

Persons and Names of the Middle Kingdom

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Database structure

Conventions ,

Data are stored in a MySQL database. It is planned to export the data into an ontology-based machine-readable format (RDF); hence, equivalent classes and properties in established ontologies are cited in this document.

For the sake of compatibility with other relational database management systems only the following datatypes are used:

- CHAR (standard SQL data type NATIONAL CHARACTER) for short attributes;
 - VARCHAR(255) (standard SQL data type NATIONAL CHARACTER VARYING (255)) for fields with a fixed set of values;
 - TEXT (standard SQL data type NATIONAL CHARACTER VARYING (4000)) for longer text values (length restricted for compatibility with MS SQL Server);
 - INT (standard SQL data type INTEGER) for IDs;
 - DATE (standard SQL data type DATE) for dates.
- The collation utf8mb4_unicode_ci is used for all CHAR and VARCHAR fields. Table and field names are set in lower case with words separated by underscores.

ID numbers

The database uses a system of ID numbers that ensures that each ID uniquely identifies an entity within the whole database and thus contains information on the table where the record is stored.

IDs are stored as signed 32-bit integers, which are used as bit fields, whereby the table is coded in bits 4 to 9, and bits 10 to 32 are used for the record number in the table, allowing for 8388607 records per table. Bits 1 to 3 are reserved. The table ID can be extracted from the record ID with two simple arithmetic operations $\$table_id = ((\$id \& 0x1F800000) \gg 23)$; in PHP 5 or in JavaScript or $CAST((id \& 0x1F800000) \gg 23 AS INT)$ AS table_id in MySQL. The online web database supports references to ID numbers in any text field, coded as @id or @id-any-human-readable-handle, and renders them as links to the corresponding entities. Thus "established by @16782609, 64" or "established by @16782609-Franke-Heqaib, 64" should be rendered in HTML as established by [, 64, and "datable after @33556813-Louvre-C249 \(@226528715-PD-772\)" should be rendered in HTML as datable after \[\\(\\[\\\).\\]\\(../persons/226528715\\)\]\(../inscriptions/33556813\)](../publications/16782609)

[Database structure](#) ([database structure.png](#))

Tables

thesauri (table_id: 0)

This is a supporting table containing keys and values of self-developed and third-party thesauri used in the database.

Field name	Type	Description
thesauri_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
thesaurus	INT	The handle of the thesaurus to which this record belongs. Under thesaurus=0 all thesauri represented in this table are listed with the keys to the thesaurus field stored in sort_value.
parent	INT	The thesauri_id of the superordinate thesaurus entry
sort_value	INT	The value used for sorting entries within a thesaurus
item_name	VARCHAR(191)	The textual value of the thesaurus entry
external_key	VARCHAR(255)	The key of the corresponding thesaurus entry in a standard external thesaurus (such as the THOT (http://thot.philo.ulg.ac.be/index.html) project)
explanation	VARCHAR(4000)	The meaning of the thesaurus entry
sort_date_range_start	INT	The start of the date range for the entries in the dating thesaurus (thesaurus 5) (a negative integer value corresponding to a year BC, used for sorting purposes)
sort_date_range_end	INT	The end of the date range for the entries in the dating thesaurus (thesaurus 5) (a negative integer value corresponding to a year BC, used for sorting purposes)

criteria (table_id: 14)

This is a supporting table containing criteria for establishing the date or the production place of inscribed objects.

Field name	Type	Description
criteria_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
title	VARCHAR(191)	The short title of the criterion used throughout the database.
criterion	TEXT	Short summary of the rule
production_place	VARCHAR(191)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the place the criterion points to
dating	VARCHAR(191)	The <code>item_name</code> of the period the criterion points to in the dating thesaurus (thesaurus 5), <i>loosely based on a subset of the THOT Dates and dating systems thesaurus (http://thot.philo.ulg.ac.be/concept/thot-114)</i>

Note: Bibliography is added through `biblio_refs`. The criteria are referred to in other records using the textual handles `@id-any-human-readable-handle` parsed by the online database.

publications (table_id: 2)

Each record in this table describes a printed or online publication (a bibliographic entry). Here belongs everything published that can be cited using the author-year system.

