

OSM Uganda Data Model and Tagging

In this document, the **key** column indicates the key to be used in OpenStreetMap tagging; the second column the **values** that are to be used when mapping this feature. See

<http://wiki.openstreetmap.org/wiki/Tags>

OSM Uganda Data Model and Tagging

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1. Financial infrastructure

Tagging overview:

Key	Value (Proposed)	OSM	FSPmaps	Note
amenity	mobile_money_agent	Yes (few)	Yes	
amenity	bureau_de_change	Yes	-	
amenity	bank	Yes	Yes	
amenity	atm	Yes	Yes	
amenity	credit_institution	-	Yes	
amenity	microfinance_bank	-	Yes	
amenity	microfinance	-	Yes	
amenity	sacco	-	Yes	
amenity	post_office	Yes	Yes	
amenity	money_transfer	Yes	-	Western Union, MoneyGram, Payway, EzeePay, and other services offering (digital) access to deposit money to either pay for services or transfer to others.
amenity	banking_agent	-	-/new	Does not seem to play a significant role in Uganda, based on survey.

This tagging scheme allows us to differentiate between 4 different tiers of financial institutions operating in Uganda, according to the Bank of Uganda system:

- Tier I are 'regular' commercial banks;
- Tier II credit unions;
- Tier III MDIs;
- Tier IV SACCOs and other MFIs.

See the list of supervised institutions on

https://www.bou.or.ug/bou/supervision/financial_institutions.html

On banking agents: “At the same time, only banks and other institutions regulated by the [Financial Institutions Act](#) are permitted to provide retail payment services. Regarding the use of agents, the BOU insisted that a change of this law would be required to permit agency banking – a legal interpretation that keeps banks from using agents to this date.” from <http://www.cgap.org/blog/mobile-money-moves-forward-uganda-despite-legal-hurdles>

1.1 Mobile Money Agents

Mobile money agents. The operator should be what's commonly referred to as the agent (the person owning the location, and holding the license). The handler actually works at the location.

key	possible values
amenity	mobile_money_agent
network	one or more operators; if multiple, semicolon delimited. Example: "MTN", or "Airtel;UTL". Options: Airtel Money, Africell Money, MTN Mobile Money, UTL M-Sente, SMART Mobile Money, Vodacom M-Pesa, Safaricom M-Pesa
name	Business name; name of the agent location (one can own multiple).
male	yes, no
female	yes, no
opening_hours	Example: "Mo-Su 08:00-22:00", "24/7", "Mo-Fr 08:30-20:00; Sa,Su 08:00-15:00"
phone	<phone number>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
level	<floor>, if necessary to indicate. 0 is the ground floor!
shop	<i>If an agent also sells other goods. Selection of possible values:</i> alcohol, art, bakery, beauty, beverages, bicycle, books, butcher, car, car_parts, car_repair, charcoal, chemist, clothes, convenience, copyshop, cosmetics, doityourself, electronics, furniture, greengrocer, hairdresser, houseware, jewelry, kiosk, mobile_phone, pastry, shoes, stationary, supermarket, tailor, yes
description	<text field>

1.2 Banks

See

https://www.bou.or.ug/bou/bou-downloads/financial_institutions/2013/Information-for-Commercial-Banks-2015.pdf. For banking agents, see https://en.wikipedia.org/wiki/Banking_agent.

key	possible values
amenity	bank, banking_agent
name	<name of bank branch>
operator	<bank name> ABC Capital Bank, Bank of Africa-Uganda, Barclays Bank of Uganda, Bank of Baroda, Bank of India, Cairo International Bank, Centenary Rural Development Bank, Citibank Uganda, Crane Bank, DFCU Bank, Diamond Trust Bank Uganda, Ecobank Uganda, Equity Bank Uganda, Guaranty Trust Bank, Finance Trust Bank, Housing Finance Bank, Imperial Bank, KCB Bank Uganda, NC Bank Uganda, Orient Bank, Stanbic Bank Uganda, Standard Chartered Bank, Tropical Bank, United Bank for Africa
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.3 ATMs

