Portfolio Management Tool (PMT)
Database Documentation

Schema Diagrams
- PMT 2.0
- PMT 3.0

Draft Version

PMT 3.0 Schema Diagram
DRAFT
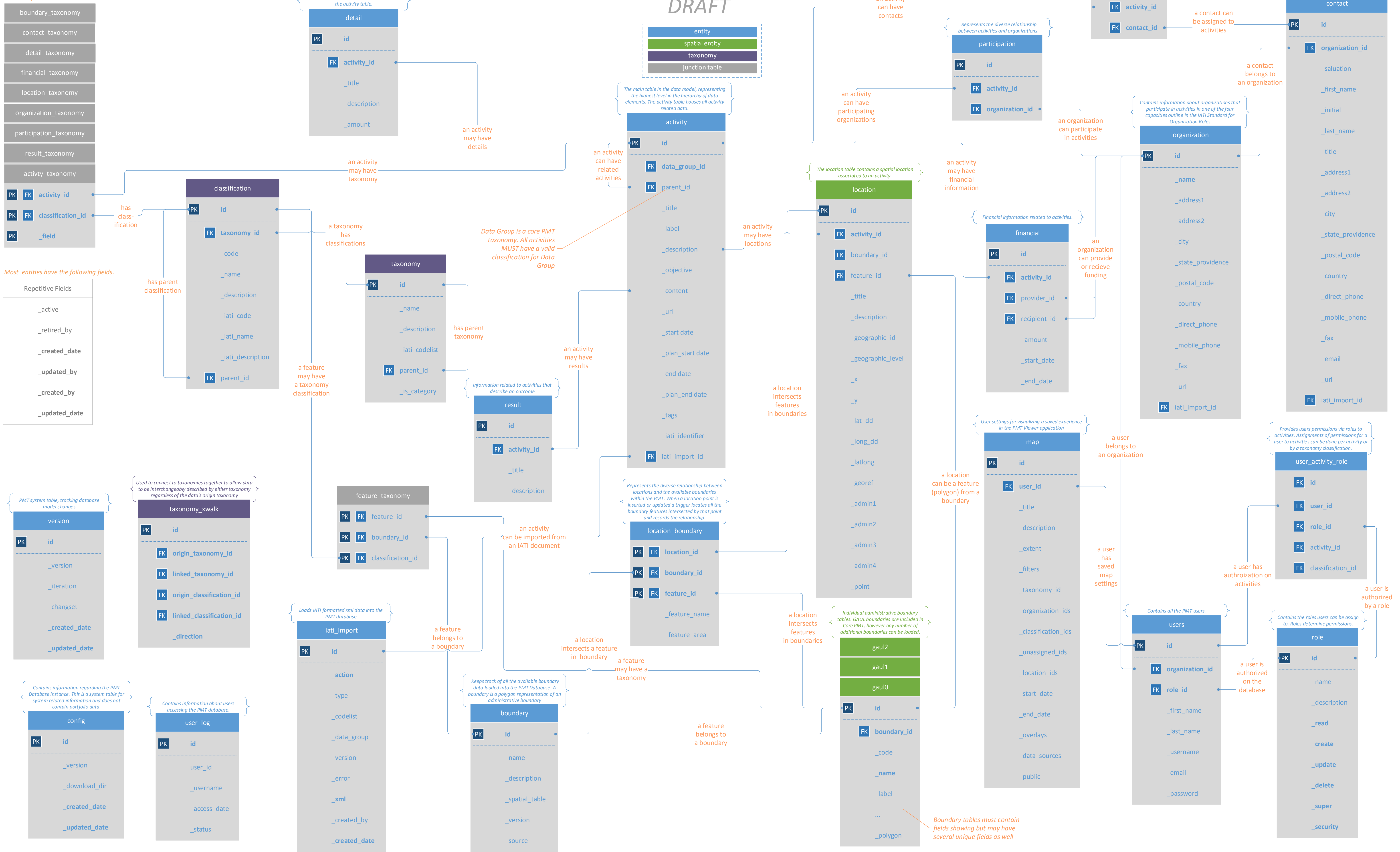
Most entities have a taxonomy table, their relationships are not shown to reserve readability.

boundary_taxonomy
contact_taxonomy
detail_taxonomy
financial_taxonomy
location_taxonomy
organization_taxonomy
participation_taxonomy
result_taxonomy
activty_taxonomy

activty_taxonomy
- PK FK activity_id
- PK FK classification_id
- PK _field

Most entities have the following fields.

