FLOSS Solutions for Open Land Administration (SOLA)

Data Dictionary

FAO NRC Land Tenure Team
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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.

document

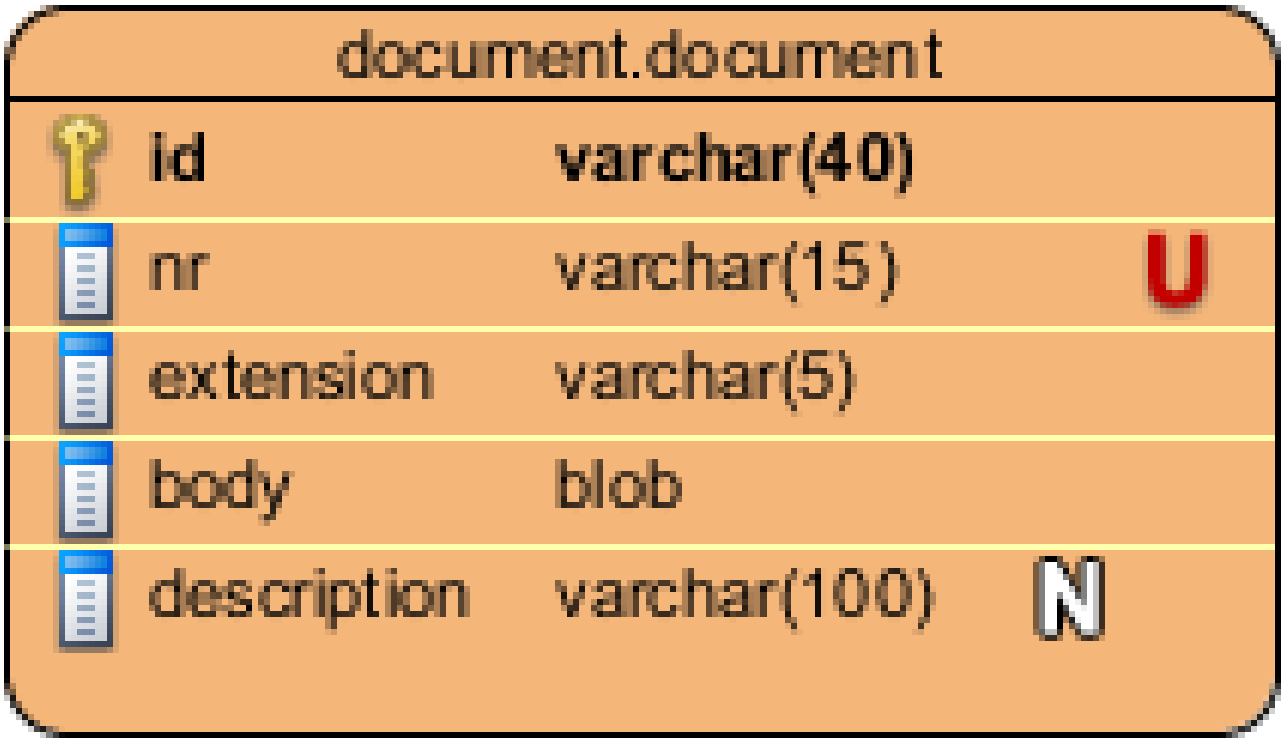

Table: document

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.

