

OSM Hall Monitor: Tracking objects, tags, and users

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State of the Map 2016

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What is a Hall Monitor?



Maryland Pride/WikiCommons

What is a Hall Monitor?



Filling a Need

CHALLENGE

- ▶ Users cannot subscribe to object updates
- ▶ Tracking objects or users requires manual checking

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CHALLENGE

- ▶ Users cannot subscribe to object updates
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OPPORTUNITY

- ▶ Create a lightweight automated tool to scan changesets

Basics of Package

osm_hall_monitor: python package

- ▶ Maintains databases of objects, users, and key/values to monitor,
- ▶ Scans diff files for any events that correspond to tracked things (minute to day resolution), and
- ▶ Provide a log of these events with optional notification.

osmhm_site: python package

- ▶ Provides front-end interface for database management and log viewing, and
- ▶ Allows authentication via OSM for multi-user setups.

Configuration


To get OSM Hall Monitor running after installation:

- ▶ Create database and user credentials, then supply them through environmental variables or directly in Python.
- ▶ Add something to track.
- ▶ Use the overarching run program that will download diff files in realtime and search for your tracked item.

Application Tracking a Tag: Pokestops



Application Tracking a Tag: Pokestops

 OpenStreetMap Hall Monitor

User activity listObject activity listTag activity listAdmin panelLogout


[Return to tag activity](#)
[Add a tag](#)

Tags on List

Deleting a key also removes its listings in the key history.

Key	Value	Author	Note	Delete
name	Pokemon	FTA	Fictional	✖

Application Tracking a Tag: Pokestops

 OpenStreetMap Hall Monitor

User watch listObject watch listKey watch listAdmin panelLogout


Keys on list
Clear this log
Last update: 2016-09-22T12:00:00Z

Key Watch List

Click a row to expand the actual changeset numbers.

Key	Value	Username	Changeset Count	Object Count	Delete User's Events
name	Pokemon Gym	████████	1	1	✖
name	Pokemon	████████	2	2	✖

Application Tracking an Object: Edit War

 OpenStreetMap Hall Monitor

User activity listObject activity listTag activity listAdmin panelLogout

[Return to object activity](#)
[Add an object](#)

Objects on List

Deleting an object also removes its listings in the object history.

Object	Author	Note	Delete
r[REDACTED]	FTA	Possible edit war	×

Application Tracking an Object: Edit War

OpenStreetMap Hall Monitor						
User watch list Object watch list Key watch list Admin panel Logout						
Objects on list						
Last update: 2016-09-20T16:00:00Z						
Object Watch List						
Time	Changeset	Username	Action	Object ID	Delete Event	
T19:00:00	1234567	user1	delete	1234567	✗	
T13:00:00	1234567	user2	modify	1234567	✗	
T20:00:00	1234567	user3	modify	1234567	✗	
T01:00:00	1234567	user4	modify	1234567	✗	
T08:00:00	1234567	user5	modify	1234567	✗	
T02:00:00	1234567	user6	modify	1234567	✗	
T16:00:00	1234567	user7	modify	1234567	✗	
T01:00:00	1234567	user8	modify	1234567	✗	
T01:00:00	1234567	user9	modify	1234567	✗	
T05:00:00	1234567	user10	modify	1234567	✗	
T19:00:00	1234567	user11	modify	1234567	✗	
T19:00:00	1234567	user12	modify	1234567	✗	
T19:00:00	1234567	user13	modify	1234567	✗	
T21:00:00	1234567	user14	modify	1234567	✗	
T19:00:00	1234567	user15	modify	1234567	✗	
T18:00:00	1234567	user16	modify	1234567	✗	
T13:00:00	1234567	user17	modify	1234567	✗	
T19:00:00	1234567	user18	modify	1234567	✗	

Other Sample Applications (From a DWG Perspective)

- ▶ Tracking users who have been blocked
- ▶ Watching particular objects
- ▶ Looking for incompatible sources

Wrapping Up...

- ▶ Big Brother for OpenStreetMap
- ▶ No *a priori* OSM database required
- ▶ Still in its infancy
- ▶ Collaboration and ideas welcomed!

Thanks!

`http://github.com/ethan-nelson/osm_hall_monitor`

`http://github.com/ethan-nelson/osmhm_site`

Demo (until it crashes):

`http://osm-hall-monitor.herokuapp.com`