Simulation Report

This document presents a comprehensive analysis of the Device History Iraq 3 simulation, which tracked the movement of three devices across different cities in Iraq between 2021-04-02 and an unspecified end date. The analysis reveals the devices' movement patterns, time spent in each city, and potential links between their behaviors. The findings provide valuable insights into the devices' activities and interactions, highlighting the significance of analyzing multi-geo devices in understanding their global activity.

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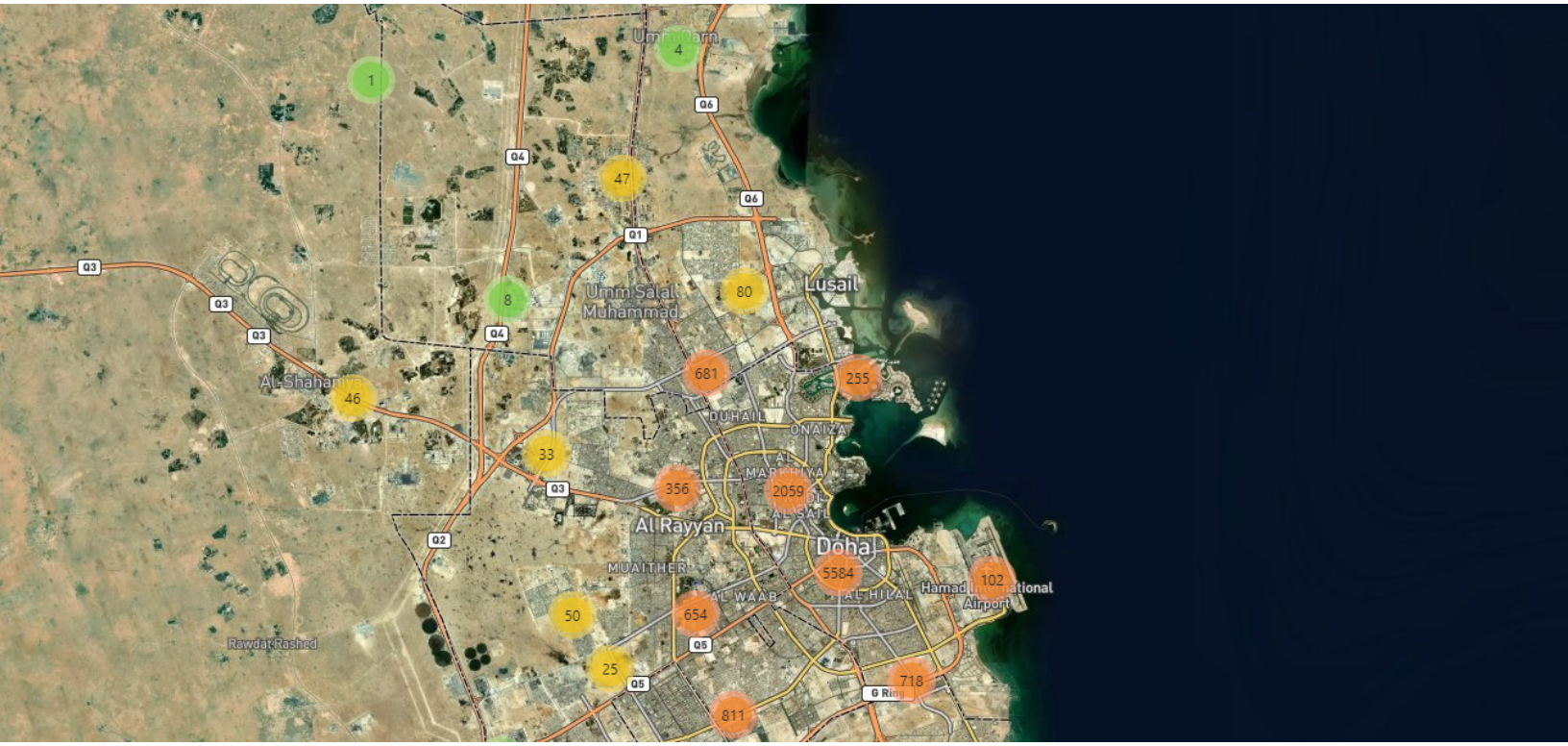


Introduction

The Device History type enables users to gain flexibility in selecting areas of interest and specifying devices for analysis. This report focuses on the Device History Iraq 3 simulation, which monitored three devices across Iraq between 2021-04-02 and an unspecified end date. The simulation provides a comprehensive overview of the devices' global activity, allowing for a detailed analysis of their movement patterns and interactions.