source

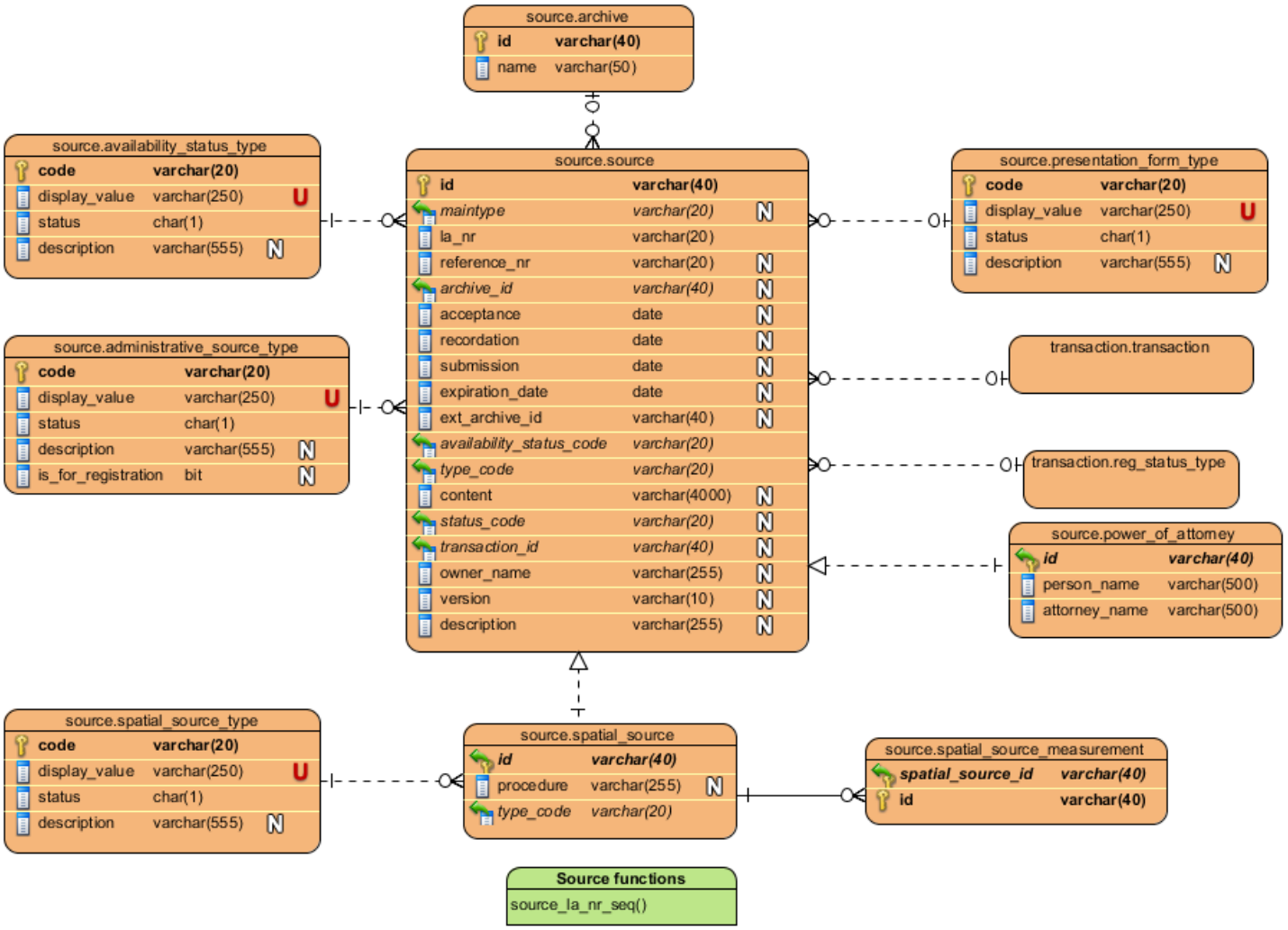

Table: source

Documents or recognised facts providing the basis for the recording of a registration, cadastre change, right, responsibility or administrative action performed by the land officeLADM Reference Object LA_SourceLADM DefinitionNot 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
recordation	date	True		**LADM Definition** - The date of formalization by the source agency.
submission	date	True	now()	**LADM Definition** - The date of submission of the source by a party
expiration_date	date	True		
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_archive_id_fk0	**From columns**: archive_id **To Entity**: archive **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
source_maintype_fk1	**From columns**: maintype **To Entity**: presentation_form_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

source_availability_status_code_fk2	**From columns**: availability_status_code **To Entity**: availability_status_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
source_type_code_fk3	**From columns**: type_code **To Entity**: administrative_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
source_status_code_fk4	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	
source_transaction_id_fk5	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
spatial_source_id_fk28	**From columns**: id **From Entity**: spatial_source **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
source_describes_rrr_source_id_fk40	**From columns**: source_id **From Entity**: source_describes_rrr **From cardinality**: 0..* **To Cardinality**: 1	
source_describes_ba_unit_source_id_fk42	**From columns**: source_id **From Entity**: source_describes_ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
power_of_attorney_id_fk74	**From columns**: id **From Entity**: power_of_attorney **From cardinality**: 1 **To Cardinality**: 1	
transaction_source_source_id_fk97	**From columns**: source_id **From Entity**: transaction_source **From cardinality**: 0..* **To Cardinality**: 1	
application_uses_source_source_id_fk102	**From columns**: source_id **From Entity**: application_uses_source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Triggers

Name	Event
change_of_status	before update

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
name	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_fk0	**From columns**: archive_id **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA 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_fk1	**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: 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_fk2	**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
description	varchar(555)	True		**LADM Definition** - Description of the administrative source type
is_for_registration	bool	True	false	**SOLA Extension** - To identify documents to be registered that must have current status to be used in rights registration (or other processes controlled by a transaction)

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_fk3	**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_fk1	**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	description	is_for_registration
1	agriConsent	Agricultural Consent::::Permesso Agricolo	x		

2	agriLease	Agricultural Lease::::Contratto Affitto Agricolo	x		
3	agriNotaryStatement	Agricultural Notary Statement::::Dichiarazione Agricola Notaio	x		
4	deed	Deed	c		
5	lease	Lease::::Affitto	c		
6	mortgage	Mortgage::::Ipoteca	c		
7	title	Title::::Titolo	c		
8	proclamation	Proclamation::::Bando	c	Extension to LADM	
9	courtOrder	Court Order::::Ordine Tribunale	c	Extension to LADM	
10	agreement	Agreement::::Accordo	c	Extension to LADM	
11	contractForSale	Contract for Sale::::Contratto di vendita	c	Extension to LADM	
12	will	Will::::Testamento	c	Extension to LADM	
13	powerOfAttorney	Power of Attorney::::Procura	c	Extension to LADM	true
14	standardDocument	Standard Document::::Documento Standard	c	Extension to LADM	true
15	cadastralMap	Cadastral Map::::Mappa Catastale	c	Extension to LADM	
16	cadastralSurvey	Cadastral Survey::::Rilevamento Catastale	c	Extension to LADM	
17	waiver	Waiver to Caveat or other requirement	c	Extension to LADM	
18	idVerification	Form of Identification including Personal ID	c	Extension to LADM	
19	caveat	Caveat::::	c	Extension to LADM	
20	publicNotification	Public Notification for Systematic Registration::::Pubblica notifica per registrazione sistematica	c	Extension to LADM	
21	systematicRegn	Systematic Registration Application::::Registrazione sistematica	c	Extension to LADM	
22	objection	Objection supporting document::::Obiezione	c	Extension to LADM	
23	objectionSolved	Objection Solved supporting document::::ITALIANO	c		

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_id_fk28	**From columns**: id **To Entity**: source **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
spatial_source_type_code_fk29	**From columns**: type_code **To Entity**: spatial_source_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
spatial_source_measurement_spatial_source_id_fk30	**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_fk29	**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
8	surveyData	Survey Data (Coordinates)::::Rilevamento Data	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_fk30	**From Columns**: spatial_source_id **To Entity**: spatial_source **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_fk74	**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.