See <http://wiki.openstreetmap.org/wiki/Tag:amenity%3Datm> and <http://wiki.openstreetmap.org/wiki/Tag:atm%3Dyes>

key	possible values
amenity	atm
network	Visa, Mastercard, Maestro, Interswitch, other?
operator	<bank/credit institution/MDI name> ABC Capital Bank, Bank of Africa-Uganda, Barclays Bank of Uganda, Bank of Baroda, Bank of India, Cairo International Bank, Centenary Rural Development Bank, Citibank Uganda, Crane Bank, DFCU Bank, Diamond Trust Bank Uganda, Ecobank Uganda, Equity Bank Uganda, Guaranty

	Trust Bank, Finance Trust Bank, Housing Finance Bank, Imperial Bank, KCB Bank Uganda, NC Bank Uganda, Orient Bank, Stanbic Bank Uganda, Standard Chartered Bank, Tropical Bank, United Bank for Africa Mercantile Credit Bank, PostBank Uganda, Opportunity Bank Uganda, Top Finance Bank Uganda FINCA Uganda, Pride Microfinance, UGAFODE Microfinance, EFC Uganda
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.4 Credit Institution

See

https://www.bou.or.ug/bou/bou-downloads/financial_institutions/2013/UPDATED-LIST-OF-LICENSED-CREDIT-INSTITUTIONS-JUNE-2015.pdf

key	possible values
amenity	credit_institution
name	<name of CI branch>
operator	<institution name> Mercantile Credit Bank, PostBank Uganda, Opportunity Bank Uganda, Top Finance Bank Uganda
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.5 MDI

No separate tag used yet.

<https://www.pridemicrofinance.co.ug:445/vision-mission-values/>

key	possible values
amenity	microfinance_bank
name	<name of branch>
operator	<MDI name> FINCA Uganda, Pride Microfinance, UGAFODE Microfinance, EFC Uganda
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.6 MFI

Ones I can find are tagged as banks - <https://www.openstreetmap.org/node/372797317>, <http://www.openstreetmap.org/node/1827676067> . We're going with "amenity=microfinance".

key	possible values
amenity	microfinance
name	<name of branch>
operator	<MFI name>
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.7 SACCO

http://www.saccol.org.za/what_is_sacco.php

“SACCO is the acronym for **S**avings **A**nd **C**redit **C**o-operative. There is no difference between a credit union and a SACCO. The term “credit union” is generally not used in Africa and specifically in South Africa to avoid confusion with the various labour movements. However some habits die-hard.”

Another useful reference: An umbrella organisation for Saccos in Uganda,

<http://www.ucscu.co.ug/>

A **credit** union is a member-owned financial **cooperative**, democratically controlled by its members, and operated for the purpose of promoting thrift, providing **credit** at competitive rates, and providing other financial services to its members. **Credit unions** are not-for-profit financial cooperatives, whose earnings are paid back to members in the form of higher savings rates and lower loan rates. **Banks** are for-profit corporations, with declared earnings paid to stockholders only.

In other words: a credit union has members; a bank has customers.

key	possible values
amenity	sacco
name	<name of branch/location>
operator	<if part of a brand>
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.8 Bureau de Change

Usually referred to as Forex (Foreign exchange) in Uganda

key	possible values
amenity	bureau_de_change
name	<name of branch>
operator	<operator name>

opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.9 Money Transfer Services

Services like Western Union and MoneyGram, but also other digital financial services which enable the transfer of money/payments like MicroPay, Remit, Ezeemoney, Payway.

http://wiki.openstreetmap.org/wiki/Proposed_features/Money_transfer

key	possible values
amenity	money_transfer
name	<name of bank/agent branch>
network	Western Union, MoneyGram, MicroPay, Ezeemoney, Remit, etc
operator	<operator name>
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>
description	<text field>

1.10 Post Office

List of post offices: <http://www.ugapost.co.ug/node/10>

key	possible values
amenity	post_office
name	<name of branch>
opening_hours	<days/times of opening>
addr:city	<city>
addr:street	<street name>
addr:housenumber	<house number>

description	<text field>
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2. Health facilities

key	possible values
name	name of hospital
amenity	clinic, doctors, hospital
opening_hours	<days/times of opening>
bed_count	(for hospitals, clinics; the number of beds)
addr:city	city name
addr:street	street name
addr:housenumber	address number of the building, ie 25 or 19A
description	<text field>