Repetitive Fields
- _active
- _retired_by
- _created_date
- _updated_by
- _created_by
- _updated_date

Additional activity details not represented in the activity table.

detail
- PK id
- FK activity_id
- _title
- _description
- _amount

Legend:
- entity
- spatial entity
- taxonomy
- junction table

The main table in the data model, representing the highest level in the hierarchy of data elements. The activity table houses all activity related data.

activity
- PK id
- FK data_group_id
- FK parent_id
- _title
- _label
- _description
- _objective
- _content
- _url
- _start date
- _plan_start date
- _end date
- _plan_end date
- _tags
- _iati_identifier
- FK iati_import_id

an activity may have details
an activity can have related activities
an activity may have taxonomy

Data Group is a core PMT taxonomy. All activities MUST have a valid classification for Data Group

classification
- PK id
- FK taxonomy_id
- _code
- _name
- _description
- _iati_code
- _iati_name
- _iati_description
- FK parent_id

has classification
has parent classification
a taxonomy has classifications

taxonomy
- PK id
- _name
- _description
- _iati_codelist
- FK parent_id
- _is_category

has parent taxonomy
a feature may have a taxonomy classification

result
- PK id
- FK activity_id
- _title
- _description

Information related to activities that describe an outcome
an activity may have results

an activity can have contacts

activity_contact
- FK activity_id
- FK contact_id

a contact can be assigned to activities

Represents the diverse relationship between activities and organizations.

participation
- PK id
- FK activity_id
- FK organization_id

an activity can have participating organizations
an organization can participate in activities

Contains information about people that can be considered as a point of contact for an activity or organization.

contact
- PK id
- FK organization_id
- _saluation
- _first_name
- _initial
- _last_name
- _title
- _address1
- _address2
- _city
- _state_providence
- _postal_code
- _country
- _direct_phone
- _mobile_phone
- _fax
- _email
- _url
- FK iati_import_id

a contact belongs to an organization

Contains information about organizations that participate in activities in one of the four capacities outline in the IATI Standard for Organization Roles

organization
- PK id
- _name
- _address1
- _address2
- _city
- _state_providence
- _postal_code
- _country
- _direct_phone
- _mobile_phone
- _fax
- _url
- FK iati_import_id

an organization can provide or recieve funding

The location table contains a spatial location associated to an activity.

location
- PK id
- FK activity_id
- FK boundary_id
- FK feature_id
- _title
- _description
- _geographic_id
- _geographic_level
- _x
- _y
- _lat_dd
- _long_dd
- _latlong
- _georef
- _admin1
- _admin2
- _admin3
- _admin4
- _point

an activity may have locations
a location intersects features in boundaries
a location can be a feature (polygon) from a boundary

Financial information related to activities.

financial
- PK id
- FK activity_id
- FK provider_id
- FK recipient_id
- _amount
- _start_date
- _end_date

an activity may have financial information

User settings for visualising a saved experience in the PMT Viewer application

map
- PK id
- FK user_id
- _title
- _description
- _extent
- _filters
- _taxonomy_id
- _organization_ids
- _classification_ids
- _unassigned_ids
- _location_ids
- _start_date
- _end_date
- _overlays
- _data_sources
- _public

a user has saved map settings
a user belongs to an organization

Provides users permissions via roles to activities. Assignments of permissions for a user to activities can be done per activity or by a taxonomy classification.

user_activity_role
- FK id
- FK user_id
- FK role_id
- FK activity_id
- FK classification_id

a user has authroization on activities
a user is authorized by a role

version
- PK id
- _version
- _iteration
- _changeset
- _created_date
- _updated_date

PMT system table, tracking database model changes

Used to connect to taxonomies together to allow data to be interchangeably described by either taxonomy regardless of the data's origin taxonomy

taxonomy_xwalk
- PK id
- FK origin_taxonomy_id
- FK linked_taxonomy_id
- FK origin_classification_id
- FK linked_classification_id
- _direction

feature_taxonomy
- PK FK feature_id
- PK FK boundary_id
- PK FK classification_id

a feature belongs to a boundary
an activity can be imported from an IATI document

Represents the diverse relationship between locations and the available boundaries within the PMT. When a location point is inserted or updated a trigger locates all the boundary features intersected by that point and records the relationship.

location_boundary
- PK FK location_id
- PK FK boundary_id
- PK FK feature_id
- _feature_name
- _feature_area

a location intersects a feature in boundary
a location intersects features in boundaries
a feature may have a taxonomy

Loads IATI formatted xml data into the PMT database.

iati_import
- PK id
- _action
- _type
- _codelist
- _data_group
- _version
- _error
- _xml
- _created_by
- _created_date

Contains information regarding the PMT Database instance. This is a system table for system related information and does not contain portfolio data.

config
- PK id
- _version
- _download_dir
- _created_date
- _updated_date

Contains information about users accessing the PMT database.