transaction

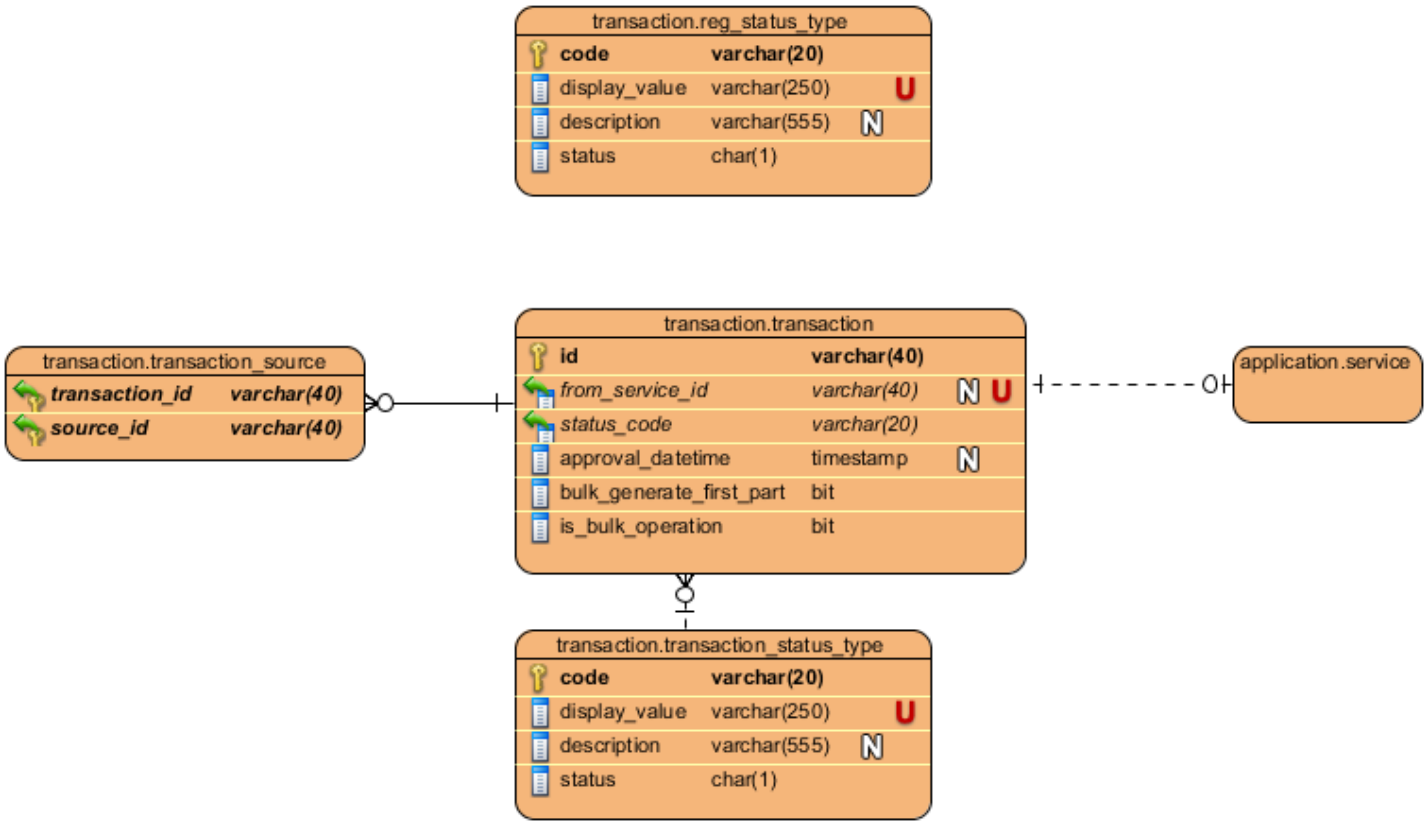

Table: reg_status_type

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

source_status_code_fk4	**From columns**: status_code **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	
cadastre_object_status_code_fk54	**From columns**: status_code **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
notation_status_code_fk63	**From columns**: status_code **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_status_code_fk76	**From columns**: status_code **From Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
rrr_status_code_fk80	**From columns**: status_code **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_target_reg_moment_fk117	**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_service_id	varchar(40)	True		The service id if the transaction is initiated by a service.
status_code	varchar(20)	False	'pending'	The status of the transaction.
approval_datetime	timestamp	True		The approval datetime of the transaction.
bulk_generate_first_part	bool	False	false	This is used during the bulk operations when transfering cadastre objects. If true, the first part of the name is generated from the process.
is_bulk_operation	bool	False	false	It is true, if this is a transaction initiated by the bulk operations processes. It is used to distinguish from other kinds of transactions. This property should not be exposed to the client.

Constraints

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

Relationships (from)

Name	Information	Description
transaction_from_service_id_fk6	**From columns**: from_service_id **To Entity**: service **From cardinality**: 1 **To Cardinality**: 0..1	
transaction_status_code_fk27	**From columns**: status_code **To Entity**: transaction_status_type **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
source_transaction_id_fk5	**From columns**: transaction_id **From Entity**: source **From cardinality**: 0..* **To Cardinality**: 0..1	

cadastre_object_transaction_id_fk56	**From columns**: transaction_id **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
notation_transaction_id_fk62	**From columns**: transaction_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_transaction_id_fk73	**From columns**: transaction_id **From Entity**: ba_unit_target **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_transaction_id_fk77	**From columns**: transaction_id **From Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
rrr_transaction_id_fk81	**From columns**: transaction_id **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_target_transaction_id_fk94	**From columns**: transaction_id **From Entity**: cadastre_object_target **From cardinality**: 0..* **To Cardinality**: 1	
survey_point_transaction_id_fk95	**From columns**: transaction_id **From Entity**: survey_point **From cardinality**: 0..* **To Cardinality**: 1	
transaction_source_transaction_id_fk96	**From columns**: transaction_id **From Entity**: transaction_source **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_node_target_transaction_id_fk98	**From columns**: transaction_id **From Entity**: cadastre_object_node_target **From cardinality**: 0..* **To Cardinality**: 1	
spatial_unit_temporary_transaction_id_fk127	**From columns**: transaction_id **From Entity**: spatial_unit_temporary **From cardinality**: 0..* **To Cardinality**: 1	
spatial_unit_transaction_id_fk129	**From columns**: transaction_id **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 0..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_fk27	**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::::Completato		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_fk96	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
transaction_source_source_id_fk97	**From columns**: source_id **To Entity**: source **From cardinality**: 0..* **To Cardinality**: 1	