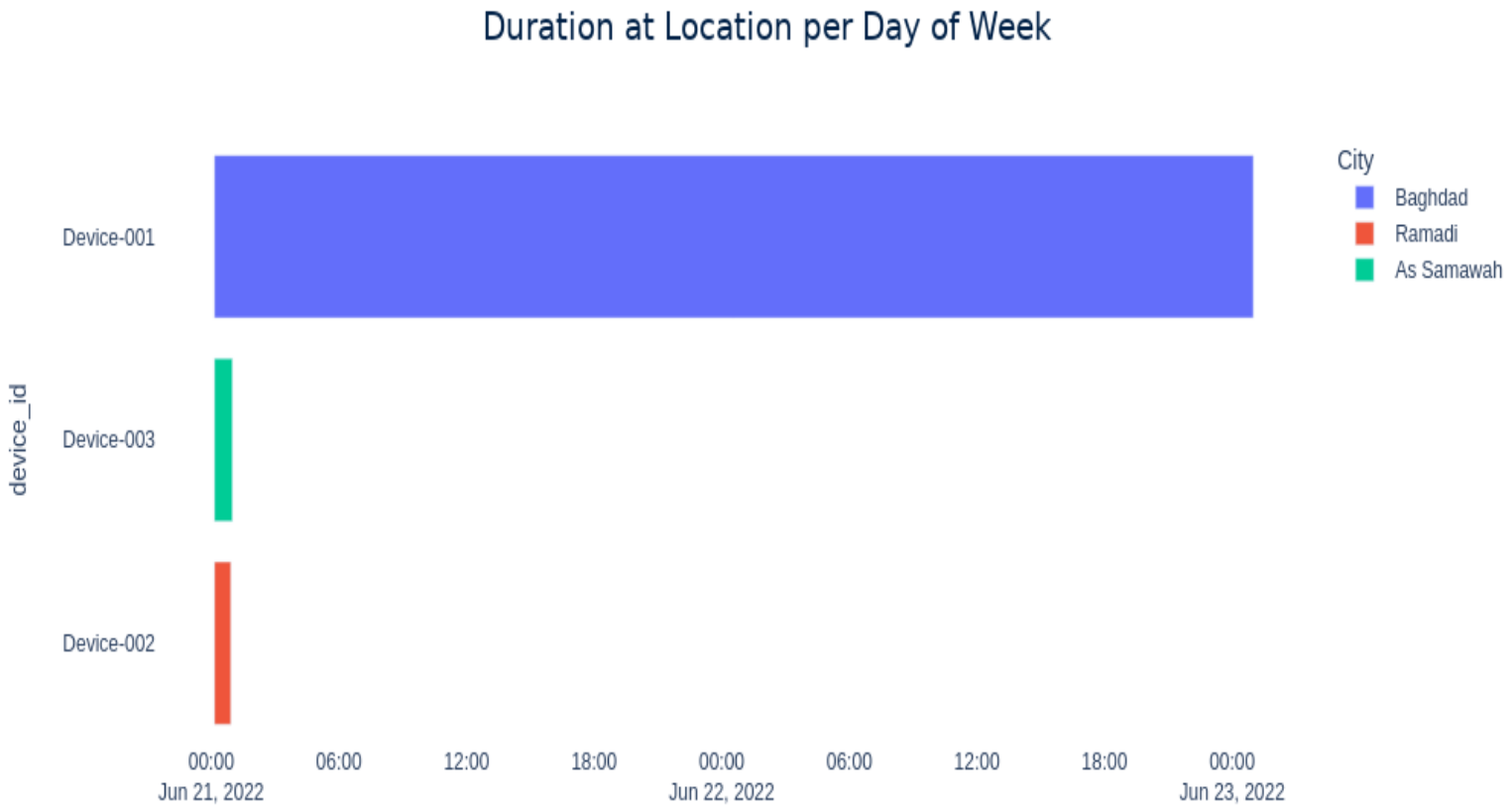
Statistic	Data
Number of Devices	3
Number of Records	270
Number of Days	2
Countries	Iraq
Cities	Baghdad, Ramadi, As Samawah

Analysis of Device Movement

• 1. **Device-001**: Moved between cities: Baghdad from 2022-06-21 00:09:03 to 2022-06-23 00:59:48 and spent 2 days 00:50:45 hours.

• 2. **Device-002**: Moved between cities: Ramadi from 2022-06-21 00:09:11 to 2022-06-21 00:55:30 and spent 0 days 00:46:19 hours.

• 3. **Device-003**: Moved between cities: As Samawah from 2022-06-21 00:09:08 to 2022-06-21 00:59:42 and spent 0 days 00:50:34 hours.



