FLOSS Solutions for Open Land Administration (SOLA)

Data Dictionary

FAO NRC Land Tenure Team
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Contents

Introduction

The SOLA database has been created as part of a project undertaken by the UN Food and Agriculture Organization (with funding from the Government of Finland) to develop open source software that supports cadastre and registration functions in land administration agencies. It has a particular goal of making computerized systems supporting open land administration more affordable and sustainable in developing countries.

The SOLA database is implemented in a Postgre SQL database and is a relational database implementation of an extended version of the Land Administration Data Model (LADM) which is currently a Draft International Standard (DIS 19152). It has been necessary to extend DIS 19152 because of the operational needs of land administration agencies to incorporate case management and other features into any system that supports the processing of client service requests (for land information, registration and cadastre change requests and others) and the maintaining and updating of the record of rights and restrictions, ownership and property boundaries. The FLOSS SOLA software supports this range of land administration business processes and the SOLA database is an integral part of the FLOSS SOLA database.

The SOLA Data Dictionary is organized according to the database schemas defined in the SOLA database. Within each section for a schema there is a definition of all tables including their description, column, constraints and relationship details.

The SOLA database should be considered a work in progress over the period 2011 - 2013 while the initial FLOSS SOLA software is under development and pilot implementation are being undertaken. For this reason those referring to this document should check www.flossola.org to ensure they have the latest version.

source

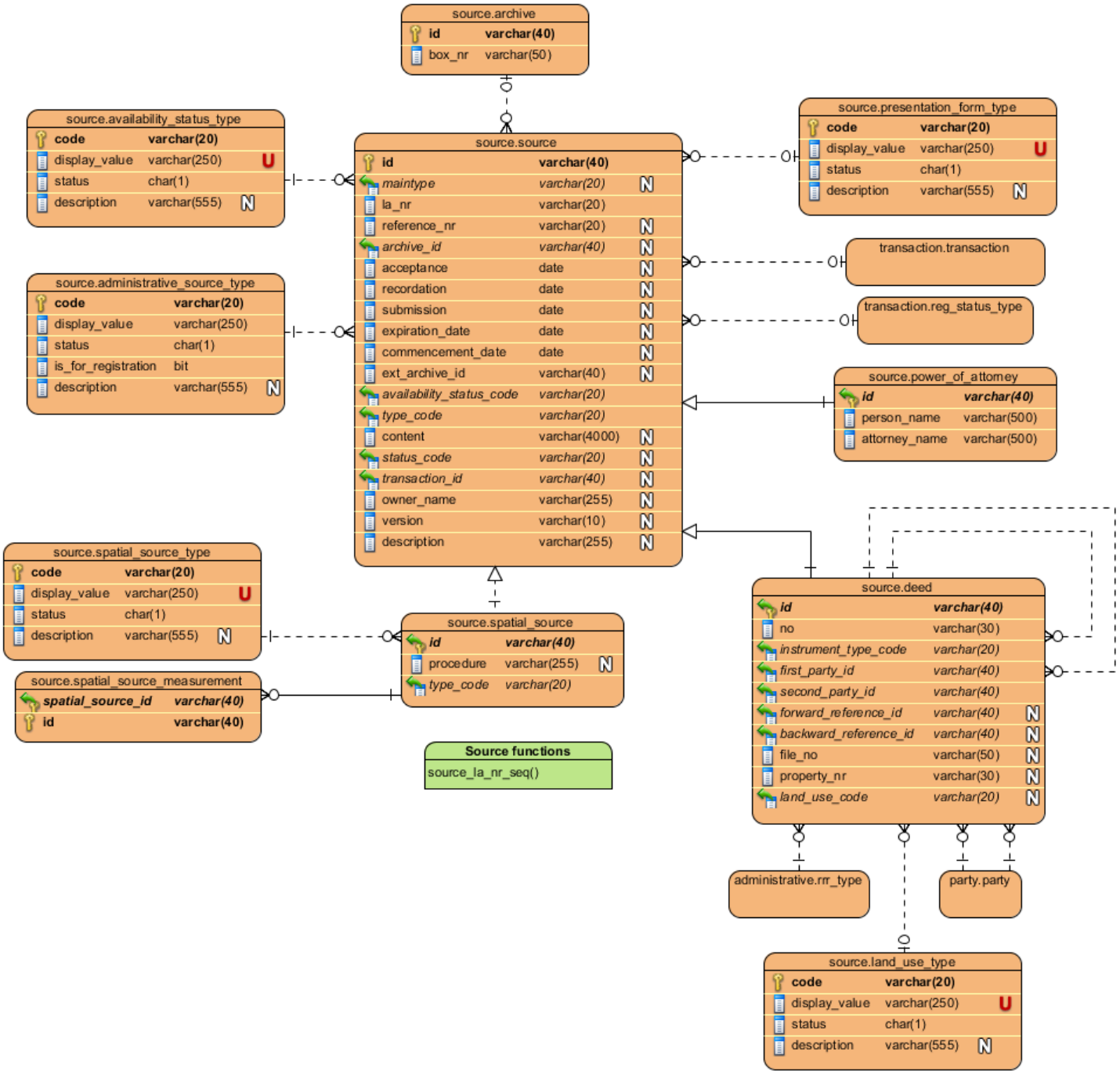

Table: source

Documents or recognised facts providing the basis for the recording of a registration, cadastre change, right, responsibility or administrative action performed by the land office

LADM Reference Object
LA_Source

LADM Definition
Not defined

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Source identifier
maintype	varchar(20)	True		**LADM Definition** - The type of the representation of the content of the source.
la_nr	varchar(20)	False		**SOLA Extension** - This number is given by the land administration office for their own administration.
reference_nr	varchar(20)	True		**SOLA Extension** -This is the number as given by the external agency.
archive_id	varchar(40)	True		**SOLA Extension** - The archive identifier of the source
acceptance	date	True		**LADM Definition** -The date of force of law of the source by an authority. Date of Registration - Day on which the deed was registered by the commission
recordation	date	True		**LADM Definition** - The date of formalization by the source agency. Ghana extension: This date in Ghana is refeerd as Date of Instrument
submission	date	True	now()	**LADM Definition** - The date when the document was submited to the system
expiration_date	date	True		Date of expiration
commencement_date	date	True		Ghana extension: Date of commencement.
ext_archive_id	varchar(40)	True		**LADM Definition** -The identifier of a source in an external registration. This attribute is used to link the source with the document management system.
availability_status_code	varchar(20)	False	'available'	**LADM Definition** - the code describing how available this source (document) is
type_code	varchar(20)	False		**LADM Definition** - Type of the document (administrative_source)
content	varchar(4000)	True		**LADM Definition** -Content of the source (administrative_source)
status_code	varchar(20)	True		The status of the document. For some documents is important to know if the document is valid or not.
transaction_id	varchar(40)	True		The transaction that brought the document in the system. This is not valid for all documents but for some of them. There are request types that bring only documents in the system without involving a ba unit. In this case is important to know which transaction brought this document in order to handle it within transaction (approve, reject) life cycle.
owner_name	varchar(255)	True		Document owner name.
version	varchar(10)	True		Document version.
description	varchar(255)	True		Document description.

Constraints

Name	Type	Explanation

source_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
source_maintype_fk35	**From columns**: maintype **To Entity**: presentation_form_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
source_archive_id_fk36	**From columns**: archive_id **To Entity**: archive **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
source_availability_status_code_fk44	**From columns**: availability_status_code **To Entity**: availability_status_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
source_type_code_fk45	**From columns**: type_code **To Entity**: administrative_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
source_transaction_id_fk85	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	
source_status_code_fk86	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
spatial_source_id_fk11	**From columns**: id **From Entity**: spatial_source **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
application_uses_source_source_id_fk38	**From columns**: source_id **From Entity**: application_uses_source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
source_describes_ba_unit_source_id_fk65	**From columns**: source_id **From Entity**: source_describes_ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
source_describes_rrr_source_id_fk75	**From columns**: source_id **From Entity**: source_describes_rrr **From cardinality**: 0..* **To Cardinality**: 1	

transaction_source_source_id_fk94	**From columns**: source_id **From Entity**: transaction_source **From cardinality**: 0..* **To Cardinality**: 1	
deed_id_fk129	**From columns**: id **From Entity**: deed **From cardinality**: 1 **To Cardinality**: 1	
power_of_attorney_id_fk141	**From columns**: id **From Entity**: power_of_attorney **From cardinality**: 1 **To Cardinality**: 1	

Triggers

Name	Event
change_of_status	before update

Table: availability_status_type

Reference Table / Code list of source (document) availability status type

LADM Reference Object
LA_AvailabilityStatusType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** -The code for the availability status type
display_value	varchar(250)	False		**LADM Definition** - The display value assigned to the availability status type
status	char(1)	False	'c'	**SOLA Extension** - The status of the availability status type
description	varchar(555)	True		**LADM Definition** - description of the availability status type

Constraints

Name	Type	Explanation
availability_status_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
availability_status_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
source_availability_status_code_fk44	**From columns**: availability_status_code **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	status	description
1	archiveConverted	Converted::::Convertito	c	
2	archiveDestroyed	Destroyed::::Distrutto	x	
3	incomplete	Incomplete::::Incompleto	c	
4	archiveUnknown	Unknown::::Sconosciuto	c	
5	available	Available	c	Extension to LADM

Table: administrative_source_type

Reference Table / Code list of administrative source types

LADM Reference Object
LA_AdministrativeSourceType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** -The code for the administrative source type
display_value	varchar(250)	False		**LADM Definition** - displayed value of the administrative source type
status	char(1)	False		**SOLA Extension** - Status of the administrative source type
is_for_registration	bool	False	false	
description	varchar(555)	True		**LADM Definition** - Description of the administrative source type

Constraints

Name	Type	Explanation
administrative_source_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
administrative_source_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
source_type_code_fk45	**From columns**: type_code **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
request_type_requires_source_type_source_type_code_fk46	**From columns**: source_type_code **From Entity**: request_type_requires_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	status	is_for_registration	description
1	agriConsent	Agricultural Consent::::Permesso Agricolo	x	false	
2	agriLease	Agricultural Lease::::Contratto Affitto Agricolo	x	false	

3	agriNotaryStatement	Agricultural Notary Statement::::Dichiarazione Agricola Notaio	x	false	
4	deed	Deed	c	false	
5	lease	Lease::::ITALIANO	c	false	
6	mortgage	Mortgage::::Ipoteca	c	false	
7	title	Title::::Titolo	c	false	
8	proclamation	Proclamation::::Bando	c	false	Extension to LADM
9	courtOrder	Court Order::::Ordine Tribunale	c	false	Extension to LADM
10	agreement	Agreement::::Accordo	c	false	Extension to LADM
11	contractForSale	Contract for Sale::::ITALIANO	c	false	Extension to LADM
12	will	Will::::ITALIANO	c	false	Extension to LADM
13	powerOfAttorney	Power of Attorney::::ITALIANO	c	true	Extension to LADM
14	standardDocument	Standard Document::::ITALIANO	c	false	Extension to LADM
15	cadastralMap	Cadastral Map::::Mappa Catastale	c	false	Extension to LADM
16	cadastralSurvey	Cadastral Survey::::Rilevamento Catastale	c	false	Extension to LADM
17	waiver	Waiver to Caveat or other requirement	c	false	Extension to LADM
18	idVerification	Form of Identification including Personal ID	c	false	Extension to LADM

Table: spatial_source

Refer to LADM Definition

LADM Reference Object
LA_Source

LADM Definition
A spatial source may be the final (sometimes formal) documents, or all documents related to a survey. Sometimes serveral documents are the result of a single survey. A spatial source may be official or not (ie a registered survey plan or an aerial photograph).

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Spatial source identifier
procedure	varchar(255)	True		**LADM Definition** - Procedures, steps or method adopted
type_code	varchar(20)	False		**LADM Definition** - Code type assigned to the source

Constraints

Name	Type	Explanation
spatial_source_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
spatial_source_type_code_fk0	**From columns**: type_code **To Entity**: spatial_source_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_source_id_fk11	**From columns**: id **To Entity**: source **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
spatial_source_measurement_spatial_source_id_fk1	**From columns**: spatial_source_id **From Entity**: spatial_source_measurement **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: spatial_source_type

Reference Table / Code list of spatial source type

LADM Reference Object
LA_SpatialSourceType

LADM Definition
Type of Spatial Source

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - The code for the spatial source type
display_value	varchar(250)	False		**LADM Definition** - The display value of the spatial source type
status	char(1)	False	't'	**SOLA Extension** The status of the spatial source type
description	varchar(555)	True		**LADM Definition** - description of the spatial source type

Constraints

Name	Type	Explanation
spatial_source_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
spatial_source_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
spatial_source_type_code_fk0	**From columns**: type_code **From Entity**: spatial_source **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	status	description
1	fieldSketch	Field Sketch::::Schizzo Campo	c	
2	gnssSurvey	GNSS (GPS) Survey::::Rilevamento GNSS (GPS)	c	
3	orthoPhoto	Orthophoto::::Foto Ortopanoramica	c	
4	relativeMeasurement	Relative Measurements::::Misure relativa	c	

5	topoMap	Topographical Map::::Mappa Topografica	c	
6	video	Video::::Video	c	
7	cadastralSurvey	Cadastral Survey::::Perizia Catastale	c	Extension to LADM

Table: spatial_source_measurement

Refer to LADM Definition

LADM Reference Object
OM_Observation

LADM Definition
The observations, and measurements, as a basis for mapping, and as a basis for historical reconstruction of the location of (parts of) the spatial unit in the field

Columns

Name	Type	Optional	Default	Description
spatial_source_id	varchar(40)	False		Spatial source identifier
id	varchar(40)	False		**LADM Definition** - This is an identifier of a measurement within a spatial source.

Constraints

Name	Type	Explanation
spatial_source_measurement_pkey	PRIMARY KEY	Combination of (spatial_source_id,id) is the primary key

Relationships (from)

Name	Information	Description
spatial_source_measurement_spatial_source_id_fk1	**From columns**: spatial_source_id **To Entity**: spatial_source **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: presentation_form_type

Reference Table / Code list for the different formats of sources (documents) that are presented to the land office

LADM Reference Object
CI_PresentationFormCode

LADM Definition
The type of document;

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - Code for the presentation form type
display_value	varchar(250)	False		**LADM Definition** - The display value for presentation form type
status	char(1)	False	't'	**SOLA Extension** - The status of the presentation form type
description	varchar(555)	True		**LADM Definition** - description of the presentation form type

Constraints

Name	Type	Explanation
presentation_form_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
presentation_form_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
source_maintype_fk35	**From columns**: maintype **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Data

Nr	code	display_value	status	description
1	documentDigital	Digital Document::::Documento Digitale	c	
2	documentHardcopy	Hardcopy Document::::Documento in Hardcopy	c	
3	imageDigital	Digital Image::::Immagine Digitale	c	
4	imageHardcopy	Hardcopy Image::::Immagine in Hardcopy	c	

5	mapDigital	Digital Map::::Mappa Digitale	c	
6	mapHardcopy	Hardcopy Map::::Mappa in Hardcopy	c	
7	modelDigital	Digital Model::::Modello Digitale',	c	
8	modelHarcopy	Hardcopy Model::::Modello in Hardcopy	c	
9	profileDigital	Digital Profile::::Profilo Digitale	c	
10	profileHardcopy	Hardcopy Profile::::Profilo in Hardcopy	c	
11	tableDigital	Digital Table::::Tabella Digitale	c	
12	tableHardcopy	Hardcopy Table::::Tabella in Hardcopy	c	
13	videoDigital	Digital Video::::Video Digitale',	c	
14	videoHardcopy	Hardcopy Video::::Video in Hardcopy	c	

Table: archive

Details about collections of sources (documents) in both paper and digital formats

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** The archive identifier of the source
box_nr	varchar(50)	False		**SOLA Extension** - The name description of the source

Constraints

Name	Type	Explanation
archive_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (to)

Name	Information	Description
source_archive_id_fk36	**From columns**: archive_id **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

Table: deed

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
no	varchar(30)	False		
instrument_type_code	varchar(20)	False		
first_party_id	varchar(40)	False		
second_party_id	varchar(40)	False		
forward_reference_id	varchar(40)	True		
backward_reference_id	varchar(40)	True		
file_no	varchar(50)	True		
property_nr	varchar(30)	True		
land_use_code	varchar(20)	True		

Constraints

Name	Type	Explanation
deed_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
deed_id_fk129	**From columns**: id **To Entity**: source **From cardinality**: 1 **To Cardinality**: 1	
deed_instrument_type_code_fk130	**From columns**: instrument_type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 1	
deed_first_party_id_fk131	**From columns**: first_party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
deed_second_party_id_fk132	**From columns**: second_party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
deed_forward_reference_id_fk133	**From columns**: forward_reference_id **To Entity**: deed **From cardinality**: 0..* **To Cardinality**: 1	

deed_backward_reference_id_fk134	**From columns**: backward_reference_id **To Entity**: deed **From cardinality**: 0..* **To Cardinality**: 1	
deed_land_use_code_fk139	**From columns**: land_use_code **To Entity**: land_use_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Table: land_use_type

Ghana extension: It contains the list of possible land use types.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		
display_value	varchar(250)	False		
status	char(1)	False	't'	
description	varchar(555)	True		

Constraints

Name	Type	Explanation
land_use_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
land_use_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
deed_land_use_code_fk139	**From columns**: land_use_code **From Entity**: deed **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status	description
1	residential	Residential	c	
2	commercial	Commercial	c	
3	industrial	Industrial	c	
4	educational	Educational	c	
5	agricultural	Agricultural	c	
6	recreational	Recreational	c	
7	civic-cultural	Civic Cultural	c	

Table: power_of_attorney

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
person_name	varchar(500)	False		The name of person, giving power of attorney
attorney_name	varchar(500)	False		The name of attorney.

Constraints

Name	Type	Explanation
power_of_attorney_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
power_of_attorney_id_fk141	**From columns**: id **To Entity**: source **From cardinality**: 1 **To Cardinality**: 1	

Sequence: source_la_nr_seq

Allocates numbers 1 to 999999999 for source la number.

party

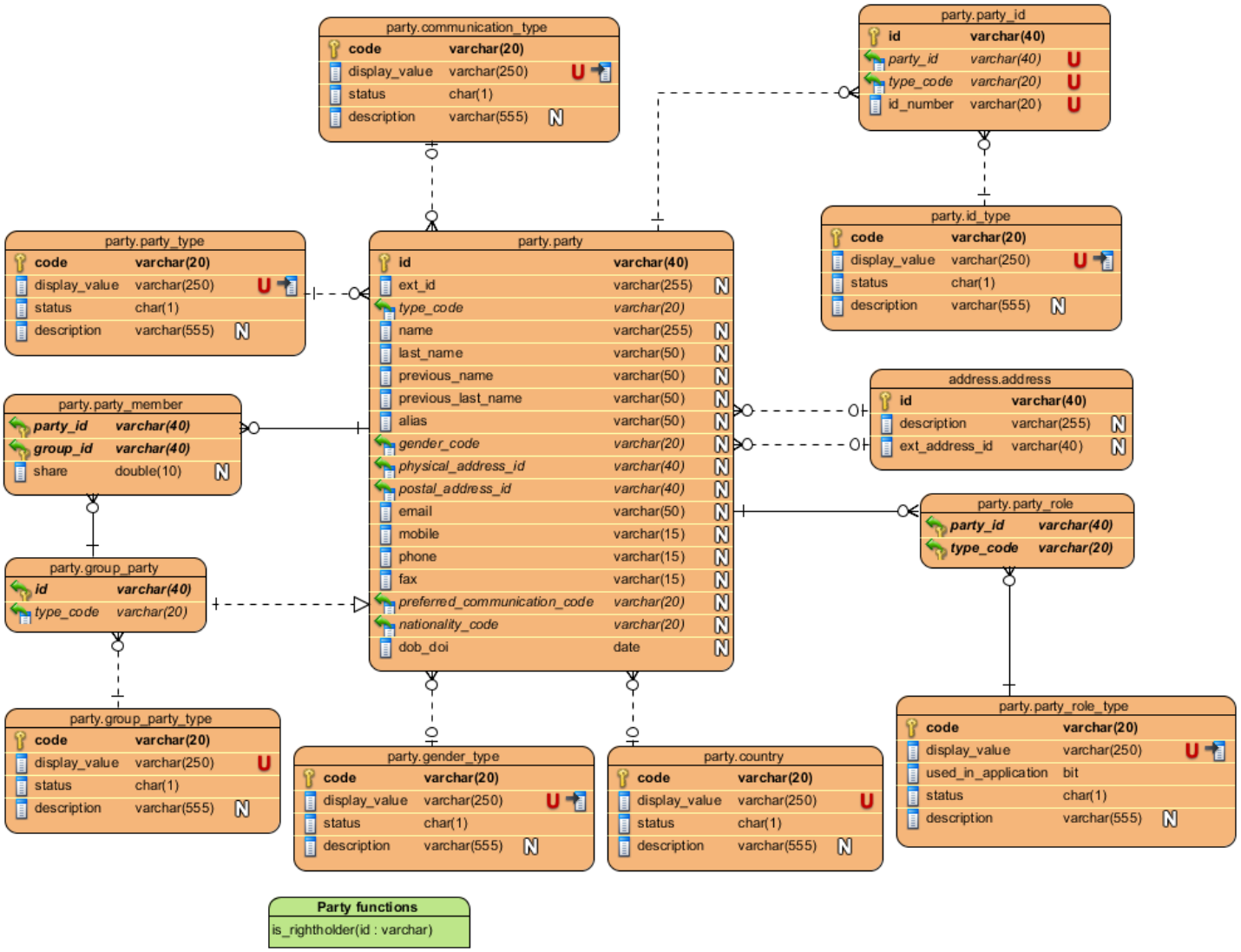

Table: party

An individual or group of individual people or a non-person organisation that is associated in some way with land office services.Also refer to LADM DefinitionLADM Reference Object LA_PartyLADM DefinitionRegistered and identified as a constituent of a group party.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** The identifier of the party
ext_id	varchar(255)	True		**LADM Definition** An identifier for the party from a system external to SOLA
type_code	varchar(20)	False		**LADM Definition** The type code for the party
name	varchar(255)	True		**LADM Definition** Name of party
last_name	varchar(50)	True		**SOLA Extension** - Last name of party
previous_name	varchar(50)	True		**SOLA Extension** - First name of father of the party.