application

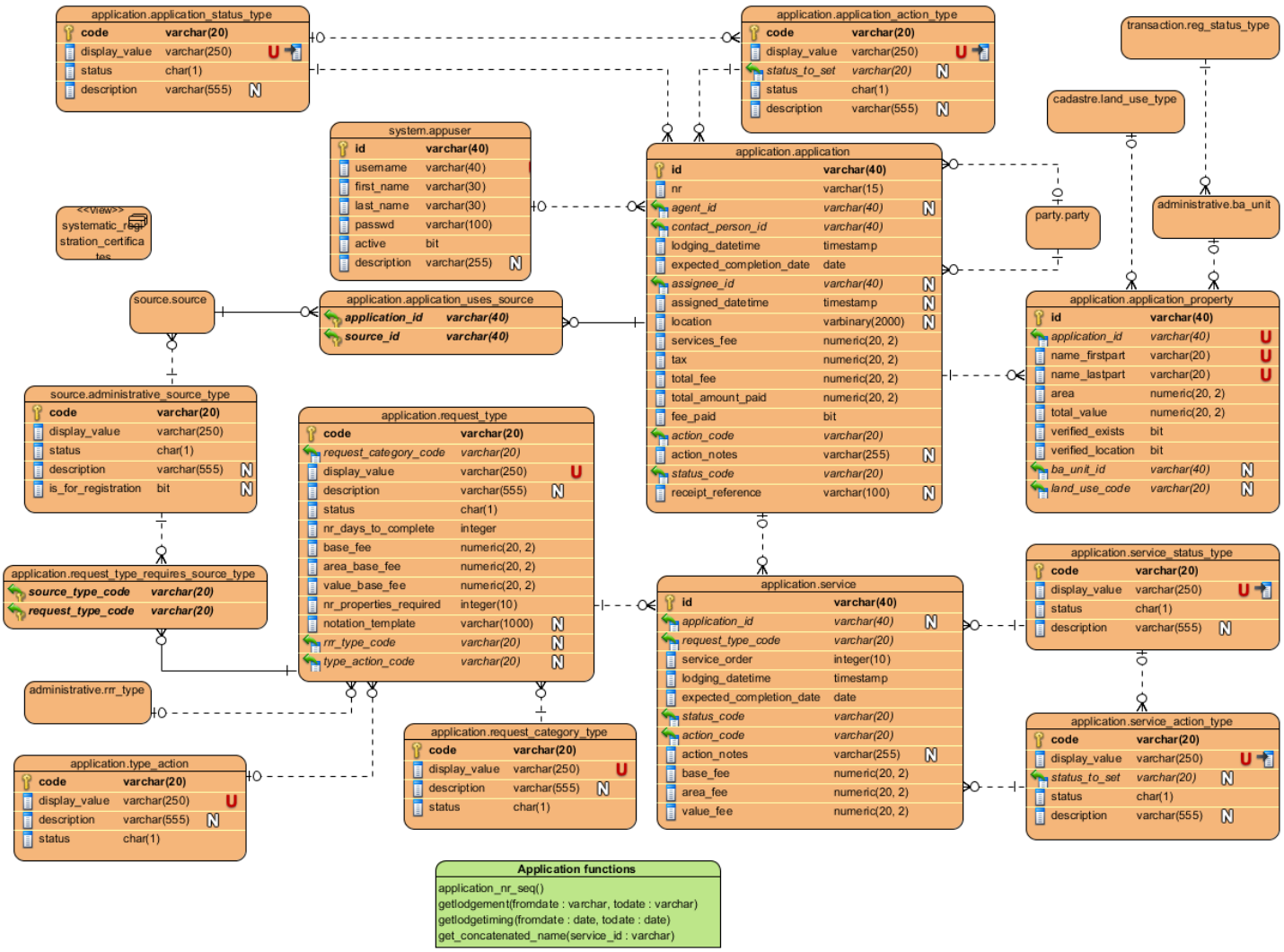

Table: service

Various forms of services provided by a land officeLADM Reference ObjectFLOSS SOLA ExtensionLADM DefinitionNot Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** - system generated id for a service
application_id	varchar(40)	True		**SOLA Extension** - Application where this service is found.
request_type_code	varchar(20)	False		**SOLA Extension** -The request typecode
service_order	integer	False	0	**SOLA Extension** - The order of the service within the application.
lodging_datetime	timestamp	False	now()	**SOLA Extension** - The start date a lodgement is made. By default it is assigned from the system.

expected_completion_date	date	False		**SOLA Extension** - Expected date when the service must be completed. It is calculated based in the lodging_datetime plus the nr_days_to_complete of the selected service type. At the moment, it is done as a simple adding of an interval.
status_code	varchar(20)	False	'lodged'	**SOLA Extension** - service status code
action_code	varchar(20)	False	'lodge'	**SOLA Extension** - action code
action_notes	varchar(255)	True		**SOLA Extension** - Extra description that can be added when the status of service can be changed.
base_fee	numeric(20, 2)	False	0	**SOLA Extension** - Base fee of this service. It is derived by the base_fee of the request_type.
area_fee	numeric(20, 2)	False	0	**SOLA Extension** - It is the fee calculated based in the sum of areas of all properties involved in the service. Derived as: request_type.area_base_fee * SUM(application_property.area)
value_fee	numeric(20, 2)	False	0	**SOLA Extension** - It is the fee calculated based in the sum of values of all properties involved in the service. Derived as: request_type.value_base_fee * SUM(application_property.value)

Constraints

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

Relationships (from)

Name	Information	Description
service_application_id_fk7	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
service_request_type_code_fk19	**From columns**: request_type_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
service_status_code_fk24	**From columns**: status_code **To Entity**: service_status_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
service_action_code_fk25	**From columns**: action_code **To Entity**: service_action_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Relationships (to)

Name	Information	Description
transaction_from_service_id_fk6	**From columns**: from_service_id **From Entity**: transaction **From cardinality**: 1 **To Cardinality**: 0..1	

Table: application

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

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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.
agent_id	varchar(40)	True		**SOLA Extension** - The id of the agent which is filling the application. It is not necessary one of the parties involved in user rights. It can be a firm or individual.
contact_person_id	varchar(40)	False		**SOLA Extension** - This is the contact person and it is always an individual that can be reachable in different ways.
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	False	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.
services_fee	numeric(20, 2)	False	0	**SOLA Extension** - The total amount of services fee. This is derived as the sum of fees of all services bundled in the application.
tax	numeric(20, 2)	False	0	**SOLA Extension** - Tax or proportionate component of the services_fee.
total_fee	numeric(20, 2)	False	0	**SOLA Extension** - The total amount of the fee (including tax) that has to be paid. Derived as: services_fee + tax
total_amount_paid	numeric(20, 2)	False	0	**SOLA Extension** - The amount paid. Normally it must be equal to the total_fee.
fee_paid	bool	False	false	**SOLA Extension** - It shows if the fee is paid.

action_code	varchar(20)	False	'lodge'	**SOLA Extension** - The last action that happened to the application. Some values of this attribute are generated by the system.
action_notes	varchar(255)	True		**SOLA Extension** - Extra description about the action.
status_code	varchar(20)	False	'lodged'	The status of the application.
receipt_reference	varchar(100)	True		**SOLA Extension** - This is the fee receipt reference number that is exposed to the user.