Equivalent class: http://www.cidoc-cm.org/cidoc-cm/E31_document (http://www.cidoc-cm.org/cidoc-cm/E31_document)

Field name	Type	Description
publications_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
csl_json	TEXT	Bibliographical data in the CSL-JSON (https://github.com/citation-style-language/schema/blob/master/csl-data.json) format
author_year	VARCHAR(191)	The author-year handle for referring
author_year_sort	VARCHAR(191)	The author-year handle with the inverted order of the First and Last Name (for authors with coinciding surnames)
year	INT	Year of the publication for sorting purposes
html_entry	TEXT	Precomposed bibliographical entry in the Chicago Manual of Style format (HTML)
oeb_id	TEXT	The ID of the corresponding record in the Online Egyptological Bibliography (http://oeb.griffith.ox.ac.uk/) (not available for all records)
digital_identifier	TEXT	URL or DOI of the publication

Note: On the back end, CSL-JSON bibliographical descriptions are converted into HTML bibliographical entries using [citeproc-node](https://github.com/zotero/citeproc-node) (<https://github.com/zotero/citeproc-node>). When the data are converted to a machine-readable format, CSL-JSON entries can be converted to [BIBO, also known as Bibliontology](http://bibliographic-ontology.org/specification) (<http://bibliographic-ontology.org/specification>) RDF, using [Zotero translation server](https://github.com/zotero/translation-server) (<https://github.com/zotero/translation-server>).

biblio_refs (table_id: 7)

Each record in this table describes a reference from a publication (if the `source_id` field is not empty), a webpage (if the `source_url` field is not empty), or an offline source that cannot be cited using the author-date system to an entity (an inscribed object, a person's dossier,

a workshop, an archaeological find group, a personal name, a title, or a criterion).

Equivalent property: http://www.cidoc-cm.org/cidoc-cm/P70i_is_documented_in (http://www.cidoc-cm.org/cidoc-cm/P70i_is_documented_in)

Field name	Type	Description
biblio_refs_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
reference_type	CHAR(20)	The type of the reference
order_value	INT	Temporary field with the <code>reference_type</code> converted to a number for sorting purposes
source_id	INT	The ID of the referring publication in the table <code>publications</code>
source_url	TEXT	URL for online sources that cannot be cited using the author-year system
source_title	TEXT	Reference to an offline source that cannot be cited using the author-year system (an archival document, an offline museum database, etc.; this also includes the references to the Topographical Bibliography to keep references to published and unpublished TopBib entries in one place) or the title of the online source referred to in <code>source_url</code>
accessed_on	DATETIME	The date when the online or offline source that cannot be cited using the author-year system was

		accessed
object_id	INT	The ID of the referred entity in any of the tables that can be referred to (inscriptions, find_groups, workshops, persons_att, persons, titles, personal_names, name_types)
pages	VARCHAR(191)	Pages, figures, plates, catalogue numbers, database ID where the entity is referred to in the source
pages_sort	VARCHAR(191)	Natural sort value of pages
note	TEXT	Note related to the reference (for example, mistakes in the publication)

inscriptions (table_id: 4)

Each record in this table represents a physical object with an Egyptian inscription. This can be an object now located in a museum or a private collection or known from a publication, archival document, or sale catalogue (such as a stela, statue, offering table, coffin, seal, papyrus, etc.), a rock inscription, an inscribed tomb, or another structure. Objects originally belonging to the same structure that has a different type than the objects themselves (e. g., stelae originally installed in the same offering chapel) are considered different objects, but objects that are parts of an originally integral object of the same type, now decomposed, (e. g., two parts of the same statue, now stored in different museums) are considered the same object.

Field name	Type	Description	Equivalent classes, properties
inscriptions_id	INT	Unique record ID, primary key	
date_created	DATE	Date when the record was created in the published version of the database	
date_changed	DATE	Date when the last change to the record was published	
title	VARCHAR(191)	The title under which the object is referred to in the database (short museum name and main inventory number for objects in the museums or the reference to the most relevant (usually first) publication for other objects)	
title_sort	VARCHAR(191)	Title converted for natural sort	
topbib_id	VARCHAR(255)	The reference to the Topographical Bibliography or a list of such references divided by semicolons	
tmtxts_id	INT	The reference to the Trismegistos Texts database	
object_type	VARCHAR(191)	The <i>item_name</i> of the inscription type in the object_type thesaurus (thesaurus 1); <i>example: stela</i>	
object_subtype	VARCHAR(191)	The <i>item_name</i> of the inscription subtype in the object_subtype thesaurus (thesaurus 2); <i>example: block-statue</i>	
material	VARCHAR(191)	The <i>item_name</i> of the material type in the material thesaurus (thesaurus 3), based on a subset of the THOT Material thesaurus (http://thot.philo.ulg.ac.be/concept/thot-6200)	http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension (http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension), http://www.cidoc-crm.org/cidoc-crm/E54_Dimension (http://www.cidoc-crm.org/cidoc-crm/E54_Dimension)
length	INT	Preserved length of the object (for scarabs) in mm.	http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension (http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension), http://www.cidoc-crm.org/cidoc-crm/E54_Dimension (http://www.cidoc-crm.org/cidoc-crm/E54_Dimension)
height	INT	Preserved height of the object in mm.	http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension (http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension), http://www.cidoc-crm.org/cidoc-crm/E54_Dimension (http://www.cidoc-crm.org/cidoc-crm/E54_Dimension)
width	INT	Preserved width of the object in mm.	http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension (http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension), http://www.cidoc-crm.org/cidoc-crm/E54_Dimension (http://www.cidoc-crm.org/cidoc-crm/E54_Dimension)
thickness	INT	Preserved thickness of the object in mm.	http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension (http://www.cidoc-crm.org/cidoc-crm/P43_has_dimension), http://www.cidoc-crm.org/cidoc-crm/E54_Dimension (http://www.cidoc-crm.org/cidoc-crm/E54_Dimension)