previous_last_name	varchar(50)	True		**SOLA Extension** - Last name of father of the party.
alias	varchar(50)	True		**SOLA Extension** - Alias of the party.
gender_code	varchar(20)	True		The gender of the party. If type of the party is naturalPerson then the gender_code must be given.
physical_address_id	varchar(40)	True		Ghana extension: An identifier for the physical address of party. In the generic model this is the column address_id.
postal_address_id	varchar(40)	True		Ghana extension: This is the address id of the postal address.
email	varchar(50)	True		**SOLA Extension** Party's contact email address
mobile	varchar(15)	True		**SOLA Extension** Contact mobile number of party
phone	varchar(15)	True		**SOLA Extension** Landline phone number of party
fax	varchar(15)	True		**SOLA Extension** Fax number of party
preferred_communication_code	varchar(20)	True		**SOLA Extension** Code for mode of preferred communication
nationality_code	varchar(20)	True		
dob_doi	date	True		

Constraints

Name	Type	Explanation
party_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
party_type_code_fk2	**From columns**: type_code **To Entity**: party_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
party_physical_address_id_fk31	**From columns**: physical_address_id **To Entity**: address **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
party_preferred_communication_code_fk34	**From columns**: preferred_communication_code **To Entity**: communication_type **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
party_gender_code_fk90	**From columns**: gender_code **To Entity**: gender_type **From cardinality**: 0..* **To Cardinality**: 0..1	

party_postal_address_id_fk117	**From columns**: postal_address_id **To Entity**: address **From cardinality**: 0..* **To Cardinality**: 0..1	
party_nationality_code_fk140	**From columns**: nationality_code **To Entity**: country **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
party_member_party_id_fk4	**From columns**: party_id **From Entity**: party_member **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
group_party_id_fk10	**From columns**: id **From Entity**: group_party **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
party_role_party_id_fk30	**From columns**: party_id **From Entity**: party_role **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
ba_unit_as_party_party_id_fk48	**From columns**: party_id **From Entity**: ba_unit_as_party **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_party_id_fk76	**From columns**: party_id **From Entity**: party_for_rrr **From cardinality**: 0..* **To Cardinality**: 1	
application_party_party_id_fk110	**From columns**: party_id **From Entity**: application_party **From cardinality**: 0..* **To Cardinality**: 1	
party_id_party_id_fk118	**From columns**: party_id **From Entity**: party_id **From cardinality**: 0..* **To Cardinality**: 1	
deed_first_party_id_fk131	**From columns**: first_party_id **From Entity**: deed **From cardinality**: 0..* **To Cardinality**: 1	
deed_second_party_id_fk132	**From columns**: second_party_id **From Entity**: deed **From cardinality**: 0..* **To Cardinality**: 1	

Table: party_type

Reference Table / Code list of party types

LADM Reference Object
LA_

LADM Definition
The type of party

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - Code for party type
display_value	varchar(250)	False		**LADM Definition** - displayed value for party type
status	char(1)	False	't'	**SOLA Extension** party type status
description	varchar(555)	True		**LADM Definition** - description of party type

Constraints

Name	Type	Explanation
party_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
party_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_type_code_fk2	**From columns**: type_code **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	status	description
1	naturalPerson	Natural Person	c	
2	nonNaturalPerson	Non-natural Person	c	

Table: group_party

Refer to LADM Definition

LADM Reference Object
LA_GroupParty

LADM Definition
Any number of parties, forming together a distinct entity, with each party identified

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		LADM Description - Identifier of a group party
type_code	varchar(20)	False		LADM Description - The type of a group party

Constraints

Name	Type	Explanation
group_party_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
group_party_type_code_fk3	**From columns**: type_code **To Entity**: group_party_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
group_party_id_fk10	**From columns**: id **To Entity**: party **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
party_member_group_id_fk5	**From columns**: group_id **From Entity**: party_member **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: group_party_type

Reference Table / Code list to identify different types of groups being a party to some form of land office transaction

LADM Reference Object
LA_

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - Group type code/identifier
display_value	varchar(250)	False		**LADM Definition** - A value assigned for group party type
status	char(1)	False	't'	**SOLA Extension** - Indication of party group type status
description	varchar(555)	True		**LADM Definition** -A brief description of party type

Constraints

Name	Type	Explanation
group_party_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
group_party_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
group_party_type_code_fk3	**From columns**: type_code **From Entity**: group_party **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	status	description
1	tribe	Tribe::::Tribu	x	
2	association	Association::::Associazione	c	
3	family	Family::::Famiglia	c	
4	baunitGroup	Basic Administrative Unit Group::::Unita Gruppo Amministrativo di Base	x	

Table: party_member

Refer to LADM Definition

LADM Reference Object
LA_PartyMember

LADM Definition
A member belonging to a party.

Columns

Name	Type	Optional	Default	Description
party_id	varchar(40)	False		**LADM Definition** - The identifier of the party
group_id	varchar(40)	False		**LADM Definition** - The identifier of the party group
share	double precision	True		**LADM Definition** - the share of a right (restriction or responsibility) held by a party member expressed as a fraction with a numerator and denominator

Constraints

Name	Type	Explanation
party_member_pkey	PRIMARY KEY	Combination of (party_id,group_id) is the primary key

Relationships (from)

Name	Information	Description
party_member_party_id_fk4	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
party_member_group_id_fk5	**From columns**: group_id **To Entity**: group_party **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: party_role

Records the role(s) a party has in land office processes

LADM Reference Object
FLOSS SOLA Extension LA_Party.role

LADM Definition
The role of a party in the data update and maintenance process

Columns

Name	Type	Optional	Default	Description
party_id	varchar(40)	False		**LADM Definition** - The identifier of the party
type_code	varchar(20)	False		**SOLA Extension** - The code for role type

Constraints

Name	Type	Explanation
party_role_pkey	PRIMARY KEY	Combination of (party_id,type_code) is the primary key

Relationships (from)

Name	Information	Description
party_role_type_code_fk29	**From columns**: type_code **To Entity**: party_role_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
party_role_party_id_fk30	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: party_role_type

Reference Table / Code list of types of party roles

LADM Reference Object
LA_

LADM Definition
The role of the party in the data update and maintenance process;

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - code for party role type
display_value	varchar(250)	False		**SOLA Extension** - displayed value of party role type
used_in_application	bool	False	false	This field is used to filter role_types that are used by applications only. Value is True if used by application.
status	char(1)	False	't'	**SOLA Extension** - Indication of party role type status
description	varchar(555)	True		**SOLA Extension** - description of party role type

Constraints

Name	Type	Explanation
party_role_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
party_role_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_role_type_code_fk29	**From columns**: type_code **From Entity**: party_role **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_party_role_code_fk111	**From columns**: role_code **From Entity**: application_party **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	used_in_application	status	description
1	conveyor	Conveyor::::Trasportatore		x	
2	notary	Notary::::Notaio		c	
3	writer	Writer::::Autore		x	
4	surveyor	Surveyor::::Perito		x	

5	certifiedSurveyor	Licenced Surveyor	true	c	
6	bank	Bank::::Banca		c	
7	moneyProvider	Money Provider::::Istituto Credito		c	
8	employee	Employee::::Impiegato		x	
9	farmer	Farmer::::Contadino		x	
10	citizen	Citizen::::Cittadino		c	
11	stateAdministrator	Registrar / Approving Surveyor::::Cancelleriere/ Perito Approvatore/		c	
12	landOfficer	Land Officer::::Ufficiale del Registro Territoriale		c	Extension to LADM
13	lodgingAgent	Lodging Agent	true	c	Extension to LADM
14	powerOfAttorney	Power of Attorney::::Procuratore		c	Extension to LADM
15	transferee	Transferee (to)::::Avente Causa		c	Extension to LADM
16	transferor	Transferor (from)::::Dante Causa		c	Extension to LADM
17	applicant	Applicant	true	c	Extension to LADM
18	client	Client	true	c	Extension to LADM

Table: communication_type

Reference Table / Code list for the different means of communication (from land office to their clients)

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - Communication type code
display_value	varchar(250)	False		**SOLA Extension** - Display value for the communication type
status	char(1)	False	't'	**SOLA Extension** - Status of the communication type
description	varchar(555)	True		**SOLA Extension** - Description of the communication type

Constraints

Name	Type	Explanation
communication_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
communication_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_preferred_communication_code_fk34	**From columns**: preferred_communication_code **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	status	description
1	eMail	e-Mail	c	
2	fax	Fax	c	
3	post	Post	c	
4	phone	Phone	c	
5	courier	Courier	c	

Table: id_type

Reference Table / Code list for the types of the documents that can be used to identify a party.

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - identifier for the type of person ID
display_value	varchar(250)	False		**SOLA Extension** - displayed value of type of personal ID
status	char(1)	False	't'	**SOLA Extension** - (personal) ID type status
description	varchar(555)	True		**SOLA Extension** - description of personal ID type

Constraints

Name	Type	Explanation
id_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
id_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_id_type_code_fk119	**From columns**: type_code **From Entity**: party_id **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	nationalID	National ID	c	The main person ID that exists in the country::::Il principale documento identificativo nel paese
2	nationalPassport	National Passport	c	A passport issued by the country::::Passaporto fornito dal paese
3	otherPassport	Other Passport	c	A passport issued by another country::::Passaporto Fornito da un altro paese
4	surveyorId	Surveyor ID	c	An id that is given to a surveyor

Table: gender_type

The gender type list a party can have.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - code for party role type
display_value	varchar(250)	False		**SOLA Extension** - displayed value of party role type
status	char(1)	False	't'	**SOLA Extension** - Indication of party role type status
description	varchar(555)	True		**SOLA Extension** - description of party role type

Constraints

Name	Type	Explanation
gender_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
gender_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_gender_code_fk90	**From columns**: gender_code **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status	description
1	male	Male	c	
2	female	Female	c	

Table: party_id

Ghana extension: The list of ids that are associated with a party.In the generic model, there was space only for one id defined by the columns id_type_code and id_number. These columns are removed from the party.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		Meaningless identifier of the id for a certain
party_id	varchar(40)	False		Id of the party
type_code	varchar(20)	False		Type code of the id
id_number	varchar(20)	False		The id number

Constraints

Name	Type	Explanation
party_id_logical_key	UNIQUE	Combination of (party_id, type_code, id_number) is unique
party_id_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
party_id_party_id_fk118	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
party_id_type_code_fk119	**From columns**: type_code **To Entity**: id_type **From cardinality**: 0..* **To Cardinality**: 1	

Table: country

Ghana extension: List of countries that are used in the system.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		
display_value	varchar(250)	False		
status	char(1)	False	't'	
description	varchar(555)	True		

Constraints

Name	Type	Explanation
country_display_value_unique	UNIQUE	Combination of (display_value) is unique
country_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
party_nationality_code_fk140	**From columns**: nationality_code **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status	description
1	GH	Ghana	c	
2	NG	Nigeria	c	

Function: is_rightholder

Gets if a party is rightholder.

Parameters

Name	Type	Direction	Description
id	varchar		Party id

administrative

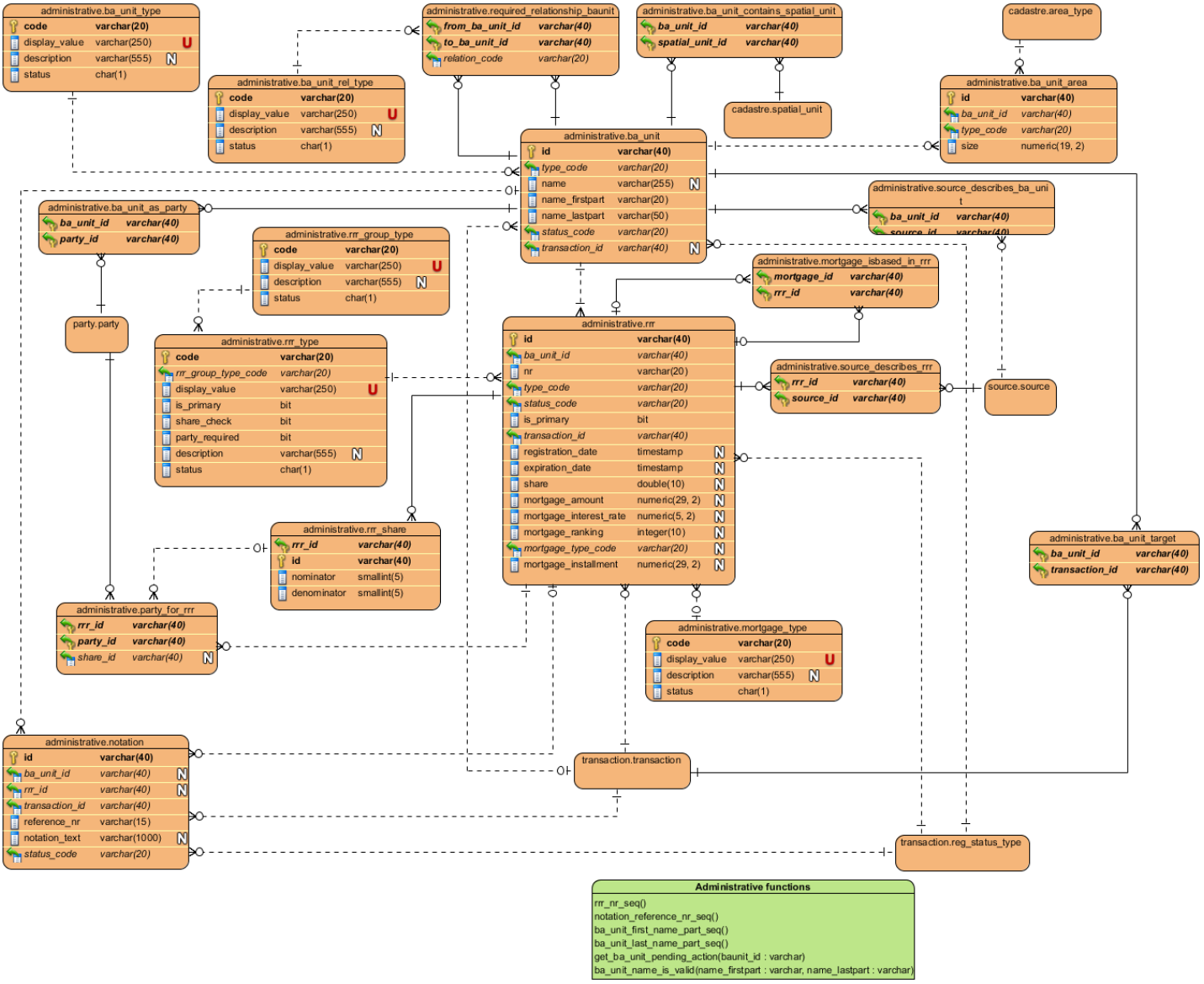

Table: ba_unit

Refer to LADM Definition

LADM Reference Object
LA_BAUnit

LADM Definition
Basic administrative units (abbreviated as baunits), are needed, among other things, to register ‘basic property units’, which consist of several spatial units, belonging to a party, under the same right (a right must be 'homogeneous' over the whole baunit). .

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - The identifier of the basic administrative unit

type_code	varchar(20)	False		**LADM Definition** - The type of the basic administrative unit
name	varchar(255)	True		**LADM Definition** - The name of the basic administrative unit
name_firstpart	varchar(20)	False		**LADM Definition** - It is the part of the identifier of the property. Together with the name_lastpart is supposed to uniquely identify the property.This constraint it is not enforced, because there will be cases when it is not unique. Combination of name_firstpart and name_lastpart must derive the value of ba_unit.
name_lastpart	varchar(50)	False		**LADM Definition** - It is the last part of the identifier of the property. Together with the name_firstpart is supposed to uniquely identify the property.This constraint it is not enforced, because there will be cases when it is not unique. Combination of name_firstpart and name_lastpart must derive the value of ba_unit.
status_code	varchar(20)	False		The status of the ba unit.
transaction_id	varchar(40)	True		Transaction which creates the baunit.

Constraints

Name	Type	Explanation
ba_unit_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
ba_unit_type_code_fk6	**From columns**: type_code **To Entity**: ba_unit_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_status_code_fk60	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_transaction_id_fk82	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
rrr_ba_unit_id_fk7	**From columns**: ba_unit_id **From Entity**: rrr **From cardinality**: 1..* **To Cardinality**: 1	LADM Definition - no refinement

source_describes_ba_unit_ba_unit_id_fk13	**From columns**: ba_unit_id **From Entity**: source_describes_ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
required_relationship_baunit_from_ba_unit_id_fk14	**From columns**: from_ba_unit_id **From Entity**: required_relationship_baunit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
required_relationship_baunit_to_ba_unit_id_fk15	**From columns**: to_ba_unit_id **From Entity**: required_relationship_baunit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_contains_spatial_unit_ba_unit_id_fk24	**From columns**: ba_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
application_property_ba_unit_id_fk41	**From columns**: ba_unit_id **From Entity**: application_property **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement
ba_unit_as_party_ba_unit_id_fk49	**From columns**: ba_unit_id **From Entity**: ba_unit_as_party **From cardinality**: 0..* **To Cardinality**: 1	
notation_ba_unit_id_fk69	**From columns**: ba_unit_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 0..1	
ba_unit_area_ba_unit_id_fk71	**From columns**: ba_unit_id **From Entity**: ba_unit_area **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_ba_unit_id_fk106	**From columns**: ba_unit_id **From Entity**: ba_unit_target **From cardinality**: 0..* **To Cardinality**: 1	

Table: ba_unit_type

Reference Table / Code list for types of BA Units

LADM Reference Object
LA_BAUnitType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** Basic unit type code
display_value	varchar(250)	False		**LADM Definition** Display value for the basic unit type
description	varchar(555)	True		**LADM Definition** Description of the unit type
status	char(1)	False	't'	**SOLA Extension** Status of the basic unit type

Constraints

Name	Type	Explanation
ba_unit_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
ba_unit_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
ba_unit_type_code_fk6	**From columns**: type_code **From Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	allodial	Allodial		c
2	customaryLawFreehold	Customary Law Freehold		c
3	leaseHold	Lease Hold		c
4	commonLawFreehold	Common Law Freehold		c

Table: rrr

Refer to LADM DefinitionLADM Reference Object LA_RRRLADM DefinitionA right, restriction or responsibility.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Identifier for the right, responsibility and restrictions
ba_unit_id	varchar(40)	False		**LADM Definition** - basic administrative unit identifier
nr	varchar(20)	False		This is a unique number of rrr within a baunit to identify it in baunit.
type_code	varchar(20)	False		**LADM Definition** - code for type of right, responsibility restriction
status_code	varchar(20)	False	'pending'	The status of the rrr.
is_primary	bool	False	false	It marks the rrr as being primary. Only one rrr can be primary for one BaUnit.
transaction_id	varchar(40)	False		The transaction that borught changes to the rrr.
registration_date	timestamp	True		This is the registration date of the rrr. It takes the value from the approval date.
expiration_date	timestamp	True		**LADM Definition** - the dates defining when the rrr remains in force LADM Reference Object - rrr.timespec
share	double precision	True		Actually, SOLA is defining shares in a seperate table. So within one rrr we can have multiple shares instead of multiple rrr of the same type within a baunit as LADM proposes. **LADM Definition** - share of a right, (restriction or responsibility) expressed as a fraction with numerator and denominator
mortgage_amount	numeric(29, 2)	True		**LADM Definition** The amount of money of the mortgage
mortgage_interest_rate	numeric(5, 2)	True		**LADM Definition** Interest rate of the mortgage (percentage)
mortgage_ranking	integer	True		**LADM Definition** The ranking order if more than one mortgage applies to a right
mortgage_type_code	varchar(20)	True		
mortgage_installment	numeric(29, 2)	True		The installment for the mortgage

Constraints

Name	Type	Explanation
rrr_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description

rrr_ba_unit_id_fk7	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 1..* **To Cardinality**: 1	LADM Definition - no refinement
rrr_type_code_fk9	**From columns**: type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
rrr_status_code_fk59	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
rrr_mortgage_type_code_fk80	**From columns**: mortgage_type_code **To Entity**: mortgage_type **From cardinality**: 0..* **To Cardinality**: 0..1	
rrr_transaction_id_fk81	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
source_describes_rrr_rrr_id_fk12	**From columns**: rrr_id **From Entity**: source_describes_rrr **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement
mortgage_isbased_in_rrr_rrr_id_fk57	**From columns**: rrr_id **From Entity**: mortgage_isbased_in_rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
mortgage_isbased_in_rrr_mortgage_id_fk58	**From columns**: mortgage_id **From Entity**: mortgage_isbased_in_rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
rrr_share_rrr_id_fk72	**From columns**: rrr_id **From Entity**: rrr_share **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_rrr_id_fk83	**From columns**: rrr_id **From Entity**: party_for_rrr **From cardinality**: 0..* **To Cardinality**: 1	
notation_rrr_id_fk84	**From columns**: rrr_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 0..1	

