Abstract

Good and efficient power management is needed by Android smartphone users to support mobility, but users often do not realize that the application process running behind the screen uses a lot of power. Turning off all application processes that run behind the screen is a solution, but is detrimental to the user if the process is needed to keep running. Therefore, a mechanism is needed to regulate the processes that are running using the categories associated with user preference. Where category is done to categorize all processes running into application categories. From the categorization process the priority of the application's importance is carried out, so that it is known that the process is important or not for the user to be turned off. The built system model that has been tested for power use using Ampere has succeeded in reducing power usage. Awake scenario testing for 20 minutes also managed to redice power by 3 %.

Keywords: power management, power saving, android smartphone, category.