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_agent_id_fk8	**From columns**: agent_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
application_contact_person_id_fk14	**From columns**: contact_person_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_assignee_id_fk15	**From columns**: assignee_id **To Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
application_action_code_fk16	**From columns**: action_code **To Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_status_code_fk18	**From columns**: status_code **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Relationships (to)

Name	Information	Description
service_application_id_fk7	**From columns**: application_id **From Entity**: service **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

application_property_application_id_fk99	**From columns**: application_id **From Entity**: application_property **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_uses_source_application_id_fk100	**From columns**: application_id **From Entity**: application_uses_source **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: application_action_type

Reference Table / Code list of action types that are performed in relation to an (land office) application for servicesLADM Reference Object FLOSS SOLA ExtensionLADM DefinitionNot 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_to_set	varchar(20)	True		
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
application_action_type_display_value_unique	UNIQUE	Combination of (display_value) is unique
application_action_type_pkey	PRIMARY KEY	Combination of (code) is the primary key

Relationships (from)

Name	Information	Description
application_action_type_status_to_set_fk17	**From columns**: status_to_set **To Entity**: application_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
application_action_code_fk16	**From columns**: action_code **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
br_validation_target_application_moment_fk115	**From columns**: target_application_moment **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status_to_set	status	description

1	lodge	Lodgement Notice Prepared::::Ricevuta della Registrazione Preparata	lodged	c	Lodgement notice is prepared (action is automatically logged when application details are saved for the first time::::La ricevuta della registrazione pronta
2	addDocument	Add document::::Documenti scannerizzati allegati alla pratica		c	Scanned Documents linked to Application (action is automatically logged when a new document is saved)::::Documenti scannerizzati allegati alla pratica
3	withdraw	Withdraw application::::Pratica Ritirata	annulled	c	Application withdrawn by Applicant (action is manually logged)::::Pratica Ritirata dal Richiedente
4	cancel	Cancel application::::Pratica cancellata	annulled	c	Application cancelled by Land Office (action is automatically logged when application is cancelled)::::Pratica cancellata da Ufficio Territoriale
5	requisition	Requisition:::Ulteriori Informazioni domandate dal richiedente	requisitioned	c	Further information requested from applicant (action is manually logged)::::Ulteriori Informazioni domandate dal richiedente
6	validateFailed	Quality Check Fails::::Controllo Qualita Fallito		c	Quality check fails (automatically logged when a critical business rule failure occurs)::::Controllo Qualita Fallito
7	validatePassed	Quality Check Passes::::Controllo Qualita Superato		c	Quality check passes (automatically logged when business rules are run without any critical failures)::::Controllo Qualita Superato
8	approve	Approve::::Approvata	approved	c	Application is approved (automatically logged when application is approved successively)::::Pratica approvata
9	archive	Archive::::Archiviata	completed	c	Paper application records are archived (action is manually logged)::::I fogli della pratica sono stati archiviati
10	dispatch	Dispatch::::Inviata		c	Application documents and new land office products are sent or collected by applicant (action is manually logged)::::I documenti della pratica e i nuovi prodotti da Ufficio Territoriale sono stati spediti o ritirati dal richiedente
11	lapse	Lapse::::Decadimento	annulled	c	
12	assign	Assign::::Assegna		c	
13	unAssign	Unassign::::Dealloca		c	
14	resubmit	Resubmit::::Reinvia	lodged	c	
15	validate	Validate::::Convalida		c	The action validate does not leave a mark, because validateFailed and validateSucceded will be used instead when the validate is completed.

Table: application_status_type

Reference Table / Code list for application status type

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Columns

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

Constraints

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

Relationships (to)

Name	Information	Description
application_action_type_status_to_set_fk17	**From columns**: status_to_set **From Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	
application_status_code_fk18	**From columns**: status_code **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	status	description
1	lodged	Lodged::::Registrata	c	Application has been lodged and officially received by land office::::La pratica registrata e formalmente ricevuta da ufficio territoriale
2	approved	Approved::::Approvato	c	
3	annulled	Annulled::::Anullato	c	
4	completed	Completed::::Completato	c	

5	requisitioned	Requisitioned::::Requisito	c	

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(20)	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.

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_fk20	**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_fk21	**From columns**: rrr_type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 0..1	
request_type_type_action_code_fk23	**From columns**: type_action_code **To Entity**: type_action **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
service_request_type_code_fk19	**From columns**: request_type_code **From Entity**: service **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
request_type_requires_source_type_request_type_code_fk104	**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_fk118	**From columns**: target_request_type_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	request_category_code	display_value	description
1	cadastreChange	registrationServices	Change to Cadastre::::Cambio del Catasto	
2	redefineCadastre	registrationServices	Redefine Cadastre::::Redefinizione catasto	
3	documentCopy	informationServices	Document Copy::::Copia Documento	
4	varyMortgage	registrationServices	Vary Mortgage::::Modifica ipoteca	
5	newFreehold	registrationServices	New Freehold Title::::Nuovo Titolo	
6	serviceEnquiry	informationServices	Service Enquiry::::Richiesta Servizio	
7	regnDeeds	registrationServices	Deed Registration::::Registrazione Atto	
8	regnOnTitle	registrationServices	Registration on Title::::Registrazione di Titolo	
9	regnPowerOfAttorney	registrationServices	Registration of Power of Attorney::::Registrazione di Procura	

10	regnStandardDocument	registrationServices	Registration of Standard Document::::Documento di Documento Standard	
11	titleSearch	informationServices	Title Search::::Ricerca Titolo	
12	surveyPlanCopy	informationServices	Survey Plan Copy::::Copia Piano Perizia	
13	cadastrePrint	informationServices	Cadastre Print::::Stampa Catastale	
14	cadastreExport	informationServices	Cadastre Export::::Export Catastale	
15	cadastreBulk	informationServices	Cadastre Bulk Export::::Export Carico Catastale	
16	registerLease	registrationServices	Register Lease::::Registrazione affitto	
17	noteOccupation	registrationServices	Occupation Noted::::Nota occupazione	
18	newOwnership	registrationServices	Change of Ownership::::Cambio proprieta	
19	usufruct	registrationServices	Register Usufruct::::Registrazione usufrutto	
20	waterRights	registrationServices	Register Water Rights::::Registrazione diritti di acqua'	
21	mortgage	registrationServices	Register Mortgage::::Registrazione ipoteca	
22	buildingRestriction	registrationServices	Register Building Restriction::::Registrazione restrizioni edificabilita	
23	servitude	registrationServices	Register Servitude::::registrazione servitu	
24	lifeEstate	registrationServices	Establish Life Estate::::Imposizione patrimonio vitalizio	
25	newApartment	registrationServices	New Apartment Title::::Nuovo Titolo	
26	newState	registrationServices	New State Title::::Nuovo Titolo	
27	caveat	registrationServices	Register Caveat::::Registrazione prelazione'	
28	removeCaveat	registrationServices	Remove Caveat::::Rimozione prelazione	
29	historicOrder	registrationServices	Register Historic Preservation Order::::Registrazione ordine storico di precedenze	
30	limitedRoadAccess	registrationServices	Register Limited Road Access::::registrazione limitazione accesso stradale	
31	varyLease	registrationServices	Vary Lease::::Modifica affitto	
32	varyRight	registrationServices	Vary Right (General)::::Modifica diritto (generico)	
33	removeRight	registrationServices	Remove Right (General)::::Rimozione diritto (generico)	