Triggers

Name	Event
change_from_pending	before update

Table: rrr_group_type

Reference Table / Code list for different categories of LA_RRR

LADM Reference Object
LA_Responsibility, LA_Right, LA_Restriction as specialisations of LA_RR

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - Identifier of group type of restriction, rights responsibility
display_value	varchar(250)	False		**LADM Definition** - the value to be displayed
description	varchar(555)	True		**LADM Definition** - description of group type of restriction, rights responsibility
status	char(1)	False		**SOLA Extension** Status of group type of restriction, rights responsibility

Constraints

Name	Type	Explanation
rrr_group_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
rrr_group_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
rrr_type_rrr_group_type_code_fk8	**From columns**: rrr_group_type_code **From Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	rights	Rights::::Diritti		c
2	restrictions	Restrictions::::Restrizioni		c
3	responsibilities	Responsibilities::::Responsabilita		x

Table: rrr_type

Reference Table / Code list of rrr typesLADM Reference Object LA_RightType, LA_RestrictionType &LA_ResponsibilityTypeLADM DefinitionThe type of right/restriction/responsibility

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - Code for responsibility and rights type code
rrr_group_type_code	varchar(20)	False		**LADM Definition** - Group restriction, responsibility and rights type code
display_value	varchar(250)	False		**LADM Definition** - displayed value of right (responsibility or restriction) type
is_primary	bool	False	false	
share_check	bool	False		**LADM Definition** - the check that totals all shares of a right (restriction or responsibility) to ensure they equal 1 (100%)
party_required	bool	False		**LADM Definition** - A flag to indicate that a party must related to this type of right (restriction or responsibility)
description	varchar(555)	True		**LADM Definition** - Description for restriction, responsibility and rights type
status	char(1)	False	't'	**SOLA Extension** - Status of restriction, responsibility and rights type

Constraints

Name	Type	Explanation
rrr_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
rrr_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description
rrr_type_rrr_group_type_code_fk8	**From columns**: rrr_group_type_code **To Entity**: rrr_group_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
rrr_type_code_fk9	**From columns**: type_code **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

br_validation_target_rrr_type_code_fk56	**From columns**: target_rrr_type_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	
request_type_rrr_type_code_fk78	**From columns**: rrr_type_code **From Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 0..1	
deed_instrument_type_code_fk130	**From columns**: instrument_type_code **From Entity**: deed **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	rrr_group_type_code	display_value	is_primary
1	agriActivity	rights	Agriculture Activity::::Attivita Agricola	false
2	commonOwnership	rights	Common Ownership::::Proprieta Comune	false
3	customaryType	rights	Customary Right::::Diritto Abituale	false
4	firewood	rights	Firewood Collection::::Collezione legna da ardere	false
5	fishing	rights	Fishing Right::::Diritto di Pesca	false
6	grazing	rights	Grazing Right::::Diritto di Pascolo	false
7	informalOccupation	rights	Informal Occupation::::Occupazione informale	false
8	lease	rights	Lease::::Affitto	false
9	occupation	rights	Occupation::::Occupazione	false
10	ownership	rights	Ownership::::Proprieta	true
11	ownershipAssumed	rights	Ownership Assumed::::Proprieta Assunta	true
12	superficies	rights	Superficies::::Superficie	false
13	tenancy	rights	Tenancy::::Locazione	true
14	usufruct	rights	Usufruct::::Usufrutto	false
15	waterrights	rights	Water Right::::Servitu di Acqua	false
16	adminPublicServitude	restrictions	Administrative Public Servitude::::Servitu Amministrazione Pubblica	false
17	monument	restrictions	Monument::::Monumento	false
18	mortgage	restrictions	Mortgage::::Ipoteca	false
19	noBuilding	restrictions	Building Restriction::::Restrizione di Costruzione	false
20	servitude	restrictions	Servitude::::Servitu	false
21	monumentMaintenance	responsibilities	Monument Maintenance::::Mantenimento Monumenti	false

22	waterwayMaintenance	responsibilities	Waterway Maintenance::::Mantenimento Acqurdotti	false
23	lifeEstate	rights	Life Estate::::Patrimonio vita	true
24	apartment	rights	Apartment Ownership::::Proprieta Appartamento	true
25	stateOwnership	rights	State Ownership::::Proprieta di Stato	true
26	caveat	restrictions	Caveat::::Ammonizione	false
27	historicPreservation	restrictions	Historic Preservation::::Conservazione Storica	false
28	limitedAccess	restrictions	Limited Access (to Road)::::Accesso limitato (su strada)	false
29	rrrStandard	rights	Incidence of Interest	true

Nr	share_check	party_required	description	status
1	true	true		x
2	true	true		x
3	true	true		x
4	true	true		x
5	true	true		x
6	true	true		x
7	false	false		x
8	true	true		c
9	true	true		c
10	true	true		c
11	true	true		x
12	true	true		x
13	true	true		x
14	true	true		c
15	true	true		c
16	true	true		x
17	true	true		x
18	true	true		c
19	false	false		c
20	false	false		c
21	false	false		x
22	false	false		x
23	true	true	Extension to LADM	x
24	true	true	Extension to LADM	c
25	false	false	Extension to LADM	c

26	true	true	Extension to LADM	c
27	false	false	Extension to LADM	c
28	false	false	Extension to LADM	c
29	true	true		c

Table: mortgage_type

Reference Table / Code list for types of mortgage

LADM Reference Object
LA_

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** Type of mortgage code
display_value	varchar(250)	False		**LADM Definition** display value of mortgage type
description	varchar(555)	True		**LADM Definition** Description of type of mortgage
status	char(1)	False		**SOLA Extension** Status of mortgage type

Constraints

Name	Type	Explanation
mortgage_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
mortgage_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
rrr_mortgage_type_code_fk80	**From columns**: mortgage_type_code **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	levelPayment	Level Payment::::Livello Pagamento		c
2	linear	Linear::::Lineare		c
3	microCredit	Micro Credit::::Micro Credito		c

Table: mortgage_isbased_in_rrr

This is left in the data model but is not implemented, because the right that is basis for the mortgage can be implied by the primary right for ba_unit.LADM Reference Object LA_Mortgage - LA_Right RelationshipLADM DefinitionIdentifies the right that is the basis for a mortgage.

Columns

Name	Type	Optional	Default	Description
mortgage_id	varchar(40)	False		
rrr_id	varchar(40)	False		**LADM Definition** - Identifier for the right, responsibility and restrictions

Constraints

Name	Type	Explanation
mortgage_isbased_in_rrr_pkey	PRIMARY KEY	Combination of (mortgage_id,rrr_id) is the primary key

Relationships (from)

Name	Information	Description
mortgage_isbased_in_rrr_rrr_id_fk57	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
mortgage_isbased_in_rrr_mortgage_id_fk58	**From columns**: mortgage_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 0..1	

Table: source_describes_rrr

Implements the many-to-many relationship identifying administrative source instances with rrr instances

LADM Reference Object
Relationship LA_AdministrativeSource - LA_RRR

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
rrr_id	varchar(40)	False		**LADM Definition** - Identifier for the right, responsibility and restrictions
source_id	varchar(40)	False		

Constraints

Name	Type	Explanation
source_describes_rrr_pkey	PRIMARY KEY	Combination of (rrr_id,source_id) is the primary key

Relationships (from)

Name	Information	Description
source_describes_rrr_rrr_id_fk12	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement
source_describes_rrr_source_id_fk75	**From columns**: source_id **To Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	

Table: source_describes_ba_unit

Implements the many-to-many relationship identifying administrative source instances with ba_unit instances

LADM Reference Object
Relationship LA_AdministrativeSource - LA_BAUnit

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
ba_unit_id	varchar(40)	False		**LADM Definition** Basic unit identifier
source_id	varchar(40)	False		In Sola the source is referenced instead of the Administrative source. **LADM Definition** Administrative source identifier

Constraints

Name	Type	Explanation
source_describes_ba_unit_pkey	PRIMARY KEY	Combination of (ba_unit_id,source_id) is the primary key

Relationships (from)

Name	Information	Description
source_describes_ba_unit_ba_unit_id_fk13	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
source_describes_ba_unit_source_id_fk65	**From columns**: source_id **To Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	

Table: required_relationship_baunit

Refer to LADM Definition

LADM Reference Object
LA_RequiredRelationshipBAUnit

LADM Definition
A required relationship between basic administrative units.

Columns

Name	Type	Optional	Default	Description
from_ba_unit_id	varchar(40)	False		**LADM Definition** -The identifier of the originating basic administrative unit
to_ba_unit_id	varchar(40)	False		**LADM Definition** -The identifier of the target basic administrative unit
relation_code	varchar(20)	False		The relationship between the basic administrative units. It exists in LADM as a open text. It is decided to make it a codelist to be used also in business rules. **LADM Definition** LADM Reference Object Relationship

Constraints

Name	Type	Explanation
required_relationship_baunit_pkey	PRIMARY KEY	Combination of (from_ba_unit_id,to_ba_unit_id) is the primary key

Relationships (from)

Name	Information	Description
required_relationship_baunit_from_ba_unit_id_fk14	**From columns**: from_ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
required_relationship_baunit_to_ba_unit_id_fk15	**From columns**: to_ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
required_relationship_baunit_relation_code_fk96	**From columns**: relation_code **To Entity**: ba_unit_rel_type **From cardinality**: 0..* **To Cardinality**: 1	

Table: ba_unit_contains_spatial_unit

Defines the spatial unit(s) associated with ba_unit

LADM Reference Object
Implements the many to many relationship LA_BAUnit - LA_SpatialUnit

LADM Definition
Not defined .

Columns

Name	Type	Optional	Default	Description
ba_unit_id	varchar(40)	False		**LADM Definition** Basic administrative unit identifier
spatial_unit_id	varchar(40)	False		**LADM Definition** Spatial unit identifier

Constraints

Name	Type	Explanation
ba_unit_contains_spatial_unit_pkey	PRIMARY KEY	Combination of (ba_unit_id,spatial_unit_id) is the primary key

Relationships (from)

Name	Information	Description
ba_unit_contains_spatial_unit_ba_unit_id_fk24	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_contains_spatial_unit_spatial_unit_id_fk25	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_contains_spatial_unit_spatial_unit_id_fk67	**From columns**: spatial_unit_id **To Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	

Table: ba_unit_as_party

LADM DefinitionLA_BAUnit is associated to class LA_Party (a party may be an basic administrative unit, indicated by the attribute ‘partyType’).LADM Reference ObjectAssociation baunitAsParty

Columns

Name	Type	Optional	Default	Description
ba_unit_id	varchar(40)	False		The id of ba_unit
party_id	varchar(40)	False		The id of the party

Constraints

Name	Type	Explanation
ba_unit_as_party_pkey	PRIMARY KEY	Combination of (ba_unit_id,party_id) is the primary key

Relationships (from)

Name	Information	Description
ba_unit_as_party_party_id_fk48	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_as_party_ba_unit_id_fk49	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	

Table: ba_unit_rel_type

The types of relation two ba_units can have between each other.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
description	varchar(555)	True		Description
status	char(1)	False		The status of this code itself.

Constraints

Name	Type	Explanation
ba_unit_rel_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
ba_unit_rel_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
required_relationship_baunit_relation_code_fkey86	**From columns**: relation_code **From Entity**: required_relationship_baunit **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	description	status
1	priorTitle	Prior Title	Prior Title	c
2	rootTitle	Root of Title	Root of Title	c

Table: notation

All notations related with a baunit are maintained here. Every notation gets a reference number and it is always associated with a transaction.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		Meaningless id.
ba_unit_id	varchar(40)	True		If the notation is only related to baunit the baunit id is given.
rrr_id	varchar(40)	True		
transaction_id	varchar(40)	False		The transaction id which brought the notation.
reference_nr	varchar(15)	False		A reference number for the notation
notation_text	varchar(1000)	True		The notation text. This text is defined by a template which is to be found in request_type. The link is established by the fact that a notation comes from a transaction which optionally can be initiated by a service which is of a certain request_type.
status_code	varchar(20)	False	'pending'	The status of the notation.

Constraints

Name	Type	Explanation
notation_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
notation_status_code_fk68	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
notation_ba_unit_id_fk69	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
notation_transaction_id_fk74	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
notation_rrr_id_fk84	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 0..1	

Table: ba_unit_area

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
ba_unit_id	varchar(40)	False		
type_code	varchar(20)	False		
size	numeric(19, 2)	False		

Constraints

Name	Type	Explanation
ba_unit_area_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
ba_unit_area_type_code_fk70	**From columns**: type_code **To Entity**: area_type **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_area_ba_unit_id_fk71	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	

Table: rrr_share

If parties are involved in an rrr then they partecipate in shares. There is at least one share for each rrr.LADM Reference Object LA_RRR.share

Columns

Name	Type	Optional	Default	Description
rrr_id	varchar(40)	False		Rrr where the share belongs to.
id	varchar(40)	False		Id of the share within a RRR.
nominator	smallint	False		Nominator / Denominator define the share.
denominator	smallint	False		Nominator / Denominator define the share.

Constraints

Name	Type	Explanation
rrr_share_pkey	PRIMARY KEY	Combination of (rrr_id,id) is the primary key

Relationships (from)

Name	Information	Description
rrr_share_rrr_id_fk72	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
party_for_rrr_rrr_id_fk73	**From columns**: rrr_id,share_id **From Entity**: party_for_rrr **From cardinality**: 0..* **To Cardinality**: 0..1	

Table: party_for_rrr

There may be parties involved in an RRR. Parties can be involved also in Shares.

Columns

Name	Type	Optional	Default	Description
rrr_id	varchar(40)	False		Rrr where party belongs to.
party_id	varchar(40)	False		Id of the party.
share_id	varchar(40)	True		The share where the party belongs to.

Constraints

Name	Type	Explanation
party_for_rrr_pkey	PRIMARY KEY	Combination of (rrr_id,party_id) is the primary key

Relationships (from)

Name	Information	Description
party_for_rrr_rrr_id_fk73	**From columns**: rrr_id,share_id **To Entity**: rrr_share **From cardinality**: 0..* **To Cardinality**: 0..1	
party_for_rrr_party_id_fk76	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_rrr_id_fk83	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	

Table: ba_unit_target

This table holds information about which ba units are being targets of a transaction. It is used when a ba unit is marked for cancellation.

Columns

Name	Type	Optional	Default	Description
ba_unit_id	varchar(40)	False		Id of the ba unit being target.
transaction_id	varchar(40)	False		Id of the transaction that targes the ba unit.

Constraints

Name	Type	Explanation
ba_unit_target_pkey	PRIMARY KEY	Combination of (ba_unit_id,transaction_id) is the primary key

Relationships (from)

Name	Information	Description
ba_unit_target_ba_unit_id_fk106	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_transaction_id_fk107	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Sequence: rrr_nr_seq

Allocates numbers 1 to 9999 for rrr number

Sequence: notation_reference_nr_seq

Allocates numbers 1 to 9999 for reference number for notation.

Sequence: ba_unit_first_name_part_seq

Allocates numbers 1 to 9999 for ba unit first name part.

Sequence: ba_unit_last_name_part_seq

Allocates numbers 1 to 9999 for ba unit last name part.

Function: get_ba_unit_pending_action

It returns the action that must be taken in the pending ba_unit.

Parameters

Name	Type	Direction	Description
baunit_id	varchar		Id of ba unit.

Function: ba_unit_name_is_valid

This function, checks if the name parts of the ba unit are valid.

Parameters

Name	Type	Direction	Description
name_firstpart	varchar		
name_lastpart	varchar		

cadastre

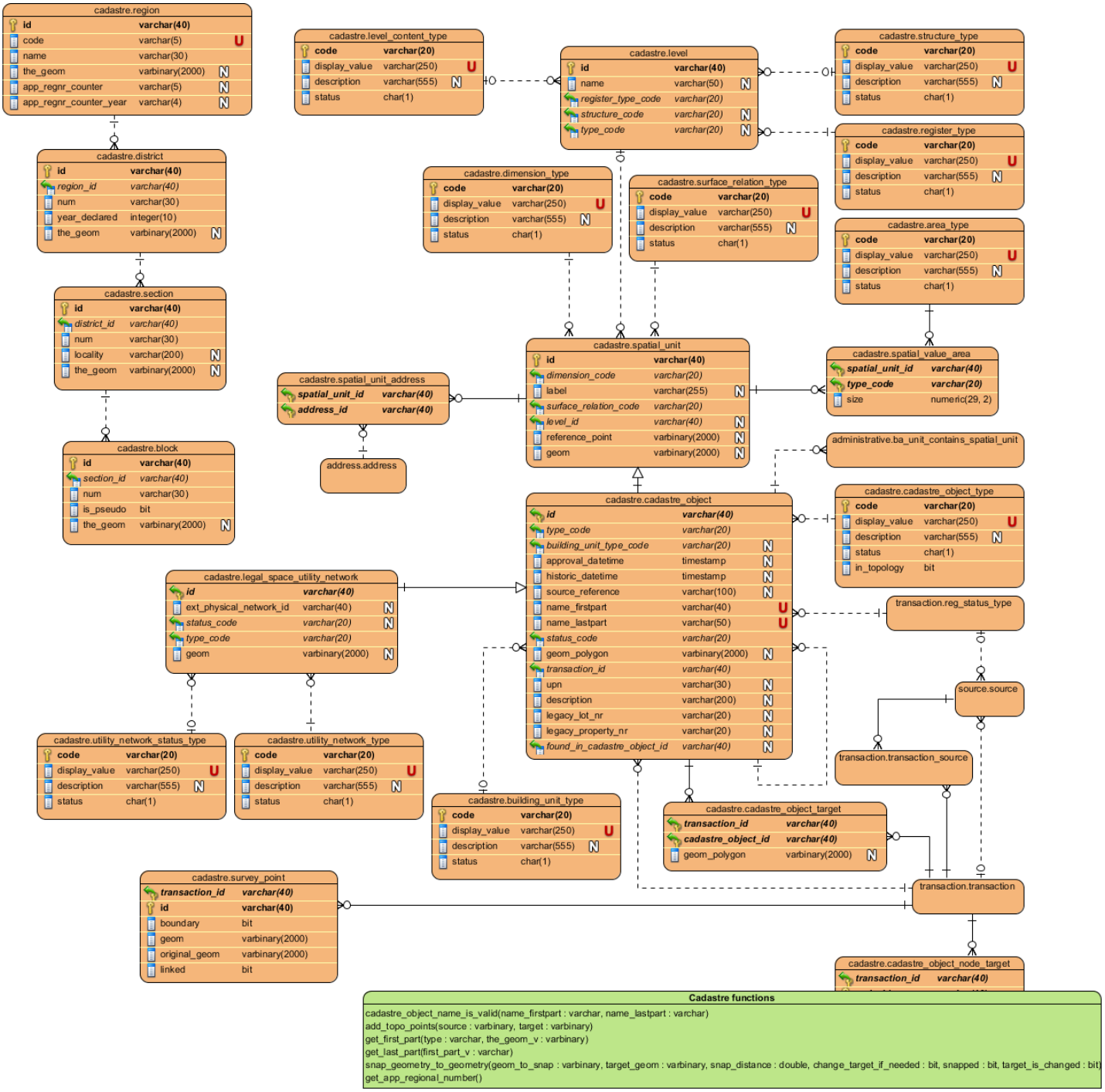

Table: spatial_unit

Single area (or multiple areas) of land or water, or a single volume (or multiple volumes) of spaceLADM Reference Object LA_SpatialUnitLADM DefinitionNot Defined

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Spatial unit identifier
dimension_code	varchar(20)	False	'2D'	**LADM Definition** - Code for dimension

label	varchar(255)	True		**LADM Definition** -Label for the spatial unit
surface_relation_code	varchar(20)	False	'onSurface'	**LADM Definition** - Code given to the surface relation to indicate whether a spatial unit is above or below the surface
level_id	varchar(40)	True		**LADM Definition** - Level identifier
reference_point	GEOMETRY	True		**LADM Definition** -The coordinates of a point inside the spatial unit
geom	GEOMETRY	True		**SOLA Extension** -The geometry type of the spatial unit

Constraints

Name	Type	Explanation
spatial_unit_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
spatial_unit_surface_relation_code_fk19	**From columns**: surface_relation_code **To Entity**: surface_relation_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_unit_level_id_fk20	**From columns**: level_id **To Entity**: level **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
spatial_unit_dimension_code_fk33	**From columns**: dimension_code **To Entity**: dimension_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
spatial_value_area_spatial_unit_id_fk16	**From columns**: spatial_unit_id **From Entity**: spatial_value_area **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_unit_address_spatial_unit_id_fk18	**From columns**: spatial_unit_id **From Entity**: spatial_unit_address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
ba_unit_contains_spatial_unit_spatial_unit_id_fk25	**From columns**: spatial_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

cadastre_object_id_fk61	**From columns**: id **From Entity**: cadastre_object **From cardinality**: 1 **To Cardinality**: 1	
application_spatial_unit_spatial_unit_id_fk127	**From columns**: spatial_unit_id **From Entity**: application_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	

Table: spatial_value_area

Refer to LADM Definition

LADM Reference Object
LA_AreaValue

LADM Definition
The area (size) of 2 dimension spatial unit

Columns

Name	Type	Optional	Default	Description
spatial_unit_id	varchar(40)	False		**LADM Definition** - Spatial unit identifier
type_code	varchar(20)	False		**LADM Definition** - Type of the spatial value area
size	numeric(29, 2)	False		**LADM Definition** - The area of the spatial unit

Constraints

Name	Type	Explanation
spatial_value_area_pkey	PRIMARY KEY	Combination of (spatial_unit_id,type_code) is the primary key

Relationships (from)

Name	Information	Description
spatial_value_area_spatial_unit_id_fk16	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_value_area_type_code_fk17	**From columns**: type_code **To Entity**: area_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: area_type

Reference Table / Code list of the different versions or means of calculated area

LADM Reference Object
LA_AreaType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - code for area type
display_value	varchar(250)	False		**LADM Definition** - displayed value of area type
description	varchar(555)	True		**LADM Definition** - description of area type
status	char(1)	False	'c'	**SOLA Extension** - status of area type values

Constraints

Name	Type	Explanation
area_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
area_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
spatial_value_area_type_code_fk17	**From columns**: type_code **From Entity**: spatial_value_area **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_area_type_code_fk70	**From columns**: type_code **From Entity**: ba_unit_area **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	description	status
1	calculatedArea	Calculated Area::::Area calcolata		c
2	nonOfficialArea	Non-official Area::::Area Non ufficiale		c
3	officialArea	Official Area::::Area Ufficiale		c

4	surveyedArea	Surveyed Area::::Area Sorvegliata		c

Table: spatial_unit_address

Implements the many-to-many relationship between address and spatial_unit

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
spatial_unit_id	varchar(40)	False		**LADM Definition** - Spatial unit identifier
address_id	varchar(40)	False		**LADM Definition** - Address identifier

Constraints

Name	Type	Explanation
spatial_unit_address_pkey	PRIMARY KEY	Combination of (spatial_unit_id,address_id) is the primary key

Relationships (from)

Name	Information	Description
spatial_unit_address_spatial_unit_id_fk18	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
spatial_unit_address_address_id_fk32	**From columns**: address_id **To Entity**: address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: surface_relation_type

Refer to LADM Definition

LADM Reference Object
LA_SurfaceRelationType

LADM Definition
The type of relation that exists between spatial objects and space (surface)

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code identifying a surface relation type
display_value	varchar(250)	False		**LADM Definition** - the displayed value for a surface relation type
description	varchar(555)	True		**LADM Definition** - the description of a surface relation type
status	char(1)	False	't'	**SOLA Extension** - the status of an instance of surface relation type

Constraints

Name	Type	Explanation
surface_relation_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
surface_relation_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
spatial_unit_surface_relation_code_fk19	**From columns**: surface_relation_code **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	above	Above::::Sopra		x
2	below	Below::::Sotto		x
3	mixed	Mixed::::Misto		x
4	onSurface	On Surface::::Sulla Superficie		c

Table: level

Refer to LADM Definition

LADM Reference Object
LA_Level

LADM Definition
A set of spatial units, with a geometric, and/or topologic, and/or thematic coherence EXAMPLE 1 One level for an urban cadastre and another level for a rural cadastre.
EXAMPLE 2 One level with rights and another level with restrictions.
EXAMPLE 3 One level with formal rights, a second level with informal rights and a third level with customary rights.
EXAMPLE 4 One level with point based spatial units, a second level with line based spatial units, and a third level with polygon based spatial units..