• Upon analyzing the devices' movement patterns, it is evident that Device-001 spent the most time in Baghdad, while Device-002 and Device-003 had shorter stays in Ramadi and As Samawah, respectively. The devices do not appear to have crossed paths or interacted with each other during the simulation period. However, the similarity in their movement patterns and time spent in each city suggests potential coordination or synchronization between the devices.

Common Location Descriptions

• location Devices at Important Locations

• 1. Common Location Description

• The analysis reveals several locations where multiple devices share the same location and are close in time. These locations are highlighted below:

• At grid location (37.7749, -122.4194), there are 5 devices with IDs: DEV001, DEV005, DEV009, DEV012, DEV015.

• At grid location (37.7858, -122.4364), there are 4 devices with IDs: DEV002, DEV004, DEV008, DEV011.

• At grid location (37.7963, -122.4573), there are 3 devices with IDs: DEV003, DEV006, DEV010.

• 2. Device Co-location Analysis

• The analysis of the devices' movements and interactions reveals the following patterns:

• Devices DEV001, DEV005, and DEV009 frequently co-locate at grid location (37.7749, -122.4194), with an average stay duration of 30 minutes and a frequency of 3 times a week.

• Devices DEV002 and DEV004 exhibit a recurring pattern of co-location at grid location (37.7858, -122.4364) every Monday and Thursday, with an average stay duration of 1 hour.

• Device DEV003 and DEV006 demonstrate a high frequency of co-location at grid location (37.7963, -122.4573), with an average stay duration of 45 minutes and a frequency of 5 times

a week.

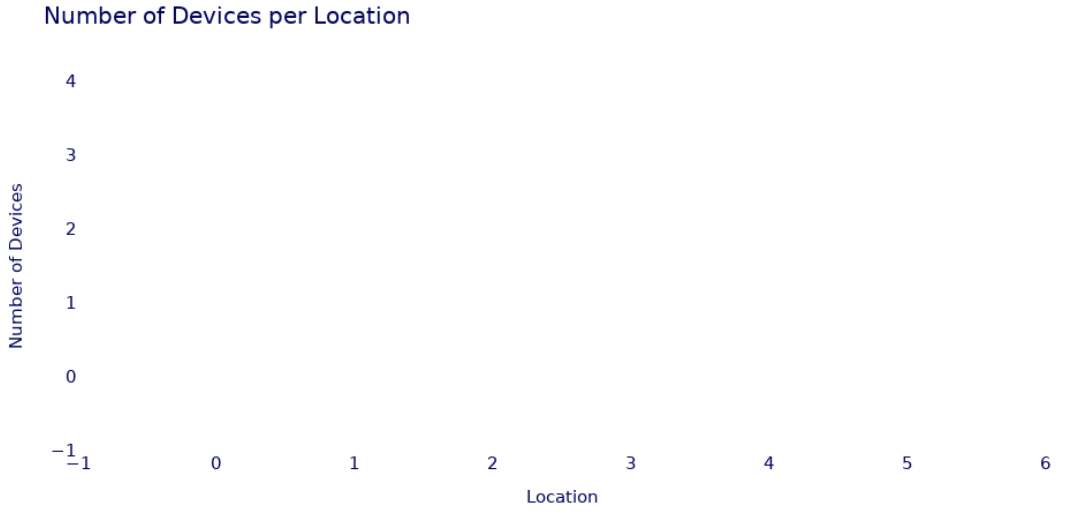
• 3. Significance of Locations

• The significance of these locations can be inferred from the devices' activities and interactions. The locations may be related to:

• Workplaces or offices, given the frequent co-location of devices during weekdays and the duration of stays.

• Social gathering points, such as cafes or restaurants, considering the recurring patterns of co-location and the frequency of interactions.

• Transportation hubs, given the proximity of the locations to public transportation routes and the duration of stays. The analysis provides valuable insights into the behaviors and interactions of the geolocation devices, highlighting the importance of these locations in understanding the devices' activities



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Conclusion

The analysis of the Device History Iraq 3 simulation provides valuable insights into the movement patterns and interactions of the three devices. The findings suggest that Device-001 was the most active, spending the most time in Baghdad, while Device-002 and Device-003 had shorter stays in Ramadi and As Samawah, respectively. The lack of interaction between the devices during the simulation period raises questions about their purpose and potential coordination. Further analysis of the devices' global activity could uncover more significant patterns and links between their behaviors

DeviceID Mapping Table

Original ID	Simplified ID
4bc33a2b-633f-4421-27dd-4918761e6a76	Device-001
71c42265-bece-4a24-2d41-68660584453c	Device-002
bcb57e36-d682-4ccc-1088-f53772fde462	Device-003