3. Educational facilities

key	possible values
name	name of school
amenity	college, kindergarten, school, university
opening_hours	<days/times of opening>
addr:city	city name
addr:street	street name
addr:housenumber	address number of the building, ie 25 or 19A
description	<text field>

4. Streets

Trace roads travelled, according to the following schema:

key	possible values
highway	primary, secondary, tertiary, unclassified, residential, footway

name	name of street
surface	asphalt, concrete, unpaved
smoothness	good, intermediate, bad, very_bad, horrible
width	<number> <i>(in meters of street width)</i>
oneway	yes, no <i>(direction of traffic, NOT the number of lanes!)</i>
bridge	yes, viaduct (add layer=1)
description	<text field>

5. Data access

For more tags, see http://wiki.openstreetmap.org/wiki/Map_Features

Overpass Turbo query example:

Website:

```
// money_transfer containing `airtel` (case-insensitive)
node
  [amenity=money_transfer][operator~'Airtel',i]
  ({{bbox}});
out;

[out:json][timeout:25];
{{geocodeArea:"Uganda"}}->.searchArea;
(
  node
    [amenity=mobile_money_agent]
    (area.searchArea);
);
// print results
out;
```

JOSM download:

```
[timeout:50];
// gather results
(
  // query part for: "amenity=mobile_money_agent"
  node["amenity"="mobile_money_agent"][operator~'Airtel'];
  way["amenity"="mobile_money_agent"][operator~'Airtel'];
);
// print results
out meta;
>;
```

```
out meta;
```

Download all financial services, health and educational facilities data

```
[timeout:50];
// gather results
(
  // query part for: "amenity=mobile_money_agent"
  node["amenity"]="mobile_money_agent";
  way["amenity"]="mobile_money_agent";
  // query part for: "amenity=bank"
  node["amenity"]="bank";
  way["amenity"]="bank";
  // query part for: "amenity=atm"
  node["amenity"]="atm";
  way["amenity"]="atm";
  // query part for: "amenity=bureau_de_change"
  node["amenity"]="bureau_de_change";
  way["amenity"]="bureau_de_change";
  // query part for: "amenity=post_office"
  node["amenity"]="post_office";
  way["amenity"]="post_office";
  // query part for: "amenity=credit_institution"
  node["amenity"]="credit_institution";
  way["amenity"]="credit_institution";
  // query part for: "amenity=microfinance_bank"
  node["amenity"]="microfinance_bank";
  way["amenity"]="microfinance_bank";
  // query part for: "amenity=microfinance"
  node["amenity"]="microfinance";
  way["amenity"]="microfinance";
  // query part for: "amenity=sacco"
  node["amenity"]="sacco";
  way["amenity"]="sacco";
  // query part for: "amenity=money_transfer"
  node["amenity"]="money_transfer";
  way["amenity"]="money_transfer";
  // query part for: "amenity=banking_agent"
  node["amenity"]="banking_agent";
  way["amenity"]="banking_agent";

  // query part for: "amenity=clinic"
  node["amenity"]="clinic";
  way["amenity"]="clinic";
  // query part for: "amenity=doctors"
  node["amenity"]="doctors";
  way["amenity"]="doctors";
  // query part for: "amenity=hospital"
  node["amenity"]="hospital";
  way["amenity"]="hospital";

  // query part for: "amenity=college"
  node["amenity"]="college";
  way["amenity"]="college";
  // query part for: "amenity=kindergarten"
  node["amenity"]="kindergarten";
  way["amenity"]="kindergarten";
  // query part for: "amenity=school"
  node["amenity"]="school";
  way["amenity"]="school";
)
```

```
way["amenity"="school"];
// query part for: "amenity=university"
node["amenity"="university"];
way["amenity"="university"];
);
// print results
out meta;
>;
out meta;
```