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Level identifier
name	varchar(50)	True		**LADM Definition** - The name of the level
register_type_code	varchar(20)	False		**LADM Definition** - The register type of the content of the level
structure_code	varchar(20)	True		**LADM Definition** - Code for the structure of the level geometry
type_code	varchar(20)	True		**LADM Definition** - The type of the content the level

Constraints

Name	Type	Explanation
level_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
level_structure_code_fk21	**From columns**: structure_code **To Entity**: structure_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
level_register_type_code_fk22	**From columns**: register_type_code **To Entity**: register_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
level_type_code_fk23	**From columns**: type_code **To Entity**: level_content_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
spatial_unit_level_id_fk20	**From columns**: level_id **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Table: register_type

Reference Table / Code list for register types

LADM Reference Object
LA_

LADM Definition
The register type of the content of the [map] level

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code identifying a register type
display_value	varchar(250)	False		**LADM Definition** - the displayed value of a register type
description	varchar(555)	True		**LADM Definition** - the description of a register type
status	char(1)	False		**SOLA Extension** - the status of an instance of register type

Constraints

Name	Type	Explanation
register_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
register_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
level_register_type_code_fk22	**From columns**: register_type_code **From Entity**: level **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	all	All::::Tutti		c
2	forest	Forest::::Forestale		c
3	mining	Mining::::Minerario		c
4	publicSpace	Public Space::::Spazio Pubblico		c
5	rural	Rural::::Rurale		c
6	urban	Urban::::Urbano		c

Table: structure_type

Reference Table / Code list of different forms of spatial unit definitions (within a level)

LADM Reference Object
LA_StructureType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code identifying a structure type
display_value	varchar(250)	False		**LADM Definition** - the displayed value for a structure type
description	varchar(555)	True		**LADM Definition** - the description of a structure type
status	char(1)	False	't'	**SOLA Extension** - the status of an instance of structure type

Constraints

Name	Type	Explanation
structure_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
structure_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
level_structure_code_fk21	**From columns**: structure_code **From Entity**: level **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	point	Point::::Punto		c
2	polygon	Polygon::::Poligono		c
3	sketch	Sketch::::Schizzo		c
4	text	Text::::Testo		c
5	topological	Topological::::Topologico		c
6	unStructuredLine	UnstructuredLine::::LineanonDefinita		c

Table: level_content_type

Reference Table / Code list for the content type of a level

LADM Reference Object
LA_

LADM Definition
The type of the content of the level;

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code identifying a level content type
display_value	varchar(250)	False		**LADM Definition** - the displayed value of a level content type
description	varchar(555)	True		**LADM Definition** - a description for a level content type
status	char(1)	False	't'	**SOLA Extension** - the status of an instance of level content type

Constraints

Name	Type	Explanation
level_content_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
level_content_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
level_type_code_fk23	**From columns**: type_code **From Entity**: level **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	building	Building::::Costruzione		x
2	customary	Customary::::Consueto		x
3	informal	Informal::::Informale		x
4	mixed	Mixed::::Misto		x
5	network	Network::::Rete		x
6	primaryRight	Primary Right::::Diritto Primario		c
7	responsibility	Responsibility::::Responsabilita		x
8	restriction	Restriction::::Restrizione		c

9	geographicLocator	Geographic Locators::::Locatori Geografici	Extension to LADM	c

Table: legal_space_utility_network

Refer to LADM Definition

LADM Reference Object
LA_LegalSpaceUtilityNetwork

LADM Definition
A utility network concerns legal space, which does not necessarily coincide with the physical space of a utility network..

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - Legal space utility network identifier
ext_physical_network_id	varchar(40)	True		**LADM Definition** - External Identifier for a physical utility network
status_code	varchar(20)	True		**LADM Definition** - Code for the legal space utility network
type_code	varchar(20)	False		**LADM Definition** - Type code for the legal space utility network
geom	GEOMETRY	True		

Constraints

Name	Type	Explanation
legal_space_utility_network_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
legal_space_utility_network_status_code_fk26	**From columns**: status_code **To Entity**: utility_network_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
legal_space_utility_network_type_code_fk27	**From columns**: type_code **To Entity**: utility_network_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
legal_space_utility_network_id_fk64	**From columns**: id **To Entity**: cadastre_object **From cardinality**: 1 **To Cardinality**: 1	

Table: building_unit_type

Reference Table / Code list for types of building units

LADM Reference Object
LA_BuildingUnitType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code identifying different building unit types
display_value	varchar(250)	False		**LADM Definition** - the displayed value of building unit type
description	varchar(555)	True		**LADM Definition** - the description of building unit type
status	char(1)	False	't'	**SOLA Extension** - the status of the code value for building unit type

Constraints

Name	Type	Explanation
building_unit_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
building_unit_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
cadastre_object_building_unit_type_code_fkey	**From columns**: building_unit_type_code **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	individual	Individual::::Individuale		c
2	shared	Shared::::Condiviso		c

Table: utility_network_status_type

Reference Table / Code list for the status of utility networks

LADM Reference Object
LA_UtilityNetworkStatusType

LADM Definition
Status of the type of utility network

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - a code identifying a utility network status type
display_value	varchar(250)	False		**LADM Definition** - the displayed value of a utility network status type
description	varchar(555)	True		**LADM Definition** - a description of a utility network status type
status	char(1)	False	't'	**SOLA Extension** - the status of an instance of utility network status type

Constraints

Name	Type	Explanation
utility_network_status_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
utility_network_status_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
legal_space_utility_network_status_code_fk26	**From columns**: status_code **From Entity**: legal_space_utility_network **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	inUse	In Use::::In uso		c
2	outOfUse	Out of Use::::Fuori uso		c
3	planned	Planned::::Pianificato		c

Table: utility_network_type

Reference Table / Code list of utility network types

LADM Reference Object
LA_

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - a code identifying a utility network type
display_value	varchar(250)	False		**LADM Definition** - the displayed value for a utility network type
description	varchar(555)	True		**LADM Definition** - the description of a utility network type
status	char(1)	False		**SOLA Extension** - the status of an instance of utility network type

Constraints

Name	Type	Explanation
utility_network_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
utility_network_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
legal_space_utility_network_type_code_fk	**From columns**: type_code **From Entity**: legal_space_utility_network **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	chemical	Chemicals::::Cimica		c
2	electricity	Electricity::::Elettricita		c
3	gas	Gas::::Gas		c
4	heating	Heating::::Riscaldamento		c
5	oil	Oil::::Carburante		c
6	telecommunication	Telecommunication::::Telecomunicazione		c
7	water	Water::::Acqua		c

Table: dimension_type

Reference Table / Code list to identify the number of dimensions used to define a spatial unit

LADM Reference Object
LA_DimensionType

LADM Definition
Not Defined

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**LADM Definition** - the code value to identify different dimension types
display_value	varchar(250)	False		**LADM Definition** - the displayed value for a dimension type
description	varchar(555)	True		**LADM Definition** - the description of a dimension type
status	char(1)	False	't'	

Constraints

Name	Type	Explanation
dimension_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
dimension_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
spatial_unit_dimension_code_fk33	**From columns**: dimension_code **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Data

Nr	code	display_value	description	status
1	0D	0D::::0D		c
2	1D	1D::::1D		c
3	2D	2D::::sD		c
4	3D	3D::::3D		c
5	liminal	Liminal		x

Table: cadastre_object_type

The type of spatial object. This defines the specialisation of the spatial unit. It can be a parcel, building_unit or backgroup data like a road etc.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
description	varchar(555)	True		Description
status	char(1)	False		The status of this code itself.
in_topology	bool	False	false	

Constraints

Name	Type	Explanation
cadastre_object_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
cadastre_object_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
cadastre_object_type_code_fk63	**From columns**: type_code **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	description	status	in_topology
1	parcel	Parcel		c	true
2	building	Building		c	false
3	strata	Strata		c	false
4	allodial	Allodial		c	true

Table: cadastre_object

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
type_code	varchar(20)	False	'parcel'	SOLA Extention - It defines the type of the spatial unit.
building_unit_type_code	varchar(20)	True		
approval_datetime	timestamp	True		**SOLA Extension** - Approval datetime of the spatial unit change.
historic_datetime	timestamp	True		**SOLA Extension** - Datetime when the spatial unit is superseded and has status of historic.
source_reference	varchar(100)	True		This is a temporary solution. It is an identifier
name_firstpart	varchar(40)	False		**SOLA Extension** - First part of the parcel identifier. First part in combination with last part are supposed to identify uniquely the parcel.
name_lastpart	varchar(50)	False		**SOLA Extension** - Last part of the parcel identifier. First part in combination with last part are supposed to identify uniquely the parcel.
status_code	varchar(20)	False	'pending'	**SOLA Extension** - It is the status of the spatial_unit which defines if it is pending or approved.
geom_polygon	GEOMETRY	True		**SOLA Extension** - The polygon geometry
transaction_id	varchar(40)	False		
upn	varchar(30)	True		
description	varchar(200)	True		
legacy_lot_nr	varchar(20)	True		Ghana extension: The SMD number of the lots before the new numbering was done.
legacy_property_nr	varchar(20)	True		Ghana extension: The number on the PVLMD townsheet for a parcel.
found_in_cadastre_object_id	varchar(40)	True		

Constraints

Name	Type	Explanation
cadastre_object_name	UNIQUE	Combination of (name_firstpart, name_lastpart) is unique
cadastre_object_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
cadastre_object_id_fk61	**From columns**: id **To Entity**: spatial_unit **From cardinality**: 1 **To Cardinality**: 1	

cadastre_object_status_code_fk62	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_type_code_fk63	**From columns**: type_code **To Entity**: cadastre_object_type **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_building_unit_type_code_fk87	**From columns**: building_unit_type_code **To Entity**: building_unit_type **From cardinality**: 0..* **To Cardinality**: 0..1	
cadastre_object_transaction_id_fk88	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_found_in_cadastre_object_id_fk139	**From columns**: found_in_cadastre_object_id **To Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
legal_space_utility_network_id_fk64	**From columns**: id **From Entity**: legal_space_utility_network **From cardinality**: 1 **To Cardinality**: 1	
ba_unit_contains_spatial_unit_spatial_unit_id_fk67	**From columns**: spatial_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_target_cadastre_object_id_fk89	**From columns**: cadastre_object_id **From Entity**: cadastre_object_target **From cardinality**: 0..* **To Cardinality**: 1	

Triggers

Name	Event
remove	before delete
new	before insert
geommodify	after insert or update of geom_polygon

Table: cadastre_object_target

This is a cadastre object that is a target of a cadastre related transaction. If the transaction is not yet approved or cancelled, the cadastre object gets a pending status.

Columns

Name	Type	Optional	Default	Description
transaction_id	varchar(40)	False		The id of the transaction that is doing changes to the cadastre object.
cadastre_object_id	varchar(40)	False		The id of the cadastre object being target of transaction.
geom_polygon	GEOMETRY	True		The new geometry of the target cadastre object. It is used only when the transaction involves changes of the existing cadastre object geometry. Example of a transaction that changes an existing cadastre object is cadastre redefinition.

Constraints

Name	Type	Explanation
cadastre_object_target_pkey	PRIMARY KEY	Combination of (transaction_id,cadastre_object_id) is the primary key

Relationships (from)

Name	Information	Description
cadastre_object_target_cadastre_object_id_fk89	**From columns**: cadastre_object_id **To Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_target_transaction_id_fk92	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Table: survey_point

Columns

Name	Type	Optional	Default	Description
transaction_id	varchar(40)	False		
id	varchar(40)	False		
boundary	bool	False	true	
geom	GEOMETRY	False		
original_geom	GEOMETRY	False		
linked	bool	False	false	

Constraints

Name	Type	Explanation
survey_point_pkey	PRIMARY KEY	Combination of (transaction_id,id) is the primary key

Relationships (from)

Name	Information	Description
survey_point_transaction_id_fk91	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Table: cadastre_object_node_target

The nodes that have been changed or added from the transaction.

Columns

Name	Type	Optional	Default	Description
transaction_id	varchar(40)	False		The id of the transaction that is changing or inserting a new node.
node_id	varchar(40)	False		The node id.
geom	GEOMETRY	False		The geometry of the node.

Constraints

Name	Type	Explanation
cadastre_object_node_target_pkey	PRIMARY KEY	Combination of (transaction_id,node_id) is the primary key

Relationships (from)

Name	Information	Description
cadastre_object_node_target_transaction_id_fk105	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Table: region

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
code	varchar(5)	False		
name	varchar(30)	False		
the_geom	GEOMETRY	True		
app_regnr_counter	varchar(5)	True		
app_regnr_counter_year	varchar(4)	True		

Constraints

Name	Type	Explanation
region_code_unique	UNIQUE	Combination of (code) is unique
region_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (to)

Name	Information	Description
district_region_id_fk135	**From columns**: region_id **From Entity**: district **From cardinality**: 0..* **To Cardinality**: 1	

Table: district

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
region_id	varchar(40)	False		
num	varchar(30)	False		
year_declared	integer	False		
the_geom	GEOMETRY	True		

Constraints

Name	Type	Explanation
district_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
district_region_id_fk135	**From columns**: region_id **To Entity**: region **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
section_district_id_fk136	**From columns**: district_id **From Entity**: section **From cardinality**: 0..* **To Cardinality**: 1	

Table: section

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
district_id	varchar(40)	False		
num	varchar(30)	False		
locality	varchar(200)	True		
the_geom	GEOMETRY	True		

Constraints

Name	Type	Explanation
section_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
section_district_id_fk136	**From columns**: district_id **To Entity**: district **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
block_section_id_fk137	**From columns**: section_id **From Entity**: block **From cardinality**: 0..* **To Cardinality**: 1	

Table: block

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
section_id	varchar(40)	False		
num	varchar(30)	False		
is_pseudo	bool	False	false	
the_geom	GEOMETRY	True		

Constraints

Name	Type	Explanation
block_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
block_section_id_fk137	**From columns**: section_id **To Entity**: section **From cardinality**: 0..* **To Cardinality**: 1	

View: survey_control

This is a view which is used to retrieve the survey points from the spatial units. It is used from the gis component.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	True		identifier
label	varchar(255)	True		Label of island
geom	GEOMETRY	True		geometry type of island

View: road

A map feature (used in the Samoa implementation) that identifies the centrelines of roads in SamoaLADM Reference ObjectFLOSS SOLA ExtensionLADM DefinitionNot Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	True		Road identifier
label	varchar(255)	True		Name of each of road
geom	GEOMETRY	True		Geometry type

View: place_name

View for retrieving place names to be used in the gis component.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	True		Identifier of village
label	varchar(255)	True		Labels and description of village
geom	GEOMETRY	True		Description of the geometry type

Function: cadastre_object_name_is_valid

This function, checks if the name parts of the cadastre_object are valid.

Parameters

Name	Type	Direction	Description
name_firstpart	varchar		
name_lastpart	varchar		

Function: add_topo_points

This function searches for any point in source that falls into target. If a point is found then the point it is added in the target. It returns the modified target.

Parameters

Name	Type	Direction	Description
source	geometry		
target	geometry		

Function: get_first_part

Parameters

Name	Type	Direction	Description
type	varchar		
the_geom_v	geometry		

Function: get_last_part

Parameters

Name	Type	Direction	Description
first_part_v	varchar		

Function: snap_geometry_to_geometry

It snaps one geometry to the other. If points needs to be added they will be added.

Parameters

Name	Type	Direction	Description
geom_to_snap	geometry	inout	
target_geom	geometry	inout	
snap_distance	double precision		
change_target_if_needed	bool		
snapped	bool	out	
target_is_changed	bool	out	

Function: get_app_regional_number

It generates the next regional number for the applications of the surveyors for regional numbers.

application

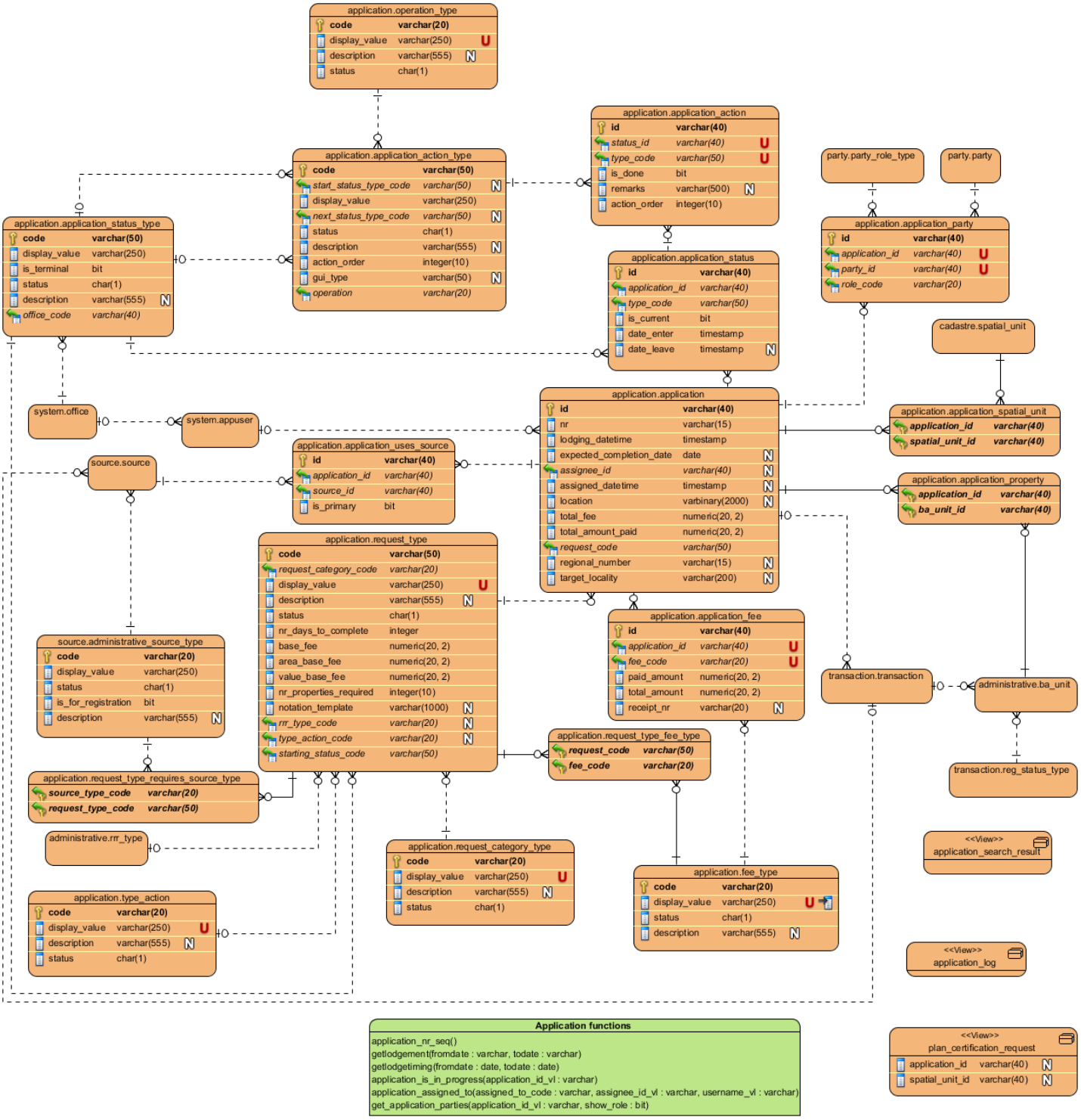

Table: application

An application is a bundle of services that a client or customer wants from the registration office.