user_log
- PK id
- user_id
- _username
- _access_date
- _status

Keeps track of all the available boundary data loaded into the PMT Database. A boundary is a polygon representation of an administrative boundary

boundary
- PK id
- _name
- _description
- _spatial_table
- _version
- _source

Individual administrative boundary tables. GAUL boundaries are included in Core PMT, however any number of additional boundaries can be loaded.

gaul2
gaul1
gaul0
- id
- FK boundary_id
- _code
- _name
- _label
- ...
- _polygon

a feature belongs to a boundary

Boundary tables must contain fields showing but may have several unique fields as well

Contains all the PMT users.

users
- PK id
- FK organization_id
- FK role_id
- _first_name
- _last_name
- _username
- _email
- _password

a user is authorized on the database

Contains the roles users can be assign to. Roles determine permissions.

role
- PK id
- _name
- _description
- _read
- _create
- _update
- _delete
- _super
- _security

Last Update August 27, 2015

PMT 2.0 Schema Diagram

Each entity has a taxonomy table, their relationships are not shown to reserve readability.

Legend
- entity
- spatial entity
- taxonomy
- junction table

Taxonomy tables (left column):
- detail_taxonomy
- boundary_taxonomy
- financial_taxonomy
- organization_taxonomy
- contact_taxonomy
- location_taxonomy
- result_taxonomy
- activity_taxonomy
- participation_taxonomy
- project_taxonomy

classification
- PK classification_id
- FK project_id
- FK classification_id
- field

All entities have the following fields

Repetitive Fields
- active
- retired_by
- created_date
- updated_by
- created_by
- updated_date

project
- PK project_id
- title
- label
- description
- url
- start date
- end date
- tags

classification
- PK classification_id
- FK taxonomy_id
- identifier
- code
- name
- description
- min
- max
- iati_code
- iati_name
- iati_description
- category_id

financial
- PK financial_id
- FK project_id
- FK activity_id
- amount
- start_date
- end_date

detail
- PK detail_id
- FK project_id
- FK activity_id
- title
- description
- amount

taxonomy
- PK taxonomy_id
- name
- description
- iati_codelist

activity
- PK activity_id
- FK project_id
- title
- label
- description
- content
- start date
- plan_start date
- end date
- plan_end date
- tags
- iati_identifier

result
- PK result_id
- FK activity_id
- title
- description
- amount

participation
- PK participation_id
- FK project_id
- FK activity_id
- FK organization_id

project_contact
- FK contact_id
- FK project_id

activity_contact
- FK activity_id
- FK contact_id

contact
- PK contact_id
- organization_id
- salutation
- first_name
- initial
- last_name
- title
- address1
- address2
- city
- state_providence
- postal_code
- country
- direct_phone
- mobile_phone
- fax
- email
- url

organization
- PK organization_id
- name
- address1
- address2
- city
- state_providence
- postal_code
- country
- direct_phone
- mobile_phone
- fax
- url

location
- PK location_id
- FK project_id
- FK activity_id
- FK boundary_id
- FK feature_id
- title
- description
- x
- y
- lat_dd
- long_dd
- latlong
- georef
- point

location_boundary
- FK location_id
- FK boundary_id
- FK feature_id

version
- PK version_id
- version
- iteration
- changeset
- created_date
- updated_date

config
- PK config_id
- version
- download_dir
- created_date
- updated_date

feature_taxonomy
- FK feature_id
- FK boundary_id
- FK classification_id

farming_systems
- aez5
- gadm2
- gadm1
- gadm0
- gaul2
- gaul1
- gaul0

boundary
- PK boundary_id
- name
- description
- spatial_table
- version
- source

(spatial feature table)
- PK feature_id
- FK boundary_id
- code
- name
- label
- ...
- polygon
- active

Spatial tables must contain fields showing but may have several unique fields as well

map
- PK map_id
- FK user_id
- title
- description
- extent
- taxonomy_id
- organization_ids
- classification_ids
- unassigned_ids
- location_ids
- start_date
- end_date
- overlays
- data_sources
- public

user
- PK user_id
- FK role_id
- organization_id
- first_name
- last_name
- username
- email
- password

Users belong to a Data Group (a Core PMT Taxonomy) contains the classification_id for assigned Data Group

user_project_role
- FK user_project_role_id
- FK user_id
- FK role_id
- FK project_id
- FK classification_id

role
- PK role_id
- name
- description
- read
- create
- update
- delete
- super

Relationship labels: may have taxonomy; has financial information; has activities; has contacts; has participating organizations; has classification; groups of; has class-ification; has details; has financial information; has results; has locations; inside a feature within a boundary; organizations participate in projects & activities; belongs to an organization; is assigned to projects; is assigned to activities; have contacts; within a boundary; has feature; has boundary; contain features; has associated feature; has saved maps; users have authorization on projects; belongs to a role

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