find_groups_id	INT	The ID of the archaeological find_group to which the inscribed object belongs in the table find_groups	
text_content	VARCHAR(191)	The item_name of the text content type in the text_content thesaurus (thesaurus 4), based on a subset of the THOT Text content thesaurus (http://thot.philo.ulg.ac.be/concept/thot-18634)	
script	VARCHAR(191)	The item_name of the script in the script thesaurus (thesaurus 12), based on a subset of the THOT Ancient Egyptian scripts thesaurus (http://thot.philo.ulg.ac.be/concept/thot-111)	
provenance	VARCHAR(191)	The place_name of the record in the table places corresponding to the place where the object was found or purchased	http://lawd.info/ontology/foundAt (http://lawd.info/ontology/foundAt)
provenance_sort	INT	The latitude of the record in the table places corresponding to the provenance	
provenance_note	TEXT	Note related to the provenance	
installation_place	VARCHAR(191)	The place_name of the record in the table places corresponding to the place where the object should have been installed (when different from the provenance or when the provenance is unknown or unreliable, as in case of purchases)	
installation_place_sort	INT	The latitude of the record in the table places corresponding to the installation_place	
installation_place_note	TEXT	Note related to the installation_place	
origin	VARCHAR(191)	The place_name of the record in the table places corresponding to the place where the person(s) named in the inscription should have lived	
origin_sort	INT	The latitude of the record in the table places corresponding to the origin	
origin_note	TEXT	The reasoning behind the origin with relevant bibliographical references whenever possible	
production_place	VARCHAR(191)	The place_name of the record in the table places corresponding to the place where the object should have been produced	http://lawd.info/ontology/origin (http://lawd.info/ontology/origin)
production_place_sort	INT	The latitude of the record in the table places corresponding to the production_place	
production_place_note	TEXT	The reasoning behind the production_place with relevant bibliographical references whenever possible	
inst_prov_temp	VARCHAR(191)	Equals installation_place if defined; otherwise, provenance	
inst_prov_temp_sort	INT	Equals installation_place_sort if defined; otherwise, provenance_sort	
orig_prod_temp	VARCHAR(191)	Equals origin if defined; otherwise, production_place	
orig_prod_temp_sort	INT	Equals origin_sort if defined; otherwise, production_place_sort	
region_temp	VARCHAR(191)	Equals orig_prod_temp if defined; otherwise, inst_prov_temp	
region_temp_sort	INT	Equals orig_prod_temp_sort if defined; otherwise, inst_prov_temp_sort	
dating	VARCHAR(191)	The item_name of the period to which the object can be dated in the dating thesaurus (thesaurus 5), loosely based on a subset of the THOT Dates and dating systems thesaurus (http://thot.philo.ulg.ac.be/concept/thot-114)	
dating_sort_start	INT	The sort_date_range_start of the period to which the object can be dated in the dating thesaurus	
dating_sort_end	INT	The sort_date_range_end of the period to which the object can be dated in the dating thesaurus	
dating_note	TEXT	The reasoning behind the dating	

last_king_id	INT	The <code>thesauri_id</code> of the most recent king explicitly named on the object in the king thesaurus (thesaurus 6), <i>loosely based on a subset of the THOT Dates and dating systems thesaurus</i> (http://thot.philo.ulg.ac.be/concept/thot-114)
note	TEXT	General notes related to the object

find_groups (table_id: 23)

Each record in this table represents an archaeological find group (such as a burial or a memorial chapel) where one or more inscribed objects were found. These data are supplementary and are entered only to the extent that it can be relevant for dating and grouping together inscribed objects.

