

# Report: Power & Data Consumption Analysis of Where's My Staff App

### 1. Introduction

Where's My Staff is a lightweight and simple geolocationbased solution tailored for small and medium-sized businesses (SMBs). It offers essential features to track and manage employee attendance and movements effectively without burdening the user's device or data plan. This report analyzes the app's power and data consumption to demonstrate its efficiency and suitability for SMBs.



## 2. Testing Environment

- Device: Samsung Galaxy A52
- OS Version: Android 14
- App Version: Where's My Staff 2.1.36 GMS
- Testing Date: December 26, 2024
- **Usage Scenario**: The app was tested under real-world conditions, running in the background for an entire workday while being actively used for attendance tracking.

### 3. Power Consumption Analysis

Data Summary

- Total Usage Time: 10 hours 47 minutes
  - Screen Time: <1 minute
  - Background Operation: 10 hours 46 minutes

#### System Resource Usage

- Wake-ups: 555 times
- Wake Locks: 27 minutes
- CPU Usage: 10 minutes

#### **Battery Usage Contribution**

• The app accounted for **2.4% of total battery consumption from a full charge battery** on December 26.



• Designed with SMBs in mind, the app consumes minimal battery power by optimizing background processes and efficiently using location services.

#### Observations

- The app's minimal impact on battery life ensures it remains functional throughout a standard workday without requiring frequent charging.
- Wake-ups and background operations are well-optimized to balance performance and power consumption.

### 4. Data Consumption Analysis

Usage Statistics (slightly more than the average working day)

- Total Data Used: 5.22 MB
  - Foreground Data: 5.22 MB
  - Background Data: 845 bytes

#### **Observations**

- The app's data usage is lightweight, with the majority of data consumed during active use, ensuring minimal background data consumption.
- The app's reliance on OS Location services (Google services and iOS) reduces additional data usage, making it ideal for users with limited mobile data plans.
- The total data consumption of 5.22 MB over an entire workday demonstrates its efficiency, even with active use.

### 5. Conclusion

Where's My Staff is an efficient and lightweight solution, ideal for SMBs seeking a simple yet effective employee tracking app. Its low battery consumption and minimal data usage make it a practical choice for businesses that prioritize cost-effectiveness and simplicity. The app's design ensures it delivers reliable performance without overburdening devices or requiring extensive technical knowledge.

# 6. Appendix

- 1. Battery Usage Summary (Screenshot):
  - Total usage time, wake-ups, CPU usage, and wake locks.
- 2. Data Usage Summary (Screenshot):
  - Foreground and background data consumption.
- 3. Battery Activity Graph (Screenshot):



• Visual representation of the app's battery usage compared to other apps.

This report highlights Where's My Staff's commitment to providing a user-friendly and costeffective solution for SMBs. For more details, visit <u>http://www.wheresmystaff.com</u>



### Appendix 1: Battery Usage Summary (Screenshot):

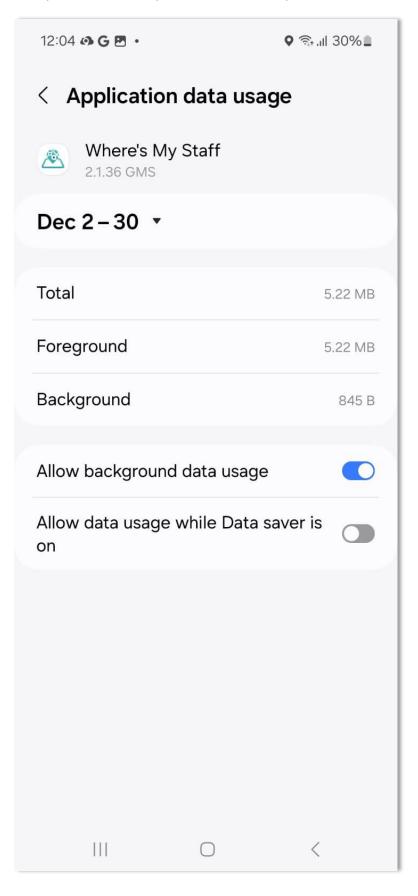
Total usage time, wake-ups, CPU usage, and wake locks.

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Dec 26		
Total usage time		10 h 47 m
Screen on		0 m
Background		10 h 46 m
System resource u	ısage	í
Wake-ups		555 times
Wake locks		27 m
CPU		10 m
Wireless communi	ication	j
Mobile data		0 packets
Wi-Fi		1161 packets
GPS		53 m
Bluetooth scanning		0 times
Background usage limits		
Sleeping apps will occasionally. Upda delayed. Deep slee	ites and notifica eping apps will	ations may be never run in
the background ar	nd may not rece	eive updates or



#### Appendix 2: Data Usage Summary (Screenshot):

Foreground and background data consumption.





# Appendix 3: Battery Activity Graph (Screenshot):

Visual representation of the app's battery usage compared to other apps.