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** - application identifier
nr	varchar(15)	False		**SOLA Extension** - This is the application number that is exposed to the user. It is generated as the date + the ordinal number within that day.
lodging_datetime	timestamp	False	now()	**SOLA Extension** - The lodging date and time of the application. This date is important because it marks the time when the application has been officially accepted from the RO.
expected_completion_date	date	True	now()	**SOLA Extension** - The date when the application is supposed to be completed or cancelled by then. It is a derived value by picking up the most later expected date from the services that are boundled with the application.
assignee_id	varchar(40)	True		**SOLA Extension** - The person that is assigned to the application. If this value is missing it means that the application is not assigned.
assigned_datetime	timestamp	True		**SOLA Extension** - Date and time the application is assigned. It has a meaning only if the assignee_login_name is present.
location	GEOMETRY	True		**SOLA Extension** - The location of the application given as multi point in the map.
total_fee	numeric(20, 2)	False	0	Ghana extension: The column is also present in generic model, but the calculates changes. This is calculated as the total amount of fees found in application_fee table in column total_amount.
total_amount_paid	numeric(20, 2)	False	0	Ghana extension: The column is also present in generic model, but the calculates changes. This is calculated as the total amount of fees found in application_fee table in column paid_amount.
request_code	varchar(50)	False		
regional_number	varchar(15)	True		Ghana extension: This number is generated per application for the request type of regional number application. It is of form: SG/Region/AXXX/YR
target_locality	varchar(200)	True		Ghana extension: It describes the location of the parcel that the application targets. It is relevant when there is no parcel yet identifie. This is the case for the application of type that generates regional number.

Constraints

Name	Type	Explanation
application_check_assigned	CHECK	Rule ((assignee_id is null and assigned_datetime is null) or (assignee_id is not null and assigned_datetime is not null)) must be true
application_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_assignee_id_fk42	**From columns**: assignee_id **To Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
application_request_code_fk112	**From columns**: request_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
application_property_application_id_fk37	**From columns**: application_id **From Entity**: application_property **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_uses_source_application_id_fk39	**From columns**: application_id **From Entity**: application_uses_source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_party_application_id_fk109	**From columns**: application_id **From Entity**: application_party **From cardinality**: 0..* **To Cardinality**: 1	
application_fee_application_id_fk113	**From columns**: application_id **From Entity**: application_fee **From cardinality**: 0..* **To Cardinality**: 1	
application_status_application_id_fk121	**From columns**: application_id **From Entity**: application_status **From cardinality**: 0..* **To Cardinality**: 1	
application_spatial_unit_application_id_fk126	**From columns**: application_id **From Entity**: application_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	
transaction_from_application_id_fk128	**From columns**: from_application_id **From Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	

Triggers

Name	Event
new	before insert

after_new	after insert

Table: request_type

Reference Table / Code list of the (service) request types received by a land officeLADM Reference Object FLOSS SOLA ExtensionLADM DefinitionNot Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(50)	False		**SOLA Extension** - Code for the request type
request_category_code	varchar(20)	False		**SOLA Extension** - The code for the request category type
display_value	varchar(250)	False		**SOLA Extension** - The display value for the request type
description	varchar(555)	True		**SOLA Extension** - The description of the request type
status	char(1)	False	't'	**SOLA Extension** - Status of the request type
nr_days_to_complete	integer	False	0	**SOLA Extension** - The number of days within the service must be completed.
base_fee	numeric(20, 2)	False	0	**SOLA Extension** - The base fee that will be asked for this kind of request.
area_base_fee	numeric(20, 2)	False	0	**SOLA Extension** - The fee that will be asked per m2 of the area of the properties that will be dealt with for this kind of request.
value_base_fee	numeric(20, 2)	False	0	**SOLA Extension** - The fee that will be asked per value unit of the properties that will be dealt with for this kind of request.
nr_properties_required	integer	False	0	**SOLA Extension** - The minimum number of properties that is required by this service.
notation_template	varchar(1000)	True		
rrr_type_code	varchar(20)	True		The type of rrr which will be affected from the service of this request type. It is optional because not every request type affects rrr. If this value is filled then also the column rrr_type_action must be filled.
type_action_code	varchar(20)	True		This holds the action that has to happen on the rrr or ba unit if the request type targets rrr or ba unit.
starting_status_code	varchar(50)	False		The starting status type for application of this kind of request.

Constraints

Name	Type	Explanation
request_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
request_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description

request_type_request_category_code_fk28	**From columns**: request_category_code **To Entity**: request_category_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
request_type_rrr_type_code_fk78	**From columns**: rrr_type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 0..1	
request_type_type_action_code_fk79	**From columns**: type_action_code **To Entity**: type_action **From cardinality**: 0..* **To Cardinality**: 0..1	
request_type_starting_status_code_fk124	**From columns**: starting_status_code **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
request_type_requires_source_type_request_type_code_fk40	**From columns**: request_type_code **From Entity**: request_type_requires_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
br_validation_target_request_type_code_fk55	**From columns**: target_request_type_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	
application_request_code_fk112	**From columns**: request_code **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	
request_type_fee_type_request_code_fk115	**From columns**: request_code **From Entity**: request_type_fee_type **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	request_category_code	display_value	description
1	smd-plancertification	registrationServices	Plan certification	
2	smd-regnr	registrationServices	Regional number	
3	cadastreChange	registrationServices	New parcel	
4	redefineCadastre	registrationServices	Edit parcel	

Nr	status	nr_days_to_complete	base_fee	area_base_fee	value_base_fee
1	c	10	100	100	100
2	c	10	100	100	100
3	c	10	100	100	100
4	c	10	100	100	100

Nr	nr_properties_required	notation_template	rrr_type_code	type_action_code	starting_status_code
1	100				smd-plancertification-received
2	100				smd-regnr-received
3	1				smd-cadchange-submit
4	1				smd-cadredef-submit

Table: request_category_type

Reference Table / Code list for categories of (service) requests received by a land office

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - The code request category type
display_value	varchar(250)	False		**SOLA Extension** - The display value for the request category type
description	varchar(555)	True		**SOLA Extension** - Description of the request category type
status	char(1)	False	't'	**SOLA Extension** - Status of the request category type

Constraints

Name	Type	Explanation
request_category_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
request_category_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
request_type_request_category_code_fk28	**From columns**: request_category_code **From Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	description	status
1	registrationServices	Registration Services::::Servizi di Registrazione		c
2	informationServices	Information Services::::Servizi Informativi		c

Table: application_action_type

The list of potential action types. Usually an action belongs to a certain status. There are actions that does not belong to a certain status, but can be taken in any moment in the application.

Columns

Name	Type	Optional	Default	Description
code	varchar(50)	False		Action type code
start_status_type_code	varchar(50)	True		The status where the action belongs to.
display_value	varchar(250)	False		Display value for the action type
next_status_type_code	varchar(50)	True		The status where the action can bring the application to.
status	char(1)	False	't'	Technical status of the action. Usually, it is 'c' which mean current. If 'x', it means not valid. Not to be mistaken with the status of the application.
description	varchar(555)	True		Description about the action. This description shows also in GUI.
action_order	integer	False		The order of the action within the status.
gui_type	varchar(50)	True		Ghana extension: This is the name of the class that is implementing the gui for this particular action. If the gui is null, the generic gui will be used. If the gui is present it means a class with this name must exist.
operation	varchar(20)	False	'normal'	It defines the operation in the application of the action when marked as done.

Constraints

Name	Type	Explanation
application_action_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description
application_action_type_next_status_type_code_fkey	**From columns**: next_status_type_code **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	
application_action_type_start_status_type_code_fkey	**From columns**: start_status_type_code **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	

application_action_type_operation_fk144	**From columns**: operation **To Entity**: operation_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
br_validation_target_action_type_code_fk120	**From columns**: target_action_type_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	
application_action_type_code_fk120	**From columns**: type_code **From Entity**: application_action **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	start_status_type_code
1	smd-regnr-received-vetchecklist	smd-regnr-received
2	smd-regnr-receivepayment	smd-regnr-vetted
3	smd-plancertification-vetchecklist	smd-plancertification-received
4	smd-plancertification-receivepay	smd-plancertification-received
5	smd-plancertification-generate	smd-plancertification-received
6	smdcadchange-make-changes	smd-cadchange-make-changes
7	smdcadchange-vetchecklist	smd-cadchange-submit
8	smdcadchange-move-to-change	smd-cadchange-submit
9	smd-regnr-paid-assign-nr	smd-regnr-paid
10	smdcadchange-set-completed	smd-cadchange-make-changes
11	smdcadchange-set-cancelled	smd-cadchange-make-changes
12	smdcadchange-receivepayment	smd-cadchange-submit
13	smd-plancertification-set-completed	smd-plancertification-received
14	smd-plancertification-set-cancelled	smd-plancertification-received
15	smdcadredef-submit-vetchecklist	smd-cadredef-submit
16	smdcadredef-submit-makechanges	smd-cadredef-submit
17	smdcadredef-submit-cancel	smd-cadredef-submit
18	smdcadredef-makechanges-makechanges	smd-cadredef-make-changes
19	smdcadredef-makechanges-complete	smd-cadredef-make-changes
20	smdcadredef-makechanges-approve	smd-cadredef-make-changes
21	smd-regnr-received-set-vetted	smd-regnr-received
22	smd-regnr-received-set-rejected	smd-regnr-received
23	smd-regnr-vetted-set-paid	smd-regnr-vetted
24	smd-regnr-vetted-set-rejected	smd-regnr-vetted

25	smd-regnr-paid-set-completed	smd-regnr-paid

Nr	display_value	next_status_type_code	status	description
1	Vet against checklist		c	Check if required infromation is collected.
2	Receive payment		c	Check if the payment is fully made.
3	Vet against checklist		c	Check if required infromation is collected.
4	Receive payment		c	Check if the payment is fully made.
5	Generate plan		c	The plan generation starts from this screen.
6	Change map (split/merge/new)		c	The cadastre change process starts by clicking in the Make changes button.
7	Vet against checklist		c	Check if required infromation is collected.
8	Go to Make Changes	smd-cadchange-make-changes	c	Move to the status where the cadastre change can start.
9	Assign Regional No. and print		c	Generate regional number by clicking the button below.
10	Complete	smd-cadchange-completed	c	The application moves to completed status.
11	Cancel	smd-cadchange-cancelled	c	The application will be cancelled.
12	Receive payment		c	Check if the payment is fully made.
13	Complete	smd-plancertification-completed	c	The application moves to completed status.
14	Cancel	smd-plancertification-cancelled	c	The application will be cancelled.
15	Vet against checklist		c	Check if required infromation is collected.
16	Go to make changes	smd-cadredef-make-changes	c	It moves the application in the status to make changes.
17	Cancel	smd-cadredef-cancelled	c	It cancells the application.
18	Make changes		c	From this screen, the operation of changing/removing/adding nodes of cadastre objects can happen.
19	Complete	smd-cadredef-completed	c	It approves the changes.
20	Cancel	smd-cadredef-cancelled	c	It cancells the changes and the application.
21	Change status to vetted	smd-regnr-vetted	c	It changes the status of the application to Vetted.
22	Reject	smd-regnr-rejected	c	It rejects the application.
23	Change status to paid	smd-regnr-paid	c	It changes the status to Paid.
24	Reject	smd-regnr-rejected	c	It rejects the application.
25	Complete	smd-regnr-completed	c	It changes the status of the application to Completed.

Nr	action_order	gui_type	operation

1	10		
2	10		
3	10		
4	20		
5	30	MapRequestActionPanel	
6	10	MapRequestActionPanel	
7	10		
8	20		
9	10	RegionalNumberGenerationActionPanel	
10	40		approve
11	50		cancel
12	15		
13	50		approve
14	60	MultipleRequestsActionPanel	cancel
15	10		
16	20		
17	30		cancel
18	10	MapRequestActionPanel	
19	20		approve
20	30		cancel
21	20		
22	30		cancel
23	20		
24	30		
25	20		approve

Table: service_action_type

Reference Table / Code list of types of action that a land officer can perform to complete a service request

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - the code identifying a service action type
display_value	varchar(250)	False		**SOLA Extension** - the displayed value of a service action type
status_to_set	varchar(20)	True		
status	char(1)	False	't'	**SOLA Extension** - the status of an instance of service action type
description	varchar(555)	True		**SOLA Extension** - the description of a service action type

Constraints

Name	Type	Explanation
service_action_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
service_action_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Data

Nr	code	display_value	status_to_set	status	description
1	lodge	Lodge::::Registrata		c	Application for service(s) is officially received by land office (action is automatically logged when application is saved for the first time)::::La pratica per i servizi formalmente ricevuta da ufficio territoriale
2	start	Start::::Comincia		c	Provisional RRR Changes Made to Database as a result of application (action is automatically logged when a change is made to a rrr object)::::Apportate Modifiche Provvisorie di tipo RRR al Database come risultato della pratica
3	cancel	Cancel::::Cancella la pratica		c	Service is cancelled by Land Office (action is automatically logged when a service is cancelled)::::Pratica cancellata da Ufficio Territoriale
4	complete	Complete::::Completa		c	Application is ready for approval (action is automatically logged when service is marked as complete::::Pratica pronta per approvazione

5	revert	Revert::::ITALIANO		c	The status of the service has been reverted to pending from being completed (action is automatically logged when a service is reverted back for further work)::::ITALIANO

Table: application_property

Details of the property associated with an application

Columns

Name	Type	Optional	Default	Description
application_id	varchar(40)	False		**SOLA Extension** - the application id
ba_unit_id	varchar(40)	False		**LADM Definition** - the id for ba_unit

Constraints

Name	Type	Explanation
application_property_pkey	PRIMARY KEY	Combination of (application_id,ba_unit_id) is the primary key

Relationships (from)

Name	Information	Description
application_property_application_id_fk37	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_property_ba_unit_id_fk41	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement

Table: application_uses_source

Sources (documents) submitted with an application, created as a result of the application by land officers or further documents added to assist in the processing of the application

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
application_id	varchar(40)	False		**SOLA Extension** - the application id
source_id	varchar(40)	False		**LADM Definition** - the source (document) id
is_primary	bool	False	false	It is a flag that shows if the source is primary for the particular application.

Constraints

Name	Type	Explanation
application_uses_source_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_uses_source_source_id_fk38	**From columns**: source_id **To Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_uses_source_application_id_fk39	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: request_type_requires_source_type

Source (documents) required for a particular (Service) Request received by a land office

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
source_type_code	varchar(20)	False		**SOLA Extension** - source type code
request_type_code	varchar(50)	False		**SOLA Extension** - request type code

Constraints

Name	Type	Explanation
request_type_requires_source_type_pkey	PRIMARY KEY	Combination of (source_type_code,request_type_code) is the primary key

Relationships (from)

Name	Information	Description
request_type_requires_source_type_request_type_code_fk	**From column**: request_type_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
request_type_requires_source_type_source_type_code_fk	**From column**: source_type_code **To Entity**: administrative_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: application_status_type

The list of potential statuses an application can get.

Columns

Name	Type	Optional	Default	Description
code	varchar(50)	False		**SOLA Extension** - status type code
display_value	varchar(250)	False		**SOLA Extension** - Display value for the status type
is_terminal	bool	False	false	True if this status is the end status the application can get.
status	char(1)	False	't'	**SOLA Extension** - Status of an instance of application status
description	varchar(555)	True		**SOLA Extension** - Description of application status
office_code	varchar(40)	False		Ghana extension: The id of the office where the application is found when it reaches this status.

Constraints

Name	Type	Explanation
application_status_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description
application_status_type_office_code_fk143	**From columns**: office_code **To Entity**: office **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
application_action_type_next_status_type_code_fk10	**From columns**: next_status_type_code **From Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	
application_status_type_code_fk122	**From columns**: type_code **From Entity**: application_status **From cardinality**: 0..* **To Cardinality**: 1	
request_type_starting_status_code_fk124	**From columns**: starting_status_code **From Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	

application_action_type_start_status_type_code_fk125	**From columns**: start_status_type_code **From Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	is_terminal	status
1	smd-regnr-received	Received	false	c
2	smd-plancertification-received	Received	false	c
3	smd-cadchange-submit	Submit	false	c
4	smd-cadredef-submit	Submit	false	c
5	smd-regnr-completed	Completed	true	c
6	smd-cadchange-make-changes	Make Changes	false	c
7	smd-cadredef-make-changes	Make Changes	false	c
8	smd-cadchange-completed	Completed	true	c
9	smd-cadredef-completed	Completed	true	c
10	smd-cadchange-cancelled	Cancelled	true	c
11	smd-cadredef-cancelled	Cancelled	true	c
12	smd-plancertification-completed	Completed	true	c
13	smd-plancertification-cancelled	Cancelled	true	c
14	smd-regnr-vetted	Vetted	false	c
15	smd-regnr-paid	Paid	false	c
16	smd-regnr-rejected	Rejected	true	c

Nr	description	office_code
1		csau
2		csau
3		csau
4		csau
5		archive
6		cartographic-gis-section
7		cartographic-gis-section
8		archive
9		archive
10		archive
11		archive
12		archive
13		archive
14		csau

15		smd-registry
16		archive

Table: type_action

This is the coded list of allowed operations on rrr and ba_unit. Present values are: new, remove, vary.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		
display_value	varchar(250)	False		
description	varchar(555)	True		
status	char(1)	False	't'	

Constraints

Name	Type	Explanation
type_action_display_value_unique	UNIQUE	Combination of (display_value) is unique
type_action_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
request_type_type_action_code_fk79	**From columns**: type_action_code **From Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	new	New::::ITALIANO		c
2	vary	Vary::::ITALIANO		c
3	cancel	Cancel::::ITALIANO		c

Table: application_party

Ghana extension: For each application can be a number of parties that can have different roles.In generic model, there were two parties referenced directly agent_id and contact_person_id. These two parties can be defined through this table so they are removed from the application.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		Meaningless id of the party within an application.
application_id	varchar(40)	False		
party_id	varchar(40)	False		
role_code	varchar(20)	False		The role that a party can get in an application. The allowed values are from the coded list party_role_type where party_role_type.used_in_application is true.

Constraints

Name	Type	Explanation
application_party_logical_key	UNIQUE	Combination of (application_id, party_id) is unique
application_party_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_party_application_id_fk109	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	
application_party_party_id_fk110	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	
application_party_role_code_fk111	**From columns**: role_code **To Entity**: party_role_type **From cardinality**: 0..* **To Cardinality**: 1	

Table: fee_type

Ghana extension: The types of fees applicable for a certain request.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		
display_value	varchar(250)	False		
status	char(1)	False	't'	
description	varchar(555)	True		

Constraints

Name	Type	Explanation
fee_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
fee_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
application_fee_fee_code_fk114	**From columns**: fee_code **From Entity**: application_fee **From cardinality**: 0..* **To Cardinality**: 1	
request_type_fee_type_fee_code_fk116	**From columns**: fee_code **From Entity**: request_type_fee_type **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	dutyStamp	Duty stamp tax	c	
2	regionalNumberFee	Regional number fee	c	Fee that is paid when applying for a regional number
3	parcelCadastralFee	Parcel/cadastral fee	c	

Table: application_fee

Ghana extension: The fees that are applicable to an application.The fees that are listed here are already calculated by other means and they are only recorded.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
application_id	varchar(40)	False		
fee_code	varchar(20)	False		The type of the fee
paid_amount	numeric(20, 2)	False		The amount paid for the fee type. This has to be equal or less than the total_amount. In order to be considered fully paid, it should be equal to total amount.
total_amount	numeric(20, 2)	False		Total amount of the fee type that needs to be paid.
receipt_nr	varchar(20)	True		The receipt number

Constraints

Name	Type	Explanation
application_fee_logical_key	UNIQUE	Combination of (application_id, fee_code) is unique
application_fee_amount_check	CHECK	Rule (paid_amount
application_fee_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_fee_application_id_fk113	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	
application_fee_fee_code_fk114	**From columns**: fee_code **To Entity**: fee_type **From cardinality**: 0..* **To Cardinality**: 1	

Triggers

Name	Event
after_change	after insert or update

Table: request_type_fee_type

Ghana extension: The types of fees applicable to a given request type

Columns

Name	Type	Optional	Default	Description
request_code	varchar(50)	False		
fee_code	varchar(20)	False		

Constraints

Name	Type	Explanation
request_type_fee_type_pkey	PRIMARY KEY	Combination of (request_code,fee_code) is the primary key

Relationships (from)

Name	Information	Description
request_type_fee_type_request_code_fk116	**From columns**: request_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	
request_type_fee_type_fee_code_fk116	**From columns**: fee_code **To Entity**: fee_type **From cardinality**: 0..* **To Cardinality**: 1	

Table: application_action

The list of actions belonging to a certain status. In the moment that the application goes to a new status, the list of actions for this status is filled in.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
status_id	varchar(40)	False		
type_code	varchar(50)	False		
is_done	bool	False	false	Flag that shows if the action is completed.
remarks	varchar(500)	True		Remarks describing a certain action.
action_order	integer	False		The order of the action within the status.