Field name	Type	Description
find_groups_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
site	VARCHAR(191)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the place where the find group is located
site_area	VARCHAR(255)	The part of the site where the find group is located
exact_location	TEXT	A detailed description of the find group location
title	VARCHAR(191)	The title under which the find group is referred to in the database
title_sort	VARCHAR(191)	<code>title</code> converted for natural sort
find_group_type	VARCHAR(191)	The <code>item_name</code> of the find group type in the <code>find_group_type</code> thesaurus (thesaurus 7)
architecture	TEXT	Relevant information on the substructure and the superstructure
human_remains	TEXT	Relevant information on the deceased in the find group
finds	TEXT	Relevant information on the finds other than inscribed objects
disturbance	VARCHAR(191)	The <code>item_name</code> of the find group type in the disturbance thesaurus (thesaurus 8)
dating	VARCHAR(191)	The <code>item_name</code> of the period to which the find group can be dated in the dating thesaurus (thesaurus 5), <i>loosely based on a subset of the THOT Dates and dating systems thesaurus</i> (http://thot.philo.ulg.ac.be/concept/thot-114)
dating_note	TEXT	The reasoning behind the <code>dating</code>
note	TEXT	General notes related to the find group

workshops (table_id: 20)

Each record in this table represents a workshop producing inscribed objects that was discussed in scholarly literature. In other words, it represents a group of objects set off by several artistic and/or palaeographic peculiarities, which allow surmising that the objects were produced at the same place and within the same period.

Field name	Type	Description
workshops_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
title	VARCHAR(191)	The title under which the workshop is referred to in the database
title_sort	VARCHAR(191)	<code>title</code> converted for natural sort
production_place	VARCHAR(191)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the place where the objects should have been produced
production_place_sort	INT	The <code>latitude</code> of the record in the table <code>places</code> corresponding to the <code>production_place</code>
production_place_note	TEXT	The reasoning behind the <code>production_place</code> with relevant bibliographical references whenever possible
dating	VARCHAR(191)	The <code>item_name</code> of the period to which the workshop can be dated in the dating thesaurus (thesaurus 5), <i>loosely based on a subset of the THOT Dates and dating systems thesaurus</i> (http://thot.philo.ulg.ac.be/concept/thot-114)
dating_sort_start	INT	The <code>sort_date_range_start</code> of the period to which the workshop can be dated in the dating thesaurus
dating_sort_end	INT	The <code>sort_date_range_end</code> of the period to which the workshop can be dated in the dating thesaurus
dating_note	TEXT	The reasoning behind the <code>dating</code>
note	TEXT	General notes related to the workshop

inscriptions_workshops_xref (table_id: 21)

An associative table for linking workshops to inscriptions (assuming that contradictory opinions can be expressed in scholarly literature).

Field name	Type	Description
inscriptions_workshops_xref_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
workshops_id	INT	ID of the workshop
inscriptions_id	INT	ID of the inscription
status	CHAR(8)	Status of the link ("accepted", "weak", or "rejected")
note	TEXT	Note concerning the appurtenance of the inscribed object to the workshop

places (table_id: 22)

Each record in this table represents the name of a place or a region associated with inscriptions catalogued in this database. One location can be listed in this table several times under different names (modern and ancient).

Equivalent class: <http://lawd.info/ontology/PlaceName> (<http://lawd.info/ontology/PlaceName>)

Field name	Type	Description
places_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
place_name	VARCHAR(191)	The short form of the name used in this database
long_place_name	VARCHAR(255)	The expanded form of the name used in this database
relative_location	VARCHAR(191)	The <code>item_name</code> in the <code>relative_location</code> thesaurus (thesaurus 9), either "Eastern Desert", "Nile Valley", "Western Desert", or the "Levant"
macro_region	VARCHAR(191)	The <code>place_name</code> in the <code>places</code> table corresponding to the larger region this place is a part of
latitude	INT	The latitude of the place (or of the central point of the region) in decimal degrees north of equator multiplied by 100. Thus 2572 stands for 25.72 N or 25° 43' N. This value is used for sorting the places in a north to south or south to north order.
topbib_id	VARCHAR(255)	The ID of the place name in the Digital TopBib (http://topbib.griffith.ox.ac.uk) database; <i>examples</i> : 501-180 (http://topbib.griffith.ox.ac.uk/dtb.html?topbib=501-180) or 901-210-003 (http://topbib.griffith.ox.ac.uk/dtb.html?topbib=901-210-003)
tm_geoid	INT	The ID of the place in the Trismegistos Geo database; <i>example</i> : 188 (http://www.trismegistos.org/place/188)
pleiades_id	INT	The ID of the place in Pleiades (https://pleiades.stoa.org); <i>example</i> : 688038 (https://pleiades.stoa.org/places/688038)
artefacts_url	VARCHAR(255)	The URL of the site page in the Artefacts of Excavation (http://egyptartefacts.griffith.ox.ac.uk) database; <i>example</i> : http://egyptartefacts.griffith.ox.ac.uk/node/1149 (http://egyptartefacts.griffith.ox.ac.uk/node/1149)

inv_nos (table_id: 25)

Each record in this table represents an inventory number of an inscribed object in a museum or other modern collection.

