respond, play for 3 minutes. You could just set 6-6 as your time to run until you take action, but I'll be nice to my morning self. We're going to add another context, the days of the week, later, but for now, you'll be moved into the Tasks section.

Here's a video showing what it looks like when my Ultimate Alarm fires off:

For my own Ultimate Alarm, I'm having a song play from my collection, make my Remember the Milk tasks load up on the screen, and have my phone say, in text-to-speech, "Good morning, Kevin. It's going to be a great day." Why? Because, why not? For these

Tasks:

- Media—Music Play—Music Play Dir. After long-clicking on the "Dir" field and choosing my Music folder, I also checked "Audio Only" and "Random." If you wanted a particular song, you could swap "Music Play" for "Music Play Dir."

- App—Load App—Remember the Milk. Fairly simple, and I could set a different starting page in Remember the Milk's own settings, if I liked.

- Misc—Say. Then just fill in the text you want, choose a language, and mess with any other fields you'd like. "Stream" sets the output you'd like the audio to go through, which helps if you've got other things, like songs, going too. You can, of course, mess with the pitch and speed of the voice, too.

When you're all done and hit "Done," tap on the left-hand side of your Ultimate Alarm entry, where the clock is. From the menu, roll down Context and hit "Add," then choose "Date." From the pop-up chooser, you can get very specific about the months, days of the month, days of the week, and other selectors for when your alarm goes off. Mine's a basic Monday-through-Friday deal.

That's all there is to that one, but it's a pretty nice package.

Task 3: Make Your Phone Quiet Down When Face-Down

Now I'm going to create a kind of "Quiet Down" mode for my phone (the video demo of which was posted higher up, or can be found on YouTube). When I put it face down on a flat surface, like arriving at my desk for work, it should turn off GPS, Wi-Fi, and Bluetooth (and, heck, you can turn off EDGE/3G data, if you'd like), and then turn the system, ringer, and media volumes all the way down but keep vibrate on. By default, whatever you had on when you flipped over will come back up when you flip it back up, but that's fine by me; you can change that in each setting, if you'd like.

For this Context, you would choose State, then pick Orientation. You'll get the options you see at left. I like to stay away from "Face up," "Standing Up," and "Upside Down," because they're pretty common occurrences. For this example, "Face Down" is a pretty deliberate action you take with your

phone.

For
the
tasks,
I
added

"Bluetooth" and "WiFi" from the Net menu, set to
Off, "GPS" from Misc set to Off, and set the
volumes for "Media Volume" and "System Volume"
to 0 from the Audio menu. "Silent Mode" with
Vibrate could simplify your setup, but I like to
be sure. If you'd like, you can re-order the
tasks in priority by pressing and dragging them
up the chain. In this case, I moved the
volume-to-0 tasks up higher, since silencing the
phone was the most important thing to do. Hit
Done, and you're all set.

We've only scratched the surface of what Tasker
can do, but we know it can do many, many more
cool things. If you grab Tasker and give it a
try, or just daydream a great if-then
combination, by all means—tell us in the
comments. We'll check back in on this post and
include the great Tasker tasks in a follow-up.
*Special thanks goes out to "Bloggerific
Himself," who turned us onto Tasker via
email.*