Constraints

Name	Type	Explanation
application_action_action	UNIQUE	Combination of (status_id, type_code) is unique
application_action_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_action_type_code_fk120	**From columns**: type_code **To Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 1	
application_action_status_id_fk123	**From columns**: status_id **To Entity**: application_status **From cardinality**: 0..* **To Cardinality**: 1	

Table: application_status

The statuses that an application went through. The first status of the application is defined in the moment when the application is created. The status type is defined in the field of request_type.start_status_code.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
application_id	varchar(40)	False		
type_code	varchar(50)	False		
is_current	bool	False	true	Flag showing the current status of the application. This is a derived value. The latest status has to be also the current one.
date_enter	timestamp	False	now()	The date when the application is moved to this status.
date_leave	timestamp	True		The date when the application left this status.

Constraints

Name	Type	Explanation
application_status_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_status_application_id_fk121	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	
application_status_type_code_fk122	**From columns**: type_code **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
application_action_status_id_fk123	**From columns**: status_id **From Entity**: application_action **From cardinality**: 0..* **To Cardinality**: 1	

Triggers

Name	Event
change	before update
after_new	after insert

Table: operation_type

The list of operations that can happen to an application when an action is marked as done.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		Code
display_value	varchar(250)	False		Display value
description	varchar(555)	True		Description
status	char(1)	False	't'	Status of the entry in this table.

Constraints

Name	Type	Explanation
operation_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
operation_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
application_action_type_operation_fk144	**From columns**: operation **From Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_target_operation_code_fk145	**From columns**: target_operation_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	normal	Normal	Nothing changes to the application.	c
2	validate	Validate	The application is validated. If the validation fails the action is not completed.	c
3	cancel	Cancel	The application is cancelled.	c

4	approve	Approve	The application is approved. Before the approval, the application is validated. If the validation succeeds then the process goes further with the approval.	c
5	change	Change	The application changes	c

Table: application_spatial_unit

Columns

Name	Type	Optional	Default	Description
application_id	varchar(40)	False		
spatial_unit_id	varchar(40)	False		

Constraints

Name	Type	Explanation
application_spatial_unit_pkey	PRIMARY KEY	Combination of (application_id,spatial_unit_id) is the primary key

Relationships (from)

Name	Information	Description
application_spatial_unit_application_id_fk126	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	
application_spatial_unit_spatial_unit_id_fk127	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	

View: application_log

A log of applications for land office servicesGhana extension: It gives a list of actions that has happen with an application.

View: application_search_result

It retrieves the application information that is diplayed during the application search.

View: plan_certification_request

It gives the list of plan certification requests that are active or completed successfully.

Columns

Name	Type	Optional	Default	Description
application_id	varchar(40)	True		
spatial_unit_id	varchar(40)	True		

Sequence: application_nr_seq

Allocates numbers 1 to 9999 for application number

Function: getlodgement

Parameters

Name	Type	Direction	Description
fromdate	varchar		From date
todate	varchar		To date.

Function: getlodgetiming

Parameters

Name	Type	Direction	Description
fromdate	date		From date
todate	date		To date

Function: application_is_in_progress

It gives if an application is in progress or not.

Parameters

Name	Type	Direction	Description
application_id_vl	varchar		

Function: application_assigned_to

Parameters

Name	Type	Direction	Description
assigned_to_code	varchar		
assignee_id_vl	varchar		
username_vl	varchar		

Function: get_application_parties

It retrieves the parties seperated by commas that are involved in an application.

Parameters

Name	Type	Direction	Description
application_id_vl	varchar		The application id for which the parties will be retrieved.
show_role	bool		If true, next to the full name will be given in branckets also the role of the party in the application.

address

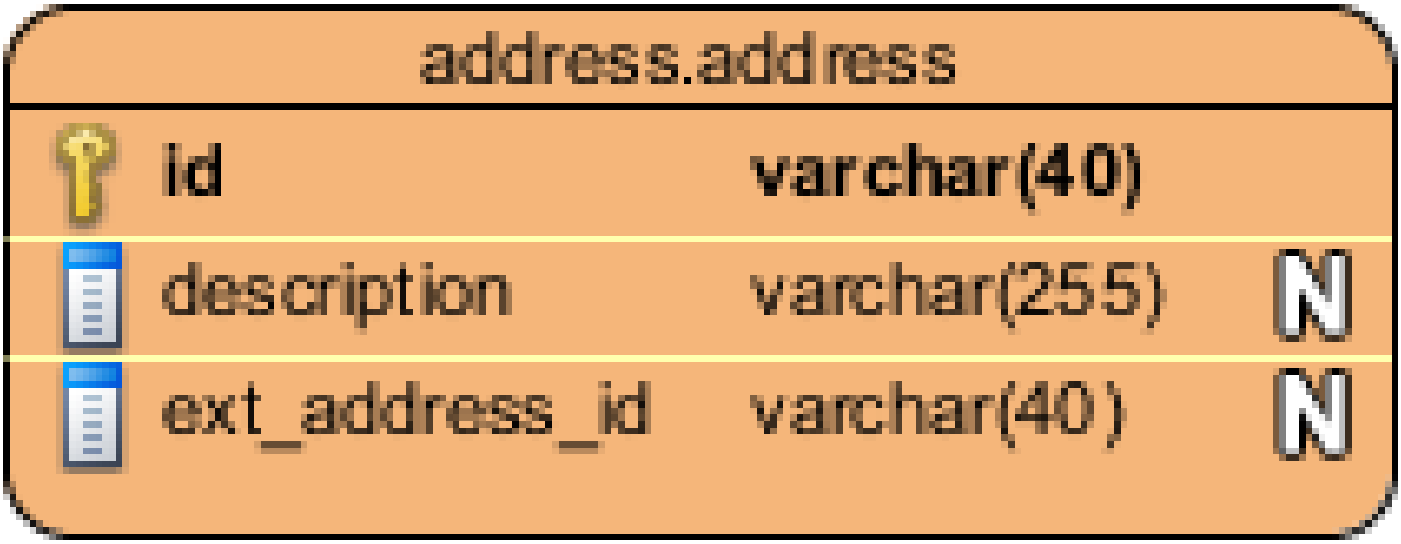

Table: address

Describes a postal or location address

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** - Address identifier
description	varchar(255)	True		**SOLA Extension** - Description of an address
ext_address_id	varchar(40)	True		**SOLA Extension** Identifier of an address referencing an external system.

Constraints

Name	Type	Explanation
address_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (to)

Name	Information	Description
party_physical_address_id_fk31	**From columns**: physical_address_id **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

spatial_unit_address_address_id_fk32	**From columns**: address_id **From Entity**: spatial_unit_address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
party_postal_address_id_fk117	**From columns**: postal_address_id **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	

system

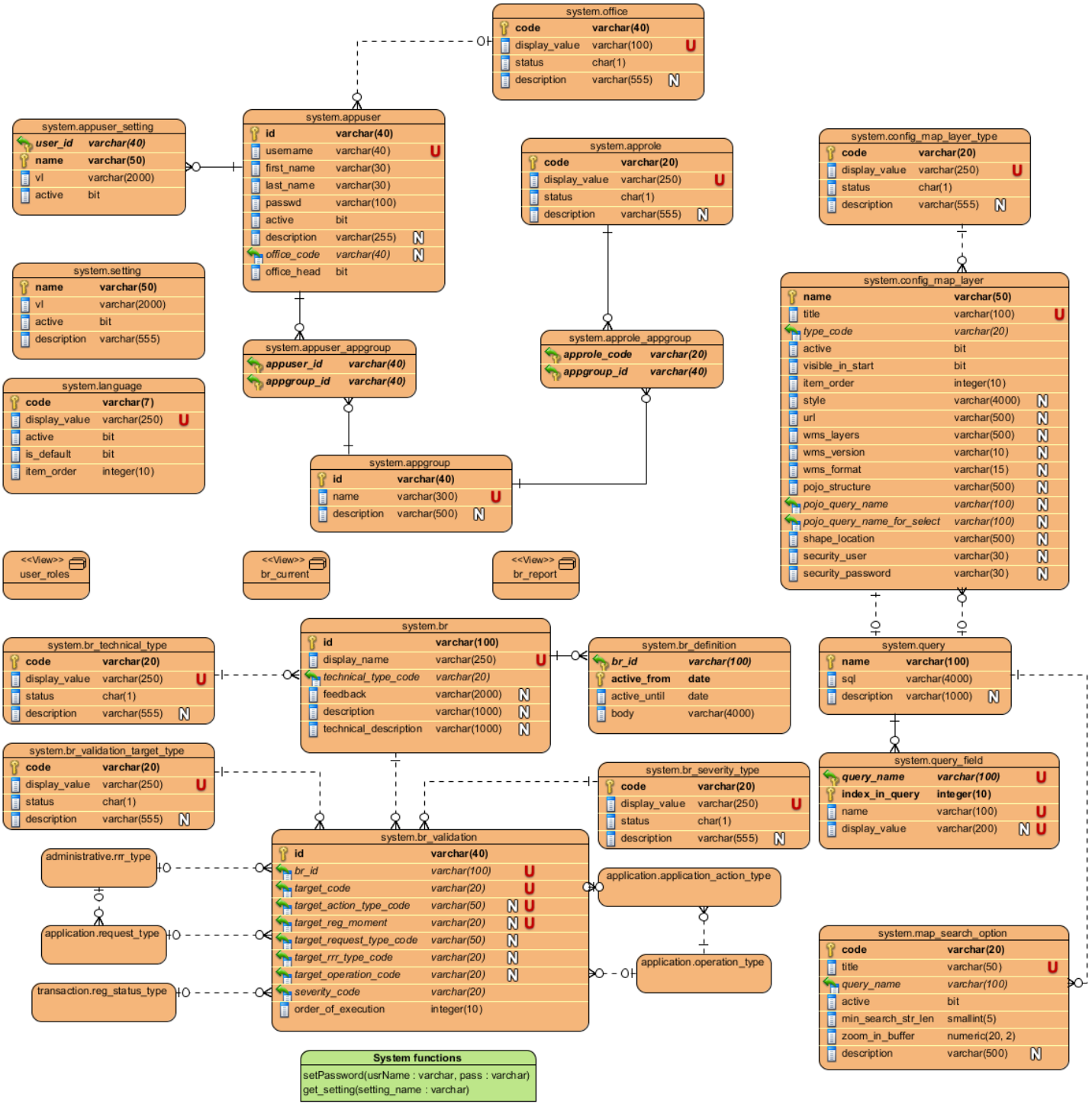

Table: appuser

This table contains list of users, who has an access to the application, can login and do certain actions.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** - the SOLA user id
username	varchar(40)	False		**SOLA Extension** - User name of a SOLA user

first_name	varchar(30)	False		**SOLA Extension** - First name of SOLA user
last_name	varchar(30)	False		**SOLA Extension** - Last name of SOLA user
passwd	varchar(100)	False	uuid_generate_v1()	**SOLA Extension** - Password of the SOLA user
active	bool	False	true	**SOLA Extension** - the flag for whether a SOLA user is considered active (or not)
description	varchar(255)	True		**SOLA Extension** - a description of the SOLA user
office_code	varchar(40)	True		Ghana extension: The id of the office where the user belongs to.
office_head	bool	False	false	If the user is head of the office. Only one user can be the head of the office.

Constraints

Name	Type	Explanation
appuser_username_unique	UNIQUE	Combination of (username) is unique
appuser_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
appuser_office_code_fk142	**From columns**: office_code **To Entity**: office **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
application_assignee_id_fk42	**From columns**: assignee_id **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
appuser_setting_user_id_fk43	**From columns**: user_id **From Entity**: appuser_setting **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
appuser_appgroup_appuser_id_fk95	**From columns**: appuser_id **From Entity**: appuser_appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	id	username	first_name
1	csau-head	csau-head	CSAU
2	smd-registry-head	registry-head	Registry
3	gis-section-head	gis-head	Gis

4	gis-section-normal	gismdw	GIS
5	csau-normal	csau-normal	CSAU
6	smd-registry-normal	registry-normal	Registry
7	archive-head	archive-head	Archive
8	admin	admin	Admin

Nr	last_name	passwd	active
1	Head	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
2	Head	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
3	Head	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
4	Normal	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
5	Normal	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
6	Normal	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
7	Head	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true
8	Admin	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true

Nr	description	office_code	office_head
1		csau	true
2		smd-registry	true
3		cartographic-gis-section	true
4		cartographic-gis-section	false
5		csau	false
6		smd-registry	false
7		archive	true
8		it	false

Table: setting

Global settings for the FLOSS SOLA application

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
name	varchar(50)	False		**SOLA Extension** - name of the setting
vl	varchar(2000)	False		**SOLA Extension** - Value of the setting
active	bool	False	true	**SOLA Extension** - if the setting is active or not.
description	varchar(555)	False		

Constraints

Name	Type	Explanation
setting_pkey	PRIMARY KEY	Combination of (name) is the primary key

Data

Nr	name	vl	active	description
1	map-srid	32630	true	The srid of the geographic data that are administered in the system.
2	map-west	807000	true	The most west coordinate. It is used in the map control.
3	map-south	612400	true	The most south coordinate. It is used in the map control.
4	map-east	816600	true	The most east coordinate. It is used in the map control.
5	map-north	622000	true	The most north coordinate. It is used in the map control.
6	map-tolerance	0.01	true	The tolerance that is used while snapping geometries to each other. If two points are within this distance are considered being in the same location.
7	map-shift-tolerance-rural	20	true	The shift tolerance of boundary points used in cadastre change in rural areas.
8	map-shift-tolerance-urban	5	true	The shift tolerance of boundary points used in cadastre change in urban areas.
9	current-region	GA	true	Ghana extension: The current region recognized from the application.

Table: appuser_setting

Software settings specific for a user within the FLOSS SOLA application

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
user_id	varchar(40)	False		**SOLA Extension** - SOLA user id
name	varchar(50)	False		**SOLA Extension** - name of the setting
vl	varchar(2000)	False		**SOLA Extension** - value of the setting
active	bool	False	true	**SOLA Extension** - if the setting is active

Constraints

Name	Type	Explanation
appuser_setting_pkey	PRIMARY KEY	Combination of (user_id,name) is the primary key

Relationships (from)

Name	Information	Description
appuser_setting_user_id_fk43	**From columns**: user_id **To Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: language

Thelanguages that can be used within the FLOSS SOLA application.

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(7)	False		**SOLA Extension** - A unique code of the localization.
display_value	varchar(250)	False		**SOLA Extension** - displayed value of localisation setting
active	bool	False	true	**SOLA Extension** -status of the instance of language
is_default	bool	False	false	**SOLA Extension** - If it is the default. One of the records in this table can have this value true.
item_order	integer	False	1	

Constraints

Name	Type	Explanation
language_display_value_unique	UNIQUE	Combination of (display_value) is unique
language_pkey	PRIMARY KEY	Combination of (code) is the primary key

Data

Nr	code	display_value	active	is_default	item_order
1	en-US	English	true	true	1

Table: config_map_layer

Parameters for defining map layers in FLOSS SOLA gis componentLADM Reference ObjectFLOSS SOLA ExtensionLADM DefinitionNot Applicable

Columns

Name	Type	Optional	Default	Description
name	varchar(50)	False		**SOLA Extension** - name of map layer
title	varchar(100)	False		
type_code	varchar(20)	False		**SOLA Extension** - map layer type
active	bool	False	true	**SOLA Extension** - flag to indicate whether instance of config map layer is active (or not)
visible_in_start	bool	False	true	If it is true, the layer will be switched on in the start of the map control.
item_order	integer	False	0	**SOLA Extension** - map layer order of display
style	varchar(4000)	True		Map layer style given in SLD.
url	varchar(500)	True		**SOLA Extension** - wms url of map layer
wms_layers	varchar(500)	True		**SOLA Extension** - wms layer id (or name)
wms_version	varchar(10)	True		
wms_format	varchar(15)	True		
pojo_structure	varchar(500)	True		**SOLA Extension** - plain old java object structure
pojo_query_name	varchar(100)	True		**SOLA Extension** - plain old java object query name
pojo_query_name_for_select	varchar(100)	True		**SOLA Extension** - plain old java object query name for select
shape_location	varchar(500)	True		**SOLA Extension** - location of map layer shape definitions
security_user	varchar(30)	True		
security_password	varchar(30)	True		

Constraints

Name	Type	Explanation
config_map_layer_fields_required	CHECK	Rule (case when type_code = 'wms' then url is not null and wms_layers is not null when type_code = 'pojo' then pojo_query_name is not null and pojo_structure is not null and style is not null when type_code = 'shape' then shape_location is not null and style is not null end) must be true It checks if the information is filled properly for each of type of the layer supported.
config_map_layer_title_unique	UNIQUE	Combination of (title) is unique
config_map_layer_pkey	PRIMARY KEY	Combination of (name) is the primary key

Relationships (from)

Name	Information	Description
config_map_layer_type_code_fk47	**From columns**: type_code **To Entity**: config_map_layer_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
config_map_layer_pojo_query_name_fk103	**From columns**: pojo_query_name **To Entity**: query **From cardinality**: 1 **To Cardinality**: 0..1	
config_map_layer_pojo_query_name_for_select_fk104	**From columns**: pojo_query_name_for_select **To Entity**: query **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	name	title	type_code	active	visible_in_start
1	parcels	Parcels	pojo	true	true
2	pending-parcels	Pending parcels	pojo	true	true
3	applications	Applications	pojo	true	true
4	parcels-historic-current-ba	Historic parcels with current titles	pojo	true	true
5	regions	Regions	pojo	true	true
6	districts	Districts	pojo	true	true
7	sections	Sections	pojo	true	true
8	blocks	Blocks	pojo	true	true
9	buildings	Buildings	pojo	true	true
10	allodials	Allodials	pojo	true	true
11	parcel-nodes	Parcel nodes	pojo	true	true
12	parcel-pending-completed	Parcels with plan certification completed	pojo	true	true
13	parcel-pending-inprogress	Parcels with plan certification in progress	pojo	true	true

Nr	item_order	style	url	wms_layers	wms_version
1	20	parcel.xml			
2	30	pending_parcels.xml			
3	70	application.xml			
4	10	parcel_historic_current_ba.xml			
5	80	region.xml			
6	90	district.xml			

7	100	section.xml			
8	110	block.xml			
9	120	building.xml			
10	130	allodial.xml			
11	40	parcel_node.xml			
12	33	pending_parcels_completed.xml			
13	35	pending_parcels_inprogress.xml			

Nr	wms_format	pojo_structure
1		theGeom:Polygon,label:""
2		theGeom:Polygon,label:""
3		theGeom:MultiPoint,label:""
4		theGeom:Polygon,label:""
5		theGeom:Polygon,label:""
6		theGeom:Polygon,label:""
7		theGeom:Polygon,label:""
8		theGeom:Polygon,label:""
9		theGeom:Polygon,label:""
10		theGeom:Polygon,label:""
11		theGeom:Polygon,label:""
12		theGeom:Polygon,label:""
13		theGeom:Polygon,label:""

_query_name	pojo_query_name_for_select	shape
alResult.getParcels	dynamic.informationtool.get_parcel	
alResult.getParcelsPending	dynamic.informationtool.get_parcel_pending	
alResult.getApplications	dynamic.informationtool.get_application	
alResult.getParcelsHistoricWithCurrentBA	dynamic.informationtool.get_parcel_historic_current_ba	
alResult.getRegion	dynamic.informationtool.get_region	
alResult.getDistrict	dynamic.informationtool.get_district	
alResult.getSection	dynamic.informationtool.get_section	
alResult.getBlock	dynamic.informationtool.get_block	
alResult.getBuildings	dynamic.informationtool.get_building	
alResult.getAllodials	dynamic.informationtool.get_allodial	
alResult.getParcelNodes		
alResult.getParcelPendingCompleted		
alResult.getParcelPendingInProgress		

Nr	security_user	security_password
1		
2		
3		

4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Table: config_map_layer_type

Parameters for defining categories/types of map layers in FLOSS SOLA gis component

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		**SOLA Extension** - code identifying a config map layer type
display_value	varchar(250)	False		**SOLA Extension** - displayed value of config map layer type
status	char(1)	False		**SOLA Extension** - status of an instance of config map layer type
description	varchar(555)	True		**SOLA Extension** - description of config map layer type

Constraints

Name	Type	Explanation
config_map_layer_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
config_map_layer_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
config_map_layer_type_code_fk47	**From columns**: type_code **From Entity**: config_map_layer **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	status	description
1	wms	WMS server with layers::::Server WMS con layer	c	
2	shape	Shapefile::::Shapefile	c	
3	pojo	Pojo layer::::Pojo layer	c	

Table: br

In this table there are defined the business rules that are used in the system.

Columns

Name	Type	Optional	Default	Description
id	varchar(100)	False		The name of the business rule
display_name	varchar(250)	False	uuid_generate_v1()	This is a compact identifier for the business rule.
technical_type_code	varchar(20)	False		The implementation type of the rule. This defines also which engine must interpret the rule.
feedback	varchar(2000)	True		A message that will be sent to the user if the rule is broken. It is not always relevant.
description	varchar(1000)	True		Here it comes description about the rule for the end-user.
technical_description	varchar(1000)	True		This is a description aimed for developers. Here it should come also description about parameters used for the rule.