Equivalents: http://www.cidoc-crm.org/cidoc-crm/P1_is_identified_by (http://www.cidoc-crm.org/cidoc-crm/P1_is_identified_by) property and http://www.cidoc-crm.org/cidoc-crm/E42_Identifier (http://www.cidoc-crm.org/cidoc-crm/E42_Identifier) class

Field name	Type	Description	Equivalent classes, properties
inv_nos_id	INT	Unique record ID, primary key	
date_created	DATE	Date when the record was created in the published version of the database	
date_changed	DATE	Date when the last change to the record was published	
inscriptions_id	INT	ID of the inscribed object identified by the inventory number	
collections_id	INT	ID of the museum	
inv_no	VARCHAR(255)	Inventory number	http://www.w3.org/2000/01/rdf-schema#label (http://www.w3.org/2000/01/rdf-schema#label)
inv_no_sort	VARCHAR(191)	<code>inv_no</code> converted for natural sort	
status	CHAR(11)	Status of the inventory number ("main", "alternative", "obsolete", or "erroneous"). The only case when an object can have more than one main inventory numbers is when its pieces bear separate inventory numbers	
note	TEXT	General notes related to the inventory number	

collections (table_id: 26)

Each record in this table represents a modern collection containing inscribed objects identified by inventory numbers.

Field name	Type	Description
collections_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
full_name_en	TEXT	Official full name of the collection (in English)
full_name_national_language	TEXT	Official full name of the collection (in the main regional or national language)
title	VARCHAR(191)	Short title used in the database
location	VARCHAR(255)	Locality and country
url	TEXT	Official website of the collection (main page)
online_collection	TEXT	URL of the online collection
tm_coll_id	INT	Trismegistos Collections (http://www.trismegistos.org/coll/index.php) ID
thot_url	TEXT	URI of the collection in the THOT Museums and private collections thesaurus (http://thot.philo.ulg.ac.be/concept/thot-6197)
artefacts_url	TEXT	URL of the collection page in the Artefacts of Excavation (http://egyptartefacts.griffith.ox.ac.uk) database

attestations (table_id: 8)

Each record in this table represents an attestation of a person, of one or two personal names, and of a string of titles (if any) born by that person in an inscription.

Equivalent classes: <http://lawd.info/ontology/NameAttestation> (<http://lawd.info/ontology/NameAttestation>), <http://lawd.info/ontology/PersonAttestation> (<http://lawd.info/ontology/PersonAttestation>)

Field name	Type	Description	Equivalent classes, properties
attestations_id	INT	Unique record ID, primary key	
date_created	DATE	Date when the record was created in the published version of the database	
date_changed	DATE	Date when the last change to the record was published	
inscriptions_id	INT	ID of the inscription	http://lawd.info/ontology/hasCitation (http://lawd.info/ontology/hasCitation) + http://lawd.info/ontology/represents (http://lawd.info/ontology/represents)
gender	CHAR(1)	Gender of the attested person ("m", "f", "?" <i>gender unknown</i> , or "a" <i>for animal(s)</i>)	
title_string	TEXT	Transliterated title string in lowercase Unicode as preserved in the inscription, separated by semicolons	
title_string_sort	TEXT	Generated sort value for sorting in the <code>title_string</code> column	
title_string_search	TEXT	Generated sort value for searching in the <code>title_string</code> column	
personal_name	VARCHAR(191)	Transliterated personal name or combination of names in lowercase Unicode as preserved in the inscription, double names separated by /	
personal_name_sort	VARCHAR(191)	Generated sort value for sorting in the <code>personal_name</code> column	
personal_name_search	VARCHAR(191)	Generated sort value for searching in the <code>personal_name</code> column	
status	CHAR(6)	Status of the person on the monument ("owner" or "patron" or "")	
location	VARCHAR(191)	The place in the inscription where the person is mentioned (register, line number according to the standard publication or other relevant indications)	Data stored in the http://lawd.info/ontology/Citation (http://lawd.info/ontology/Citation) class
note	TEXT	General notes related to the attestation	

spellings_attestations_xref (table_id: 15)

Each record in this table represents a link between an attestation of a person and a spelling. When a person bears a double name in a particular source, two records are created in `spellings_attestations_xref`, one for the first name and one for the second name. When a person is attested on the same monuments with the same name in two different spellings, two records are created in `spellings_attestations_xref`, one for the first name, and one for the second name.

