# 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>

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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*](https://www.bou.or.ug/bou/bou-downloads/acts/supervision_acts_regulations/FI_Act/FIAct2004.pdf) 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 | *If an agent also sells other goods. Selection of possible values:*  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](https://www.openstreetmap.org/node/3727973172), <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 **Co**-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> |

## 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>  *(in meters of street width)* |
| oneway | yes, no *(direction of traffic, NOT the number of lanes!)* |
| 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"];

// query part for: “amenity=university”

node["amenity"="university"];

way["amenity"="university"];

);

// print results

out meta;

>;

out meta;