Constraints

Name	Type	Explanation
br_display_name_unique	UNIQUE	Combination of (display_name) is unique
br_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
br_technical_type_code_fk50	**From columns**: technical_type_code **To Entity**: br_technical_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
br_validation_br_id_fk51	**From columns**: br_id **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 1	
br_definition_br_id_fk52	**From columns**: br_id **From Entity**: br_definition **From cardinality**: 0..* **To Cardinality**: 1	

Table: br_technical_type

Here are specified the types of techincal implementations of the business rule.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
status	char(1)	False		The status of this code itself.
description	varchar(555)	True		Description

Constraints

Name	Type	Explanation
br_technical_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
br_technical_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
br_technical_type_code_fk50	**From columns**: technical_type_code **From Entity**: br **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	sql	SQL::::SQL	c	The rule definition is based in sql and it is executed by the database engine.
2	drools	Drools::::Drools	c	The rule definition is based on Drools engine.

Table: br_validation

In this table are defined the sets of rules that has to be executed.If for a rule there is not target moment specified, then the rule will not be part of the set.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False	uuid_generate_v1()	This is a meaningless identifier for the rule.
br_id	varchar(100)	False		Name of the business rule
target_code	varchar(20)	False		The type of the target of the the validation.
target_action_type_code	varchar(50)	True		The moment of execution of the rule if the target is the application action.
target_reg_moment	varchar(20)	True		The moment of execution of the rule if the target is the ba_unit, rrr or cadastre_object.
target_request_type_code	varchar(50)	True		If the target is a request type then here is given which is the request type. If this is null the business rule will be relevant for all services.
target_rrr_type_code	varchar(20)	True		If the target is a registration on RRR then here is given the rrr type. If this is null the business rule validation will be valid for all rrr-s.
target_operation_code	varchar(20)	True		
severity_code	varchar(20)	False		Severity of the failure of the business rule.
order_of_execution	integer	False	0	The order of the execution of the rule.

Constraints

Name	Type	Explanation
br_validation_action_moment_unique	UNIQUE	Combination of (br_id, target_code, target_action_type_code) is unique
br_validation_reg_moment_unique	UNIQUE	Combination of (br_id, target_code, target_reg_moment) is unique
br_validation_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
br_validation_br_id_fk51	**From columns**: br_id **To Entity**: br **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_severity_code_fk53	**From columns**: severity_code **To Entity**: br_severity_type **From cardinality**: 0..* **To Cardinality**: 1	

br_validation_target_code_fk54	**From columns**: target_code **To Entity**: br_validation_target_type **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_target_request_type_code_fk55	**From columns**: target_request_type_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_rrr_type_code_fk56	**From columns**: target_rrr_type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_action_type_code_fk100	**From columns**: target_action_type_code **To Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_reg_moment_fk101	**From columns**: target_reg_moment **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_operation_code_fk145	**From columns**: target_operation_code **To Entity**: operation_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Table: br_definition

Columns

Name	Type	Optional	Default	Description
br_id	varchar(100)	False		
active_from	date	False		
active_until	date	False	'infinity'	The date until this rule is active.
body	varchar(4000)	False		The definition of the rule. The interpretation of the definition is done from the rule engine in use.

Constraints

Name	Type	Explanation
br_definition_pkey	PRIMARY KEY	Combination of (br_id,active_from) is the primary key

Relationships (from)

Name	Information	Description
br_definition_br_id_fk52	**From columns**: br_id **To Entity**: br **From cardinality**: 0..* **To Cardinality**: 1	

Table: br_severity_type

These are the types of severity of the business rules within the context of there use.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
status	char(1)	False		The status of this code itself.
description	varchar(555)	True		Description

Constraints

Name	Type	Explanation
br_severity_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
br_severity_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
br_validation_severity_code_fk53	**From columns**: severity_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	critical	Critical	c	
2	medium	Medium	c	
3	warning	Warning	c	

Table: br_validation_target_type

The potential targets of the validation rules.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
status	char(1)	False		The status of this code itself.
description	varchar(555)	True		Description

Constraints

Name	Type	Explanation
br_validation_target_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
br_validation_target_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
br_validation_target_code_fk54	**From columns**: target_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	application-action	Application action::::ITALIANO	c	The target of the validation is the application action. It accepts one parameter {id} which is the application action id.
2	rrr	Right or Restriction::::ITALIANO	c	The target of the validation is the rrr. It accepts one parameter {id} which is the rrr id.
3	ba_unit	Administrative Unit::::ITALIANO	c	The target of the validation is the ba_unit. It accepts one parameter {id} which is the ba_unit id.
4	source	Source::::ITALIANO	c	The target of the validation is the source. It accepts one parameter {id} which is the source id.
5	cadastre_object	Cadastre Object::::ITALIANO	c	The target of the validation is the transaction related with the cadastre change. It accepts one parameter {id} which is the transaction id.
6	application	Application	c	The target of the validation is the application. It accepts one parameter {id} which is the application id.

Table: approle

This table contains list of security roles, used to restrict access to the different parts of application, both on server and client side.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code
display_value	varchar(250)	False		The value that will be displayed to the user
status	char(1)	False		The status of this code itself.
description	varchar(555)	True		Description

Constraints

Name	Type	Explanation
approle_display_value_unique	UNIQUE	Combination of (display_value) is unique
approle_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
approle_appgroup_approle_code_fk97	**From columns**: approle_code **From Entity**: approle_appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	DashbrdViewAssign	View Assigned Applications	c	View Assigned Applications in Dashboard
2	DashbrdViewUnassign	View Unassigned Applications	c	View Unassigned Applications in Dashboard
3	DashbrdViewOwn	View Own Applications	c	View Applications assigned to user in Dashboard
4	ApplnView	Search and View Applications	c	Search and view applications
5	ApplnCreate	Lodge new Applications	c	Lodge new Applications
6	ApplnStatus	Generate and View Status Report	c	Generate and View Status Report
7	ApplnAssignSelf	Assign Applications to Self	c	Able to assign (unassigned) applications to yourself

8	ApplnUnassignSelf	Unassign Applications to Self	c	Able to unassign (assigned) applications from yourself
9	ApplnAssignOthers	Assign Applications to Other Users	c	Able to assign (unassigned) applications to other users
10	ApplnUnassignOthers	Unassign Applications to Others	c	Able to unassign (assigned) applications to other users
11	StartService	Start Service	c	Start Service
12	CompleteService	Complete Service	c	Complete Service (prior to approval)
13	CancelService	Cancel Service	c	Cancel Service
14	RevertService	Revert Service	c	Revert previously Complete Service
15	ApplnRequisition	Requisition application and request	c	Request further information from applicant
16	ApplnResubmit	Resubmit Application	c	Resubmit (requisitioned) application
17	ApplnApprove	Approve Application	c	Approve Application
18	ApplnWithdraw	Withdraw Application	c	Applicant withdraws their application
19	ApplnReject	Reject Application	c	Land Office rejects an application
20	ApplnValidate	Validate Application	c	User manually runs validation rules for application
21	ApplnDispatch	Dispatch Application	c	Dispatch any documents to be returned to applicant and any certificates/reports/map prints requested by applicant
22	ApplnArchive	Archive Application	c	Paper Application File is stored in Land Office Archive
23	BaunitSave	Create or Modify BA Unit	c	Create or Modify BA Unit (Property)
24	BauunitrrrSave	Create or Modify Rights or Restrictions	c	Create or Modify Rights or Restrictions
25	BaunitParcelSave	Create or Modify (BA Unit) Parcels	c	Create or Modify (BA Unit) Parcels
26	BaunitNotatSave	Create or Modify (BA Unit) Notations	c	Create or Modify (BA Unit) Notations
27	BaunitCertificate	Generate and Print (BA Unit) Certificate	c	Generate and Print (BA Unit) Certificate
28	BaunitSearch	Search BA Unit	c	Search BA Unit

29	TransactionCommit	Approve (and Cancel) Transaction	c	Approve (and Cancel) Transaction
30	ViewMap	View Cadastral Map	c	View Cadastral Map
31	PrintMap	Print Map	c	Print Map
32	ParcelSave	Create or modify (Cadastre) Parcel	c	Create or modify (Cadastre) Parcel
33	PartySave	Create or modify Party	c	Create or modify Party
34	SourceSave	Create or modify Source	c	Create or modify Source
35	SourceSearch	Search Sources	c	Search sources
36	SourcePrint	Print Sources	c	Print Source
37	ReportGenerate	Generate and View Reports	c	Generate and View reports
38	ArchiveApps	Archive applications	c	Archive applications
39	ManageSecurity	Manage users, groups and roles	c	Manage users, groups and roles
40	ManageRefdata	Manage reference data	c	Manage reference data
41	ManageSettings	Manage system settings	c	Manage system settings
42	ApplnEdit	Application Edit	c	Allows editing of Applications
43	ManageBR	Manage business rules	c	Allows to manage business rules

Table: approle_appgroup

This many-to-many table contains groups, related to security roles. Allows to have multiple roles for one group.

Columns

Name	Type	Optional	Default	Description
approle_code	varchar(20)	False		
appgroup_id	varchar(40)	False		

Constraints

Name	Type	Explanation
approle_appgroup_pkey	PRIMARY KEY	Combination of (approle_code,appgroup_id) is the primary key

Relationships (from)

Name	Information	Description
approle_appgroup_approle_code_fk97	**From columns**: approle_code **To Entity**: approle **From cardinality**: 0..* **To Cardinality**: 1	
approle_appgroup_appgroup_id_fk98	**From columns**: appgroup_id **To Entity**: appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	approle_code	appgroup_id
1	ManageSecurity	admin-group
2	ManageRefdata	admin-group
3	ManageBR	admin-group
4	ManageSettings	admin-group

Table: appgroup

This table contains list of groups, which are used to group users with similar rights in the system.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		
name	varchar(300)	False		
description	varchar(500)	True		

Constraints

Name	Type	Explanation
appgroup_name_unique	UNIQUE	Combination of (name) is unique
appgroup_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (to)

Name	Information	Description
appuser_appgroup_appgroup_id_fk96	**From columns**: appgroup_id **From Entity**: appuser_appgroup **From cardinality**: 0..* **To Cardinality**: 1	
approle_appgroup_appgroup_id_fk98	**From columns**: appgroup_id **From Entity**: approle_appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	id	name	description
1	super-group	Super group	This is a group of users that has right to use everthing in the application.
2	admin-group	Admin group	This group is used for admin users

Table: appuser_appgroup

This many-to-many table contains users, related to groups. Allows to have multiple groups for one user.

Columns

Name	Type	Optional	Default	Description
appuser_id	varchar(40)	False		
appgroup_id	varchar(40)	False		

Constraints

Name	Type	Explanation
appuser_appgroup_pkey	PRIMARY KEY	Combination of (appuser_id,appgroup_id) is the primary key

Relationships (from)

Name	Information	Description
appuser_appgroup_appuser_id_fk95	**From columns**: appuser_id **To Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 1	
appuser_appgroup_appgroup_id_fk96	**From columns**: appgroup_id **To Entity**: appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	appuser_id	appgroup_id
1	admin	admin-group

Table: query

It defines a query that can be executed by the search ejb.

Columns

Name	Type	Optional	Default	Description
name	varchar(100)	False		Unique identifier for the query
sql	varchar(4000)	False		Query definition
description	varchar(1000)	True		Technical description about the query.

Constraints

Name	Type	Explanation
query_pkey	PRIMARY KEY	Combination of (name) is the primary key

Relationships (to)

Name	Information	Description
query_field_query_name_fk102	**From columns**: query_name **From Entity**: query_field **From cardinality**: 0..* **To Cardinality**: 1	
config_map_layer_pojo_query_name_fk103	**From columns**: pojo_query_name **From Entity**: config_map_layer **From cardinality**: 1 **To Cardinality**: 0..1	
config_map_layer_pojo_query_name_for_select_fk104	**From columns**: pojo_query_name_for_select **From Entity**: config_map_layer **From cardinality**: 0..* **To Cardinality**: 0..1	
map_search_option_query_name_fk108	**From columns**: query_name **From Entity**: map_search_option **From cardinality**: 0..* **To Cardinality**: 1	

Data

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	sql	des
els	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
elsPending	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'pending' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid})) union select co.id, co.name_firstpart || '/' || co.name_lastpart as label, st_asewkb(co_t.geom_polygon) as the_geom from cadastre.cadastre_object co inner join cadastre.cadastre_object_target co_t on co.id = co_t.cadastre_object_id and co_t.geom_polygon is not null where ST_Intersects(co_t.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid})) and co_t.transaction_id in (select id from transaction.transaction where status_code not in ('approved'))	
cations	select id, nr as label, st_asewkb(location) as the_geom from application.application where ST_Intersects(location, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	

ol.get_parcel	select co.id, co.name_firstpart || '/' || co.name_lastpart as parcel_nr, (select string_agg(ba.name_firstpart || '/' || ba.name_lastpart, ',') from administrative.ba_unit_contains_spatial_unit bas, administrative.ba_unit ba where spatial_unit_id= co.id and bas.ba_unit_id= ba.id) as ba_units, (SELECT spatial_value_area.size FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqm, (SELECT spatial_value_area.size * 10.76 FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqf, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
ol.get_parcel_pending	select co.id, co.name_firstpart || '/' || co.name_lastpart as parcel_nr, (SELECT spatial_value_area.size FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqm, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and ((status_code= 'pending' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))) or (co.id in (select cadastre_object_id from cadastre.cadastre_object_target co_t inner join transaction.transaction t on co_t.transaction_id=t.id where ST_Intersects(co_t.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid})) and t.status_code not in ('approved'))))	
ol.get_application	select id, nr, st_asewkb(location) as the_geom from application.application where ST_Intersects(location, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
elsHistoricWithCurrentBA	select co.id, co.name_firstpart || '/' || co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co inner join administrative.ba_unit_contains_spatial_unit ba_co on co.id = ba_co.spatial_unit_id inner join administrative.ba_unit ba_unit on ba_unit.id= ba_co.ba_unit_id where co.type_code='parcel' and co.status_code= 'historic' and ba_unit.status_code = 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
ol.get_parcel_historic_current_ba	select co.id, co.name_firstpart || '/' || co.name_lastpart as parcel_nr, (select string_agg(ba.name_firstpart || '/' || ba.name_lastpart, ',') from administrative.ba_unit_contains_spatial_unit bas, administrative.ba_unit ba where spatial_unit_id= co.id and bas.ba_unit_id= ba.id) as ba_units, (SELECT spatial_value_area.size FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqm, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co inner join administrative.ba_unit_contains_spatial_unit ba_co on co.id = ba_co.spatial_unit_id inner join administrative.ba_unit ba_unit on ba_unit.id= ba_co.ba_unit_id where co.type_code='parcel' and co.status_code= 'historic' and ba_unit.status_code = 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
_object_by_number	select id, name_firstpart || '/ ' || name_lastpart as label, st_asewkb(geom_polygon) as the_geom from cadastre.cadastre_object where status_code= 'current' and compare_strings(#{search_string}, name_firstpart || ' ' || name_lastpart) limit 30	

_object_by_baunit	select distinct co.id, ba_unit.name_firstpart || '/ ' || ba_unit.name_lastpart || ' > ' || co.name_firstpart || '/ ' || co.name_lastpart as label, st_asewkb(geom_polygon) as the_geom from cadastre.cadastre_object co inner join administrative.ba_unit_contains_spatial_unit bas on co.id = bas.spatial_unit_id inner join administrative.ba_unit on ba_unit.id = bas.ba_unit_id where (co.status_code= 'current' or ba_unit.status_code= 'current') and compare_strings(#{search_string}, ba_unit.name_firstpart || ' ' || ba_unit.name_lastpart) limit 30	
_object_by_baunit_owner	select distinct co.id, coalesce(party.name, '') || ' ' || coalesce(party.last_name, '') || ' > ' || co.name_firstpart || '/ ' || co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co inner join administrative.ba_unit_contains_spatial_unit bas on co.id = bas.spatial_unit_id inner join administrative.ba_unit on bas.ba_unit_id= ba_unit.id inner join administrative.rrr on (ba_unit.id = rrr.ba_unit_id and rrr.status_code = 'current' and rrr.type_code = 'ownership') inner join administrative.party_for_rrr pfr on rrr.id = pfr.rrr_id inner join party.party on pfr.party_id= pfr.party_id where (co.status_code= 'current' or ba_unit.status_code= 'current') and compare_strings(#{search_string}, coalesce(party.name, '') || ' ' || coalesce(party.last_name, '')) limit 30	
re_object_by_baunit_id	SELECT id, name_firstpart || '/ ' || name_lastpart as label, st_asewkb(geom_polygon) as the_geom FROM cadastre.cadastre_object WHERE transaction_id IN (SELECT cot.transaction_id FROM (administrative.ba_unit_contains_spatial_unit ba_su INNER JOIN cadastre.cadastre_object co ON ba_su.spatial_unit_id = co.id) INNER JOIN cadastre.cadastre_object_target cot ON co.id = cot.cadastre_object_id WHERE ba_su.ba_unit_id = #{search_string}) AND (SELECT COUNT(1) FROM administrative.ba_unit_contains_spatial_unit WHERE spatial_unit_id = cadastre_object.id) = 0 AND status_code = 'current'	Qu Ba
on	select sup.id, sup.code, sup.name, st_asewkb(sup.the_geom) as the_geom from cadastre.region as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
ct	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.district as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
on	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.section as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.block as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
ol.get_region	select sup.id, sup.code, sup.name, st_asewkb(sup.the_geom) as the_geom from cadastre.region as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
ol.get_district	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.district as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
ol.get_section	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.section as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
ol.get_block	select sup.id, sup.num as label, st_asewkb(sup.the_geom) as the_geom from cadastre.block as sup where ST_Intersects(sup.the_geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	

	select id, id as label, st_asewkb(the_geom) as the_geom from cadastre.district where compare_strings(#{search_string}, id) limit 30	
	select id, id || coalesce('(' || locality || ')', '') as label, st_asewkb(the_geom) as the_geom from cadastre.section where compare_strings(#{search_string}, id || coalesce('(' || locality || ')', '')) limit 30	
	select id, id as label, st_asewkb(the_geom) as the_geom from cadastre.block where compare_strings(#{search_string}, id) limit 30	
ngs	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'building' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
ol.get_building	select co.id, co.name_firstpart || '/' || co.name_lastpart as nr, (SELECT spatial_value_area.size FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqm, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'building' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
als	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'allodial' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
ol.get_allodial	select co.id, co.name_firstpart || '/' || co.name_lastpart as nr, (SELECT spatial_value_area.size FROM cadastre.spatial_value_area WHERE spatial_value_area.type_code='officialArea' and spatial_value_area.spatial_unit_id = co.id) AS area_official_sqm, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'allodial' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
elNodes	select distinct st_astext(geom) as id, '' as label, st_asewkb(geom) as the_geom from (select (ST_DumpPoints(geom_polygon)).* from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))) tmp_table	
elPendingCompleted	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid})) and id in (select spatial_unit_id from application.application_spatial_unit a_su inner join application.application_status a_s on a_su.application_id = a_s.application_id where a_s.is_current and a_s.type_code = 'smd-plancertification-completed')	
elPendingInProgress	select co.id, co.name_lastpart as label, st_asewkb(co.geom_polygon) as the_geom from cadastre.cadastre_object co where type_code= 'parcel' and status_code= 'current' and ST_Intersects(co.geom_polygon, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid})) and id in (select spatial_unit_id from application.application_spatial_unit a_su where application.application_is_in_progress(a_su.application_id))	

Table: map_search_option

This table contains information about the options to search objects in the map. The list of options here will be used to configure the list of search by options in the Map Search Component.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The unique code of the search option. This code is used programatically.
title	varchar(50)	False		The unique title that is visible to the user. It can be localizable.
query_name	varchar(100)	False		The query that will be used for retrieving the search results. The query requires only one parameter: search_string. So, it means that queries that are used here, should contain only one parameter with this name. These queries also should return only 3 fields: - id: Unique id of returned match - label: What will be displayed to the user - the_geom: the WKB form of the geometry
active	bool	False	true	If the search option is active or not
min_search_str_len	smallint	False	3	The minimum number of characters required for the search string.
zoom_in_buffer	numeric(20, 2)	False	50	The buffer distance to use when zooming the map to display the selected object. The units of this value are dependent on the coordinate system of the map (usually meters).
description	varchar(500)	True		A description about the option

Constraints

Name	Type	Explanation
map_search_option_title_unique	UNIQUE	Combination of (title) is unique
map_search_option_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description
map_search_option_query_name_fk108	**From columns**: query_name **To Entity**: query **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	title	query_name	active

1	NUMBER	Parcel by number	map_search.cadastre_object_by_number	true
2	BAUNIT	Parcel by property number	map_search.cadastre_object_by_baunit	true
3	OWNER_OF_BAUNIT	Parcel by property owner	map_search.cadastre_object_by_baunit_owner	true
4	DISTRICT	District	map_search.district	true
5	SECTION	Section	map_search.section	true
6	BLOCK	Block	map_search.block	true

Nr	min_search_str_len	zoom_in_buffer	description
1	3	50	
2	3	50	
3	3	50	
4	2	50	
5	3	50	
6	3	50	

Table: query_field

It defines a field in the query. The field is returned by the select part.Not for all queries is needed to define the fields. It becomes important only for queries that will need to have fields that has to be localized.