Field name	Type	Description	Equivalent classes, properties
spellings_attestations_xref_id	INT	Unique record ID, primary key	
date_created	DATE	Date when the record was created in the published version of the database	
date_changed	DATE	Date when the last change to the record was published	
attestations_id	INT	ID of the attestation	
spellings_id	INT	ID of the spelling	

persons_attestations_xref (table_id: 1)

Each record in this table represents a statement on the appurtenance of an attestation to a dossier.

Equivalent property: <http://lawd.info/ontology/hasAttestation> (<http://lawd.info/ontology/hasAttestation>)

Field name	Type	Description
persons_attestations_xref_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
attestations_id	INT	ID of the attestation
persons_id	INT	ID of the person's dossier
reasoning	VARCHAR(191)	Reasons for accepting or rejecting the attestation as a part of a dossier. Ideally, a list of <code>item_name</code> values in the dossier_reasoning thesaurus (thesaurus 10) separated by semicolons (not yet implemented); <i>example</i> : "same name; related title; same mother's name"
status	CHAR(8)	Status of the statement ("accepted", "weak", or "rejected")
note	TEXT	General notes related to the statement

persons (table_id: 27)

Each record in this table represents a dossier of a person attested in more than one inscription.

Equivalent: entries in D. Franke, *Personendaten aus dem Mittleren Reich (20.-16. Jahrhundert v. Chr.)*

Equivalent class: <http://lawd.info/ontology/Person> (<http://lawd.info/ontology/Person>)

Field name	Type	Description
persons_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
gender	CHAR(1)	Gender of the person ("m", "f", "?" <i>gender unknown</i> , or "a" <i>for animals</i>)
title	VARCHAR(255)	The designation of the dossier referred to in the database such as the reference to the work where the dossier was first established; <i>example</i> : "PD 599"
title_sort	VARCHAR(191)	<code>title</code> converted for natural sort
title_string	TEXT	Transliterated title string in lowercase Unicode as reconstructed from all available attestations, separated by semicolons
title_string_sort	TEXT	Generated sort value for sorting in the <code>title_string</code> column
title_string_search	TEXT	Generated sort value for searching in the <code>title_string</code> column
personal_name	VARCHAR(255)	Transliterated personal name or combination of names in lowercase Unicode as reconstructed from all available attestations, double names separated by /
personal_name_sort	VARCHAR(191)	Generated sort value for sorting in the <code>personal_name</code> column
personal_name_search	VARCHAR(191)	Generated sort value for searching in the <code>personal_name</code> column
note	TEXT	General notes related to the person
dating	VARCHAR(191)	The <code>item_name</code> of the period to which the person can be dated in the dating thesaurus (thesaurus 5), loosely based on a subset of the THOT Dates and dating systems thesaurus (http://thot.philo.ulg.ac.be/concept/thot-114)
dating_sort_start	INT	The <code>sort_date_range_start</code> of the period to which the person can be dated in the dating thesaurus
dating_sort_end	INT	The <code>sort_date_range_end</code> of the period to which the person can be dated in the dating thesaurus
dating_note	TEXT	The reasoning behind the <code>dating</code>
region	VARCHAR(191)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the person's suggested main place of activity
region_sort	INT	The <code>latitude</code> of the record in the table <code>places</code> corresponding to the <code>region</code>
region_note	TEXT	The reasoning behind the <code>region</code>

titles_att (table_id: 28)

Each record in this table represents an attestation of a title in a string of titles in an inscription.

Field name	Type	Description
titles_att_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
titles_id	INT	ID of the attested title
attestations_id	INT	ID of the attestation of a person bearing a title
sequence_number	INT	Sequence number of the title in the title string
spelling	VARCHAR(255)	Optional: the spelling of the title in JSesh-compatible MdC codes

titles (*table_id: 5*)

Each record in this table represents an Egyptian title.

Equivalent: entries in W. A. Ward, Index of Egyptian Administrative and Religious Titles of the Middle Kingdom