34	newDigitalTitle	registrationServices	Convert to Digital Title::::Nuovo Titolo Digitale	
35	newDigitalProperty	registrationServices	New Digital Property::::Nuova Proprieta Digitale	
36	removeRestriction	registrationServices	Remove Restriction (General)::::Rimozione restrizione (generica)	
37	cancelProperty	registrationServices	Cancel title::::Cancella prioprieta	
38	varyCaveat	registrationServices	Vary caveat	
39	cnclPowerOfAttorney	registrationServices	Cancel Power of Attorney	
40	cnclStandardDocument	registrationServices	Withdraw Standard Document	To withdraw from use any standard document (such as standard mortgage or standard lease)
41	systematicRegn	registrationServices	Systematic Registration::::ITALIANO	

Nr	status	nr_days_to_complete	base_fee	area_base_fee	value_base_fee
1	c	30	25.00	0.10	0
2	c	30	25.00	0.10	0
3	c	1	0.50	0.00	0
4	c	1	5.00	0.00	0
5	c	5	5.00	0.00	0
6	c	1	0.00	0.00	0
7	x	3	1.00	0.00	0
8	c	5	5.00	0.00	0.01
9	c	3	5.00	0.00	0
10	c	3	5.00	0.00	0
11	c	1	5.00	0.00	0
12	x	1	1.00	0.00	0
13	c	1	0.50	0.00	0
14	x	1	0.00	0.10	0
15	x	5	5.00	0.10	0
16	c	5	5.00	0.00	0.01
17	x	5	5.00	0.00	0.01
18	c	5	5.00	0.00	0.02
19	x	5	5.00	0.00	0
20	x	5	5.00	0.01	0
21	c	5	5.00	0.00	0
22	c	5	5.00	0.00	0
23	c	5	5.00	0.00	0
24	x	5	5.00	0.00	0.02
25	c	5	5.00	0.00	0.02

26	x	5	0.00	0.00	0
27	c	5	50.00	0.00	0
28	c	5	5.00	0.00	0
29	c	5	5.00	0.00	0
30	c	5	5.00	0.00	0
31	c	5	5.00	0.00	0
32	c	5	5.00	0.00	0
33	c	5	5.00	0.00	0
34	c	5	0.00	0.00	0
35	x	5	0.00	0.00	0
36	c	5	5.00	0.00	0
37	c	5	5	0	0
38	c	5	5	0	0
39	c	1	5.00	0	0
40	c	1	5.00	0	0
41	c	90	50.00	0	0

Nr	nr_properties_required	notation_template	rrr_type_code	type_action_code
1	1			
2	1			
3	0			
4	1	Change on the mortgage	mortgage	vary
5	1	Fee Simple Estate		
6	0			
7	0			
8	1			
9	0			
10	0			
11	1			
12	0			
13	0			
14	0			
15	0			
16	1	Lease of nn years to	lease	new
17	1	Occupation by recorded		
18	1	Transfer to	ownership	vary
19	1	right granted to	usufruct	new
20	1	Water Rights granted to	waterrights	new
21	1	Mortgage to	mortgage	new

22	1	Building Restriction	noBuilding	new
23	1	Servitude over in favour of	servitude	new
24	1	Life Estate for with Remainder Estate in	lifeEstate	new
25	1	Apartment Estate	apartment	new
26	1	State Estate		
27	1	Caveat in the name of	caveat	new
28	1	Caveat removed	caveat	cancel
29	1	Historic Preservation Order	noBuilding	new
30	1	Limited Road Access	limitedAccess	
31	1	Variation of Lease	lease	vary
32	1	Variation of		vary
33	1	cancelled		cancel
34	1	Title converted to digital format		
35	1			
36	1	cancelled		cancel
37	1			cancel
38	1		caveat	vary
39	0			cancel
40	0			
41	1	Title issued at completion of systematic registration	ownership	new

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_fk20	**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: 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_fk23	**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::::Nuovo		c
2	vary	Vary::::Variazione		c
3	cancel	Cancel::::Cancellazione		c

Table: service_status_type

It is the status that a service can have.

Columns

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

Constraints

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

Relationships (to)

Name	Information	Description
service_status_code_fk24	**From columns**: status_code **From Entity**: service **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
service_action_type_status_to_set_fk26	**From columns**: status_to_set **From Entity**: service_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status	description
1	lodged	Lodged::::Registrata	c	Application for a service has been lodged and officially received by land office::::La pratica per un servizio, registrata e formalmente ricevuta da ufficio territoriale
2	completed	Completed::::Completata	c	
3	pending	Pending::::Pendente	c	
4	cancelled	Cancelled::::Cancellato	c	

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

Relationships (from)

Name	Information	Description
service_action_type_status_to_set_fk26	**From columns**: status_to_set **To Entity**: service_status_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
service_action_code_fk25	**From columns**: action_code **From Entity**: service **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
br_validation_target_service_moment_fk116	**From columns**: target_service_moment **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	status_to_set	status	description
1	lodge	Lodge::::Registrata	lodged	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	pending	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	cancelled	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	completed	c	Application is ready for approval (action is automatically logged when service is marked as complete::::Pratica pronta per approvazione
5	revert	Revert::::Ripristino	pending	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)::::Lo stato del servizio riportato da completato a pendente (azione automaticamente registrata quando un servizio viene reinviato per ulteriori adempimenti)

Table: application_property

Details of the property associated with an application

LADM Reference Object
FLOSS SOLA Extension

LADM Definition
Not Applicable

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**SOLA Extension** - the id for the application property record
application_id	varchar(40)	False		**SOLA Extension** - the application id
name_firstpart	varchar(20)	False		**SOLA Extension** - the first part of the property reference id
name_lastpart	varchar(20)	False		**SOLA Extension** - the last part of the property reference ID
area	numeric(20, 2)	False	0	**SOLA Extension** - the area in square metres of application - property
total_value	numeric(20, 2)	False	0	**SOLA Extension** - the land (or property value - will vary from jurisdiction to jurisdiction) on which the proportionate service fee or tax is calculated
verified_exists	bool	False	false	**SOLA Extension** - the flag that indicates that the application property already exists (as an/some instance(s) of ba_unit
verified_location	bool	False	false	**SOLA Extension** - the flag that indicates that the application property already exists (as an/some instance(s) of ba_unit
ba_unit_id	varchar(40)	True		**LADM Definition** - the id for ba_unit
land_use_code	varchar(20)	True		