Columns

Name	Type	Optional	Default	Description
query_name	varchar(100)	False		Query identifier
index_in_query	integer	False		
name	varchar(100)	False		The index of the field in the query. The index is zero based. It should not exeed the number of fields in the select part of the query.
display_value	varchar(200)	True		The title of the field to be used in the query. It can be localized.

Constraints

Name	Type	Explanation
query_field_display_value	UNIQUE	Combination of (query_name, display_value) is unique
query_field_name	UNIQUE	Combination of (query_name, name) is unique
query_field_pkey	PRIMARY KEY	Combination of (query_name,index_in_query) is the primary key

Relationships (from)

Name	Information	Description
query_field_query_name_fk102	**From columns**: query_name **To Entity**: query **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	query_name	index_in_query
1	dynamic.informationtool.get_parcel	1
2	dynamic.informationtool.get_parcel	2
3	dynamic.informationtool.get_parcel	3
4	dynamic.informationtool.get_parcel	0
5	dynamic.informationtool.get_parcel	5
6	dynamic.informationtool.get_parcel_pending	0
7	dynamic.informationtool.get_parcel_pending	1
8	dynamic.informationtool.get_parcel_pending	2
9	dynamic.informationtool.get_parcel_pending	3
10	dynamic.informationtool.get_application	0
11	dynamic.informationtool.get_application	1
12	dynamic.informationtool.get_application	2

13	dynamic.informationtool.get_parcel_historic_current_ba	0
14	dynamic.informationtool.get_parcel_historic_current_ba	1
15	dynamic.informationtool.get_parcel_historic_current_ba	2
16	dynamic.informationtool.get_parcel_historic_current_ba	3
17	dynamic.informationtool.get_parcel_historic_current_ba	4
18	dynamic.informationtool.get_region	0
19	dynamic.informationtool.get_region	1
20	dynamic.informationtool.get_region	3
21	dynamic.informationtool.get_district	0
22	dynamic.informationtool.get_district	1
23	dynamic.informationtool.get_district	2
24	dynamic.informationtool.get_section	0
25	dynamic.informationtool.get_section	1
26	dynamic.informationtool.get_section	2
27	dynamic.informationtool.get_block	0
28	dynamic.informationtool.get_block	1
29	dynamic.informationtool.get_block	2
30	dynamic.informationtool.get_region	2
31	dynamic.informationtool.get_building	0
32	dynamic.informationtool.get_building	1
33	dynamic.informationtool.get_building	2
34	dynamic.informationtool.get_allodial	0
35	dynamic.informationtool.get_allodial	1
36	dynamic.informationtool.get_allodial	2
37	dynamic.informationtool.get_parcel	4

Nr	name	display_value
1	parcel_nr	Parcel number::::ITALIANO
2	ba_units	Properties::::ITALIANO
3	area_official_sqm	Official area (m2)::::ITALIANO
4	id	
5	the_geom	
6	id	
7	parcel_nr	Parcel number::::ITALIANO
8	area_official_sqm	Official area (m2)::::ITALIANO
9	the_geom	
10	id	
11	nr	Number::::Numero
12	the_geom	
13	id	
14	parcel_nr	Parcel number::::ITALIANO

15	ba_units	Properties::::ITALIANO
16	area_official_sqm	Official area (m2)::::ITALIANO
17	the_geom	
18	id	
19	code	Code
20	the_geom	
21	id	
22	label	District
23	the_geom	
24	id	
25	label	Section
26	the_geom	
27	id	
28	label	Block
29	the_geom	
30	name	Name
31	id	
32	nr	Number
33	the_geom	
34	id	
35	nr	Number
36	the_geom	
37	area_official_sqf	Official area (square feet)

Table: office

Ghana extension: The office that is involved in the system. Every office can have one or more users. One of those users has to be the head of the office.

Columns

Name	Type	Optional	Default	Description
code	varchar(40)	False		
display_value	varchar(100)	False		Office name
status	char(1)	False		
description	varchar(555)	True		

Constraints

Name	Type	Explanation
office_display_value_unique	UNIQUE	Combination of (display_value) is unique
office_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
appuser_office_code_fk142	**From columns**: office_code **From Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 0..1	
application_status_type_office_code_fk143	**From columns**: office_code **From Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	csau	CSAU	c	
2	smd-registry	SMD Registry	c	
3	cartographic-gis-section	Cartographic and GIS Section	c	
4	archive	Archive	c	
5	it	IT	c	

View: user_roles

This view is used to retrieve the roles of a user.

View: br_current

It retrieves the active business rules.

View: br_report

This view is used in a report to document the business rules.

Function: setPassword

This function changes the password of the user.

Parameters

Name	Type	Direction	Description
usrName	varchar		The user name.
pass	varchar		Password. The password is given encrypted.

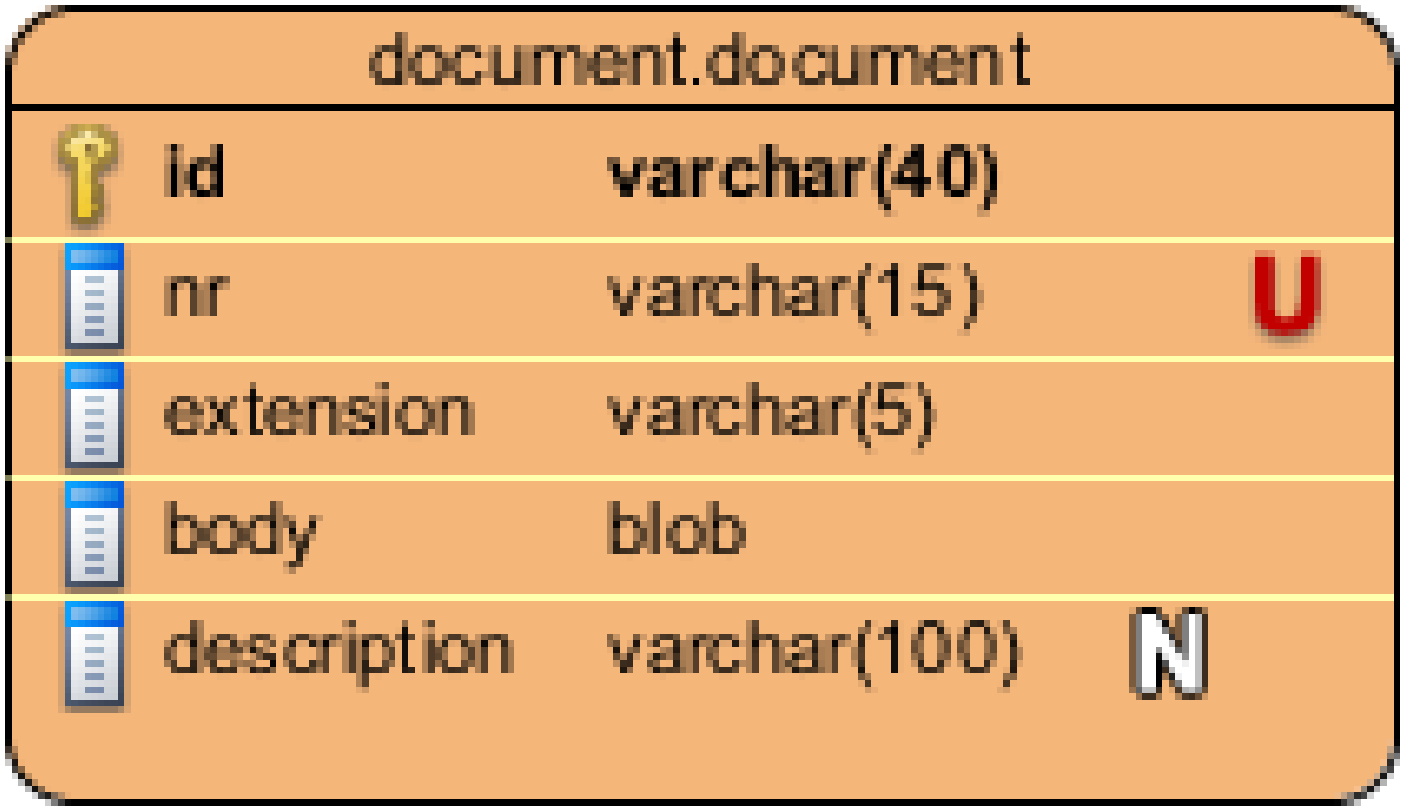
Function: get_setting

Gets the value of a setting.

Parameters

Name	Type	Direction	Description
setting_name	varchar		Setting name.

document


document.document
id
varchar(40)
nr
varchar(15)
U
extension
varchar(5)
body
blob
description
varchar(100)
N


Document functions
document_nr_seq()

Table: document

An extension of the source table to contain the image files of scanned documents forming part of the land office archive including the paper documents presented or created through cadastre or registration processes

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - The identifier of the source document
nr	varchar(15)	False		**SOLA Extension** - A unique number to identify the document
extension	varchar(5)	False		**SOLA Extension** - The extension of the original file.
body	bytea	False		**SOLA Extension** - The content of the document
description	varchar(100)	True		**SOLA Extension** - A name to recognize the document

Constraints

Name	Type	Explanation
document_nr_unique	UNIQUE	Combination of (nr) is unique
document_pkey	PRIMARY KEY	Combination of (id) is the primary key

Sequence: document_nr_seq

Allocates numbers 1 to 9999 for document number.

transaction

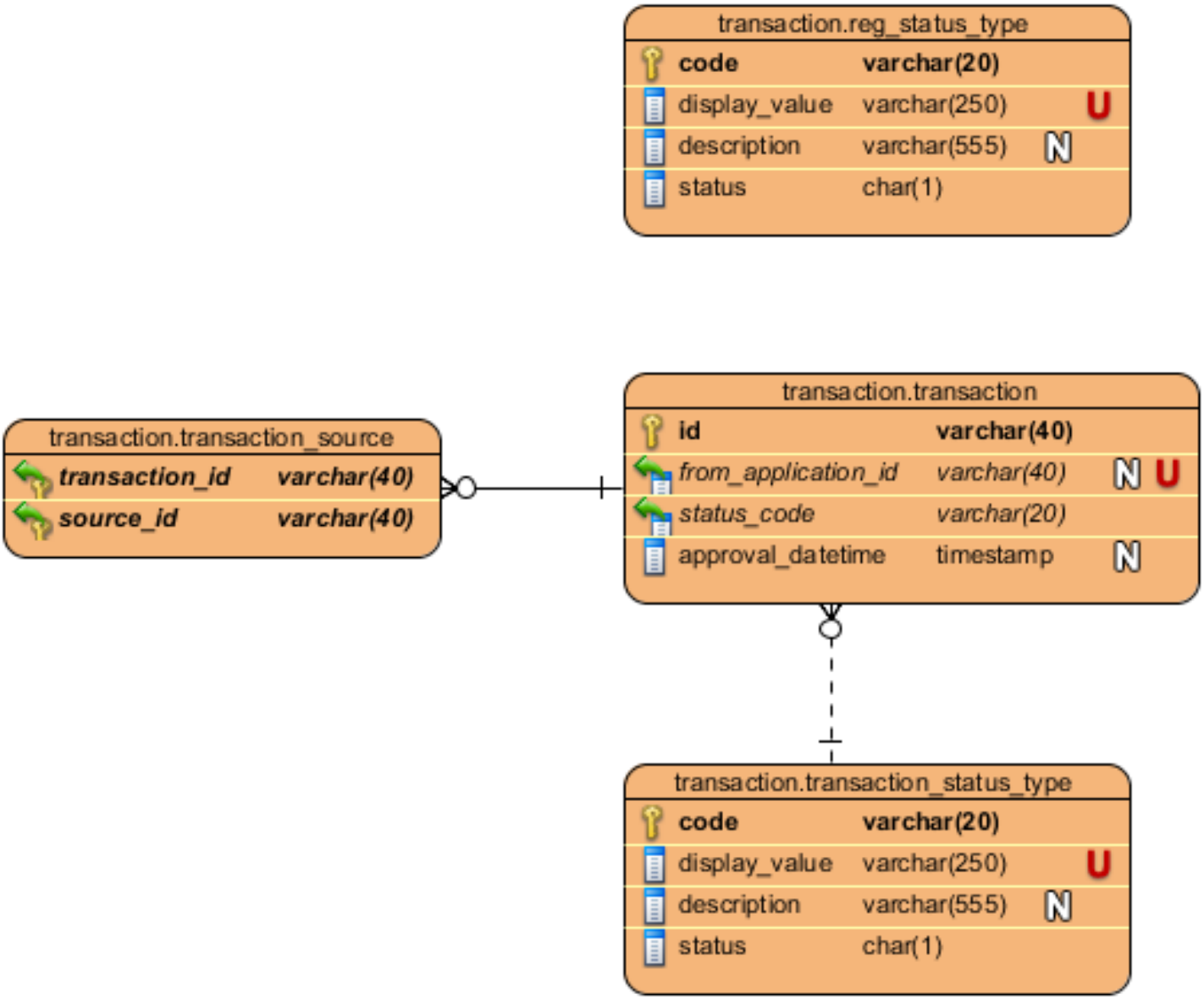


Table: reg_status_type

This table has the list of statuses that a registration about Rights/Restrictions/ Responsabilities/ Cadastral objects / Sources can have.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code of the status that an rrr can have
display_value	varchar(250)	False		The value that will be displayed to the user
description	varchar(555)	True		Description of the status
status	char(1)	False		The status of this code itself.

Constraints

Name	Type	Explanation
reg_status_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
reg_status_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
rrr_status_code_fk59	**From columns**: status_code **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_status_code_fk60	**From columns**: status_code **From Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_status_code_fk62	**From columns**: status_code **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
notation_status_code_fk68	**From columns**: status_code **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 1	
source_status_code_fk86	**From columns**: status_code **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_reg_moment_fk101	**From columns**: target_reg_moment **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	current	Current		c
2	pending	Pending		c
3	historic	Historic		c
4	previous	Previous		c

Table: transaction

Changes in the system come by transactions. A transaction is initiated (optionally) by a service. By introducing the concept of transaction it can be traced how the changes in the administrative schema came. Also by approving the transaction we can approve changes or by rejecting a transaction we can remove the pending changes that came with it and restore the previous state of the administrative schema.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		Meaningless id.
from_application_id	varchar(40)	True		Ghana extension: This was from_service_id. Because now the service is merged into the application, the transaction can be started from a application.
status_code	varchar(20)	False	'pending'	The status of the transaction.
approval_datetime	timestamp	True		The approval datetime of the transaction.

Constraints

Name	Type	Explanation
transaction_from_application_id_unique	UNIQUE	Combination of (from_application_id) is unique
transaction_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
transaction_status_code_fk77	**From columns**: status_code **To Entity**: transaction_status_type **From cardinality**: 0..* **To Cardinality**: 1	
transaction_from_application_id_fk128	**From columns**: from_application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
notation_transaction_id_fk74	**From columns**: transaction_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 1	
rrr_transaction_id_fk81	**From columns**: transaction_id **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	

ba_unit_transaction_id_fk82	**From columns**: transaction_id **From Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
source_transaction_id_fk85	**From columns**: transaction_id **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	
cadastre_object_transaction_id_fk88	**From columns**: transaction_id **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
survey_point_transaction_id_fk91	**From columns**: transaction_id **From Entity**: survey_point **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_target_transaction_id_fk92	**From columns**: transaction_id **From Entity**: cadastre_object_target **From cardinality**: 0..* **To Cardinality**: 1	
transaction_source_transaction_id_fk93	**From columns**: transaction_id **From Entity**: transaction_source **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_node_target_transaction_id_fk105	**From columns**: transaction_id **From Entity**: cadastre_object_node_target **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_transaction_id_fk107	**From columns**: transaction_id **From Entity**: ba_unit_target **From cardinality**: 0..* **To Cardinality**: 1	

Table: transaction_status_type

This table has the list of statuses that a transaction can take.Potential values are current, pending, rejected.

Columns

Name	Type	Optional	Default	Description
code	varchar(20)	False		The code of the status that an rrr can have
display_value	varchar(250)	False		The value that will be displayed to the user
description	varchar(555)	True		Description of the status
status	char(1)	False		The status of this code itself.

Constraints

Name	Type	Explanation
transaction_status_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
transaction_status_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (to)

Name	Information	Description
transaction_status_code_fk77	**From columns**: status_code **From Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	description	status
1	approved	Approved::::Approvata		c
2	cancelled	CancelledApproved::::Cancellata		c
3	pending	Pending::::In Attesa		c
4	completed	Completed::::ITALIANO		c

Table: transaction_source

Columns

Name	Type	Optional	Default	Description
transaction_id	varchar(40)	False		
source_id	varchar(40)	False		

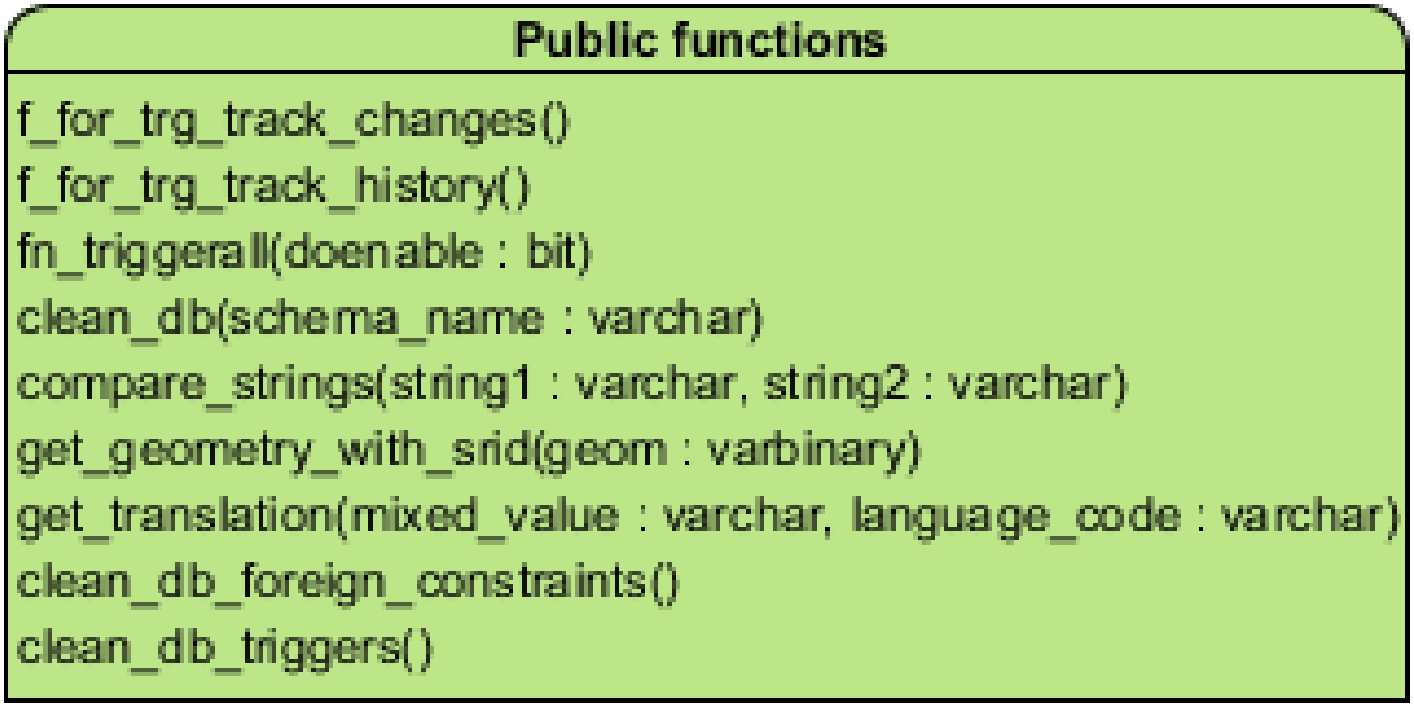
Constraints

Name	Type	Explanation
transaction_source_pkey	PRIMARY KEY	Combination of (transaction_id,source_id) is the primary key

Relationships (from)

Name	Information	Description
transaction_source_transaction_id_fk93	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
transaction_source_source_id_fk94	**From columns**: source_id **To Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	

public



Function: f_for_trg_track_changes

This function is called from triggers in every table that has the columns to track changes. It also checks if the record has been already updated from another client application by checking the rowversion.

Function: f_for_trg_track_history

This function is called after a change is happening in a table to push the former values to the historic keeping table.

Function: fn_triggerall

This function can be used to disable all triggers in the database. **How to use** to call to disable all triggers in all schemas in db select fn_triggerall(false); to call to enable all triggers in all schemas in db select fn_triggerall(true);

Parameters

Name	Type	Direction	Description
doenable	bool		If true all triggers will be enabled.If false triggers will be disabled.

Function: clean_db

This function will delete any table and function in a schema that does not belong to the standard postgis template.

Parameters

Name	Type	Direction	Description
schema_name	varchar		The name of schema that will be cleaned.

Function: compare_strings

Special string compare function.

Parameters

Name	Type	Direction	Description
string1	varchar		
string2	varchar		

Function: get_geometry_with_srid

This function assigns a srid found in the settings to the geometry passed as parameter.

Parameters

Name	Type	Direction	Description
geom	geometry		

Function: get_translation

This function is used to translate the values that are supposed to be multilingual like the reference data values (display_value)

Parameters

Name	Type	Direction	Description
mixed_value	varchar		
language_code	varchar		

Function: clean_db_foreign_constraints

This function can be used to drop all foreign key constraints from the database.

Function: clean_db_triggers

This function removes all triggers and their related functions in the database. It assumes that the trigger functions are found in the public schema.