Field name	Type	Description
titles_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
title	VARCHAR(191)	Transliterated title in lowercase unicode
title_sort	TEXT	Generated sort value for sorting in the <code>title</code> column
title_search	TEXT	Generated sort value for searching in the <code>title</code> column
translation_en	VARCHAR(191)	English translation of the title
translation_de	VARCHAR(191)	German translation of the title
gender	CHAR(4)	Gender of persons bearing the title ("m", "f", or "both")
tla	VARCHAR(255)	List of corresponding lemma numbers in the Thesaurus Linguae Aegyptiae (http://aaew.bbaw.de/tla/servlet/TlaLogin), separated by semicolons
hannig	VARCHAR(191)	List of corresponding lemma numbers in R. Hannig, <i>Ägyptisches Wörterbuch II: Mittleres Reich und Zweite Zwischenzeit</i> , separated by semicolons
hannig_sort	VARCHAR(191)	Temporary field with the <code>hannig</code> number converted for natural sort
ward_fischer	VARCHAR(191)	List of corresponding lemma numbers in Ward, <i>Index of Egyptian Administrative and Religious Titles of the Middle Kingdom and Fischer, Egyptian Titles of the Middle Kingdom. A Supplement to Wm. Ward's Index</i>
ward_fischer_sort	VARCHAR(191)	Temporary field with the <code>ward_fischer</code> number converted for natural sort
usage_area	VARCHAR(191)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the region where the title was predominantly used
usage_area_sort	INT	The <code>latitude</code> of the record in the table <code>places</code> corresponding to the <code>usage_area</code>
usage_area_note	TEXT	Explanatory notes and bibliographic references to the <code>usage_area</code>
usage_period	VARCHAR(191)	The <code>item_name</code> of the period when the title was predominantly used in the dating thesaurus (thesaurus 5), loosely based on a subset of the THOT Dates and dating systems thesaurus (http://thot.philo.ulg.ac.be/concept/thot-114)
usage_period_sort	INT	The sort value of the period to which the title can be dated
usage_period_note	TEXT	Explanatory notes and bibliographic references to the <code>usage_period</code>
note	TEXT	General notes related to the title

Note: The numbers of the title in W. A. Ward, *Index of Egyptian Administrative and Religious Titles* and H. G. Fischer, *Supplement* are entered using `biblio_refs`

spellings (*table_id: 29*)

Each record in this table represents a spelling type of a personal name. Generic entries with empty spellings are used for names attested in sources accessible only in transliteration or translation.

Field name	Type	Description
spellings_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
personal_names_id	INT	ID of the personal name corresponding to the preferred reading of the spelling
spelling	VARCHAR(191)	The spelling of the name in in JSesh-compatible MdC codes
spelling_norm	VARCHAR(191)	Normalized spelling
ranke	VARCHAR(255)	The corresponding entry in Ranke, <i>Personennamen</i>
usage_area	VARCHAR(255)	The <code>place_name</code> of the record in the table <code>places</code> corresponding to the region where the spelling was predominantly used
usage_area_note	TEXT	Explanatory notes and bibliographic references to the <code>usage_area</code>
		The <code>item_name</code> of the period when the spelling was predominantly used in the dating thesaurus

usage_period VARCHAR(255) (thesaurus 5), loosely based on a subset of the [THOT Dates and dating systems thesaurus](http://thot.philo.ulg.ac.be/concept/thot-114) (<http://thot.philo.ulg.ac.be/concept/thot-114>)

usage_period_note TEXT Explanatory notes and bibliographic references to the usage_period

Note: On the back end, a script uses JSesh (<http://jsesh.genherkhopeshef.org/>) to generate PNG graphical files corresponding to MdC codes. These graphical files get names according to spellings_id and appear in the online database.

alternative_readings (table_id: 9)

Each record in this table represents a possible reading of a spelling, differing from the preferred reading specified in the personal_names_id

Field name	Type	Description
alternative_readings_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
spellings_id	INT	ID of the spelling
personal_names_id	INT	ID of the personal name corresponding to the alternate reading of the spelling

personal_names (table_id: 17)

Each record in this table represents an Egyptian name.

Equivalent: entries in H. Ranke, *Die ägyptischen Personennamen*

Equivalent class: <http://lawd.info/ontology/PersonalName> (<http://lawd.info/ontology/PersonalName>)

Field name	Type	Description	Equivalent classes, properties
personal_names_id	INT	Unique record ID, primary key	
date_created	DATE	Date when the record was created in the published version of the database	
date_changed	DATE	Date when the last change to the record was published	
personal_name	VARCHAR(191)	Transliterated personal name in lowercase Unicode	http://lawd.info/ontology/primaryForm (http://lawd.info/ontology/primaryForm)
personal_name_sort	VARCHAR(191)	Generated sort value for sorting in the personal_name column	
personal_name_search	VARCHAR(191)	Generated sort value for searching in the personal_name column	
translation_en	VARCHAR(255)	English translation of the name	
translation_de	VARCHAR(255)	German translation of the name	
gender	CHAR(4)	Gender of persons bearing the name ("m", "f", "both", or "a" for animals)	
ranke	VARCHAR(191)	List of corresponding entries in Ranke, <i>Personennamen</i> , separated by semicolons	
ranke_sort	VARCHAR(191)	ranke converted for natural sort	
tla	VARCHAR(191)	List of corresponding lemma numbers in the Thesaurus Linguae Aegyptiae (http://aaew.bbaw.de/tla/servlet/TlaLogin), separated by semicolons	
scheele-schweitzer	VARCHAR(191)	List of corresponding entries in K. Scheele-Schweitzer, <i>Die Personennamen des Alten Reiches</i> , separated by semicolons	
agea	VARCHAR(191)	List of corresponding name numbers in the AGÉA database (http://www.ifao.egnet.net/bases/agea/), separated by semicolons	
usage_area	VARCHAR(191)	The place_name of the record in the table places corresponding to the region where the name was predominantly used	
usage_area_sort	INT	The latitude of the record in the table places corresponding to the usage_area	
usage_area_note	TEXT	Explanatory notes and bibliographic references to the usage_area	
usage_period	VARCHAR(191)	The item_name of the period when the name was predominantly used in the dating thesaurus (thesaurus 5), loosely based on a subset of the THOT Dates and dating systems thesaurus (http://thot.philo.ulg.ac.be/concept/thot-114)	
usage_period_sort	INT	The sort value of the period to which the title can be	