Constraints

Name	Type	Explanation
application_property_property_once	UNIQUE	Combination of (application_id, name_firstpart, name_lastpart) is unique
application_property_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
application_property_application_id_fk99	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

application_property_ba_unit_id_fk100	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 0..1	SOLA Extension relationship - no refinement
application_property_land_use_code_fk126	**From columns**: land_use_code **To Entity**: land_use_type **From cardinality**: 0..* **To Cardinality**: 0..1	

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
application_id	varchar(40)	False		**SOLA Extension** - the application id
source_id	varchar(40)	False		**LADM Definition** - the source (document) id

Constraints

Name	Type	Explanation
application_uses_source_pkey	PRIMARY KEY	Combination of (application_id,source_id) is the primary key

Relationships (from)

Name	Information	Description
application_uses_source_application_id_fk101	**From columns**: application_id **To Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
application_uses_source_source_id_fk102	**From columns**: source_id **To Entity**: source **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(20)	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_source_type_code_fk103	**From column**: source_type_code **To Entity**: administrative_source_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
request_type_requires_source_type_request_type_code_fk104	**From column**: request_type_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	source_type_code	request_type_code
1	cadastralSurvey	cadastreChange
2	cadastralSurvey	redefineCadastre
3	mortgage	varyMortgage
4	title	varyMortgage
5	title	regnOnTitle
6	deed	regnDeeds
7	lease	registerLease
8	powerOfAttorney	regnPowerOfAttorney
9	standardDocument	regnStandardDocument
10	title	noteOccupation

11	deed	noteOccupation
12	deed	usufruct
13	deed	waterRights
14	mortgage	mortgage
15	deed	buildingRestriction
16	deed	servitude
17	title	lifeEstate
18	deed	lifeEstate
19	deed	newApartment
20	deed	newState
21	title	caveat
22	deed	removeCaveat
23	title	removeCaveat
24	deed	historicOrder
25	deed	limitedRoadAccess
26	lease	varyLease
27	deed	varyLease
28	title	varyRight
29	deed	varyRight
30	deed	removeRight
31	title	removeRight
32	deed	removeRestriction
33	title	removeRestriction
34	deed	cnclPowerOfAttorney
35	deed	cnclStandardDocument
36	caveat	caveat

View: systematic_registration_certificates

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: get_concatenated_name

This function returns the concatenated list of spatial objects contained in a ba_unit for each service, if any. If there are no spatial objects then it only returns that it is a property.

Parameters

Name	Type	Direction	Description
service_id	varchar		

party

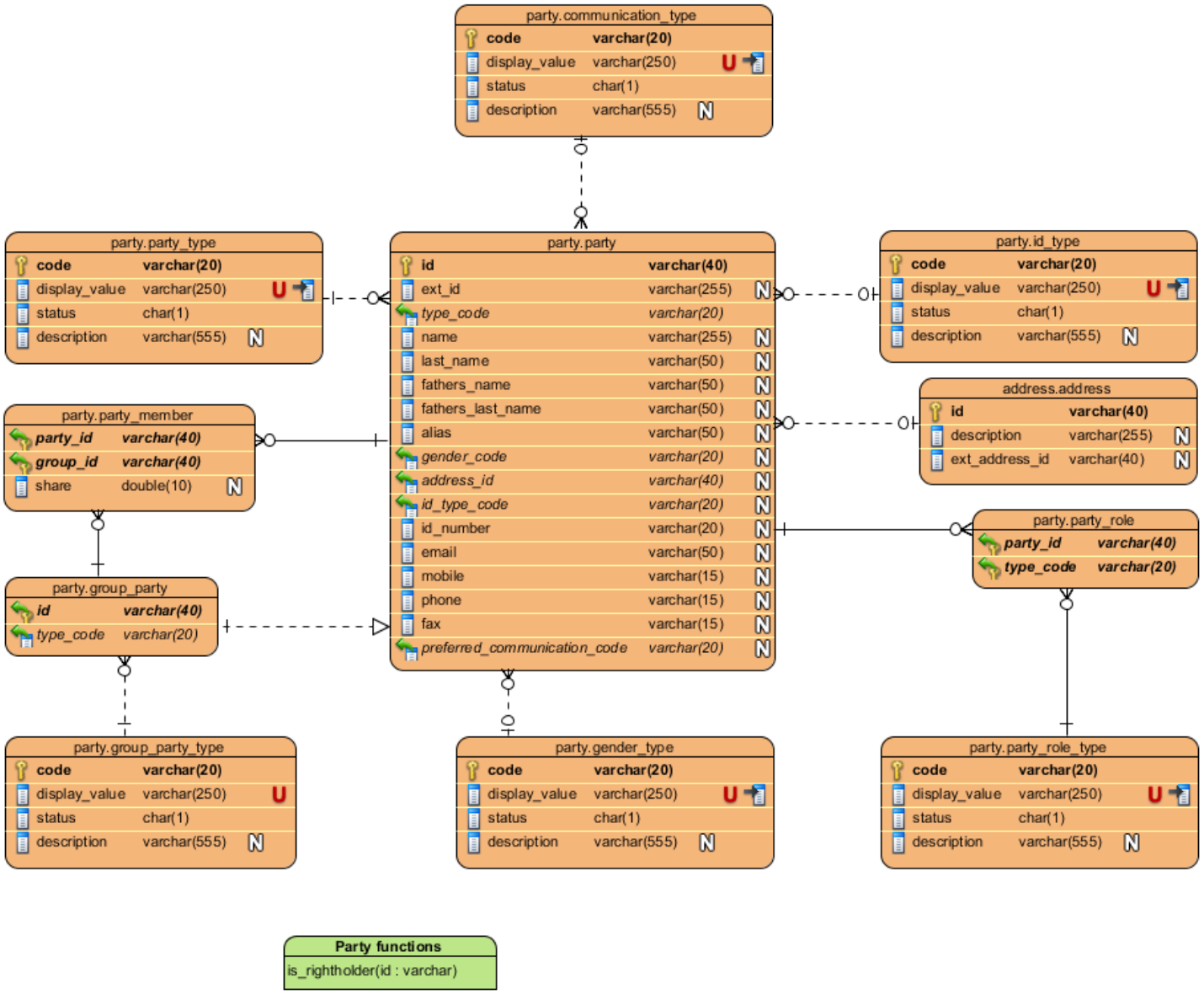


Table: party

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

fathers_name	varchar(50)	True		**SOLA Extension** - First name of father of the party.
fathers_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.
address_id	varchar(40)	True		**SOLA Extension** - An identifier for the contact address of party
id_type_code	varchar(20)	True		**SOLA Extension** The type of the identification which is used to identify the party.
id_number	varchar(20)	True		**SOLA Extension** The number of the id document.
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