		dated
usage_period_note	TEXT	Explanatory notes and bibliographic references to the usage_period
note	TEXT	General notes related to the name

name_types (table_id: 30)

Each record in this table represents a type or a pattern in Egyptian personal names.

Field name	Type	Description
name_types_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
parent_id	INT	ID of the parent name type
title	VARCHAR(191)	Transliterated personal name pattern in lowercase Unicode or the title of a name type
title_raw	VARCHAR(191)	raw title with unfiltered # signs (see below)
title_sort	VARCHAR(191)	A sort value generated based on the previous field, where # triggers a change from normal text to unicode and back
category	CHAR(8)	The category of the name type ("semantic" or "formal")
note	TEXT	General notes related to the name type

names_types_xref (table_id: 31)

Each record in this table represents a correspondence between a personal name and a name pattern.

Field name	Type	Description
names_types_xref_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
personal_names_id	INT	ID of the personal name
name_types_id	INT	ID of the name type

bonds (table_id: 24)

Each record represents a statement about a bond between two persons stated in inscriptions or representations (as in cases when the bond of matrimony between two persons is implied only by iconography) on an inscribed object.

Equivalent class: <http://onto.snapdrqn.net/snap#Bond> (<http://onto.snapdrqn.net/snap#Bond>)

Field name	Type	Description
bonds_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
subject_id	INT	attestations_id of the record in attestations corresponding to the subject of the statement (the person whose name stands in apposition to the phrase expressing the bond or the antecedent of the relative form)
predicate	VARCHAR(191)	The item_name of the bond type in the bond thesaurus (thesaurus 11), based on a subset of the elements of <i>SNAP:DRGN Bond class</i> (http://snapdrqn.net/ontology); example: SonOf
wording	VARCHAR(255)	Transliterated exact expression of the bond in lowercase Unicode as attested in the inscription; example: <i>Sꜣf</i>
object_id	INT	attestations_id of the record in attestations corresponding to the object of the statement (usually the person referred to in the wording by the suffix pronoun or introduced as the agent of a relative form)

persons_bonds (table_id: 11)

Each record represents a statement about a bond between two personal dossiers reconstructed from more than one source.

Equivalent class: <http://onto.snapdrqn.net/snap#Bond> (<http://onto.snapdrqn.net/snap#Bond>)

Field name	Type	Description
persons_bonds_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
subject_id	INT	persons_id of the record in persons corresponding to the subject of the statement
predicate	VARCHAR(191)	The item_name of the bond type in the bond thesaurus (thesaurus 11), based on a subset of the elements of <i>SNAP:DRGN Bond class</i> (http://snapdrqn.net/ontology); example: SonOf

object_id INT persons_id of the record in persons corresponding to the object of the statement

title_relations (table_id: 3)

Each record represents a statement about a relation between two titles.

Field name	Type	Description
title_relations_id	INT	Unique record ID, primary key
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
subject_id	INT	titles_id of the record in titles corresponding to the subject of the statement
predicate	VARCHAR(191)	The relation of the title with the subject_id to the title with the object_id
object_id	INT	titles_id of the record in titles corresponding to the object of the statement

info (no table_id)

This is a supporting table containing notes displayed on the Info page.

Field name	Type	Description
date_created	DATE	Date when the record was created in the published version of the database
date_changed	DATE	Date when the last change to the record was published
title	VARCHAR (191)	The title of the entry
text	TEXT	The HTML-formatted text of the entry
sort_order	INT	The value used for sorting entries on the start page

Besides, temporary tables for speeding up queries to hierarchal data (hierarchies of name_types and thesauri) are created each time when a new version of the database is published. These temporary tables are name_types_temp, children_temp, siblings_temp, spouses_temp.