Constraints

Name	Type	Explanation
party_id_is_present	CHECK	Rule ((id_type_code is null and id_number is null) or ((id_type_code is not null and id_number is not null))) must be true If id_type_code is provided then also the id_number must be provided and the other way around.
party_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
party_type_code_fk9	**From columns**: type_code **To Entity**: party_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
party_address_id_fk10	**From columns**: address_id **To Entity**: address **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
party_preferred_communication_code_fk11	**From columns**: preferred_communication_code **To Entity**: communication_type **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

party_id_type_code_fk12	**From columns**: id_type_code **To Entity**: id_type **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
party_gender_code_fk13	**From columns**: gender_code **To Entity**: gender_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
application_agent_id_fk8	**From columns**: agent_id **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
application_contact_person_id_fk14	**From columns**: contact_person_id **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
group_party_id_fk31	**From columns**: id **From Entity**: group_party **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
party_member_party_id_fk33	**From columns**: party_id **From Entity**: party_member **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
party_role_party_id_fk35	**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_fk61	**From columns**: party_id **From Entity**: ba_unit_as_party **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_party_id_fk71	**From columns**: party_id **From Entity**: party_for_rrr **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_fk9	**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::::Persona Naturale	c	
2	nonNaturalPerson	Non-natural Person::::Persona Giuridica	c	
3	baunit	Basic Administrative Unit::::Unita Amministrativa di Base	c	
4	group	Group::::Gruppo		

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_fk11	**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:::E-mail	c	
2	fax	Fax::::Fax	c	
3	post	Post::::Posta	c	
4	phone	Phone::::Telefono	c	
5	courier	Courier::::Corriere	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_fk12	**From columns**: id_type_code **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	status	description
1	nationalID	National ID::::Carta Identita Nazionale	c	The main person ID that exists in the country::::Il principale documento identificativo nel paese
2	nationalPassport	National Passport::::Passaporto Nazionale	c	A passport issued by the country::::Passaporto fornito dal paese
3	otherPassport	Other Passport::::Altro Passaporto	c	A passport issued by another country::::Passaporto Fornito da un altro paese

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_fk13	**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: 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_id_fk31	**From columns**: id **To Entity**: party **From cardinality**: 1 **To Cardinality**: 1	LADM relationship - no refinement
group_party_type_code_fk32	**From columns**: type_code **To Entity**: group_party_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
party_member_group_id_fk34	**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_fk32	**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_fk33	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
party_member_group_id_fk34	**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_party_id_fk35	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
party_role_type_code_fk36	**From columns**: type_code **To Entity**: party_role_type **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
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_fk36	**From columns**: type_code **From Entity**: party_role **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Data

Nr	code	display_value	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::::Perito con Licenza	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::::Richiedente Registrazione	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	c	Extension to LADM

Function: is_rightholder

Gets if a party is rightholder.

Parameters

Name	Type	Direction	Description
id	varchar		Party id

address

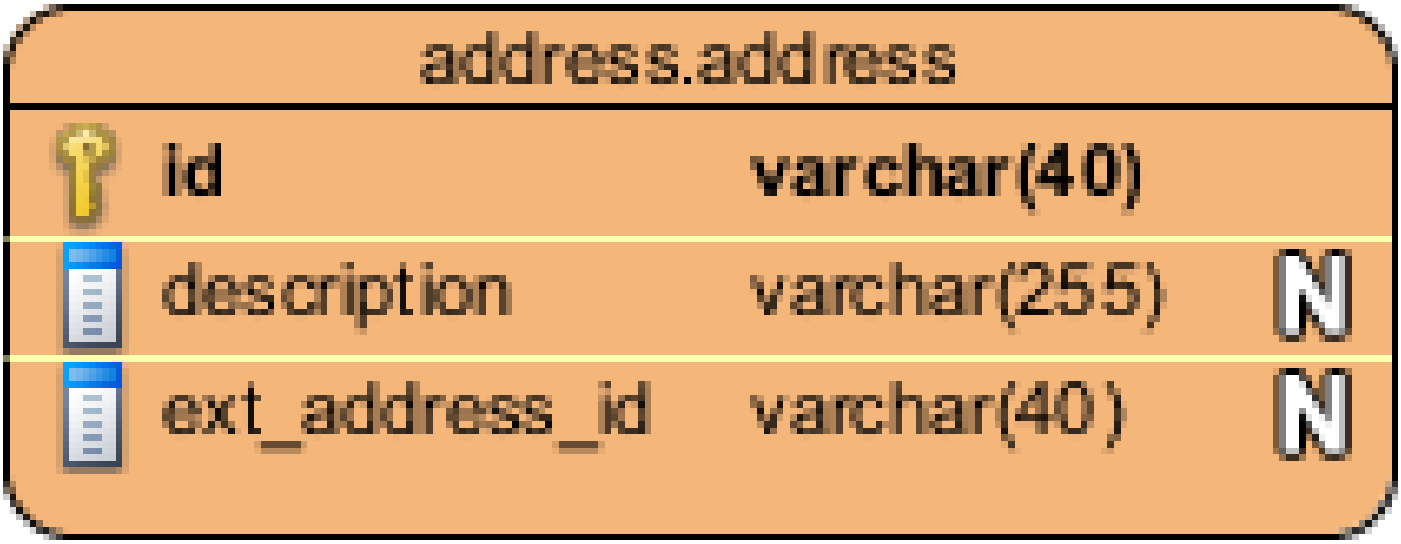


Table: address

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_address_id_fk10	**From columns**: address_id **From Entity**: party **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement

spatial_unit_address_address_id_fk86	**From columns**: address_id **From Entity**: spatial_unit_address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

system

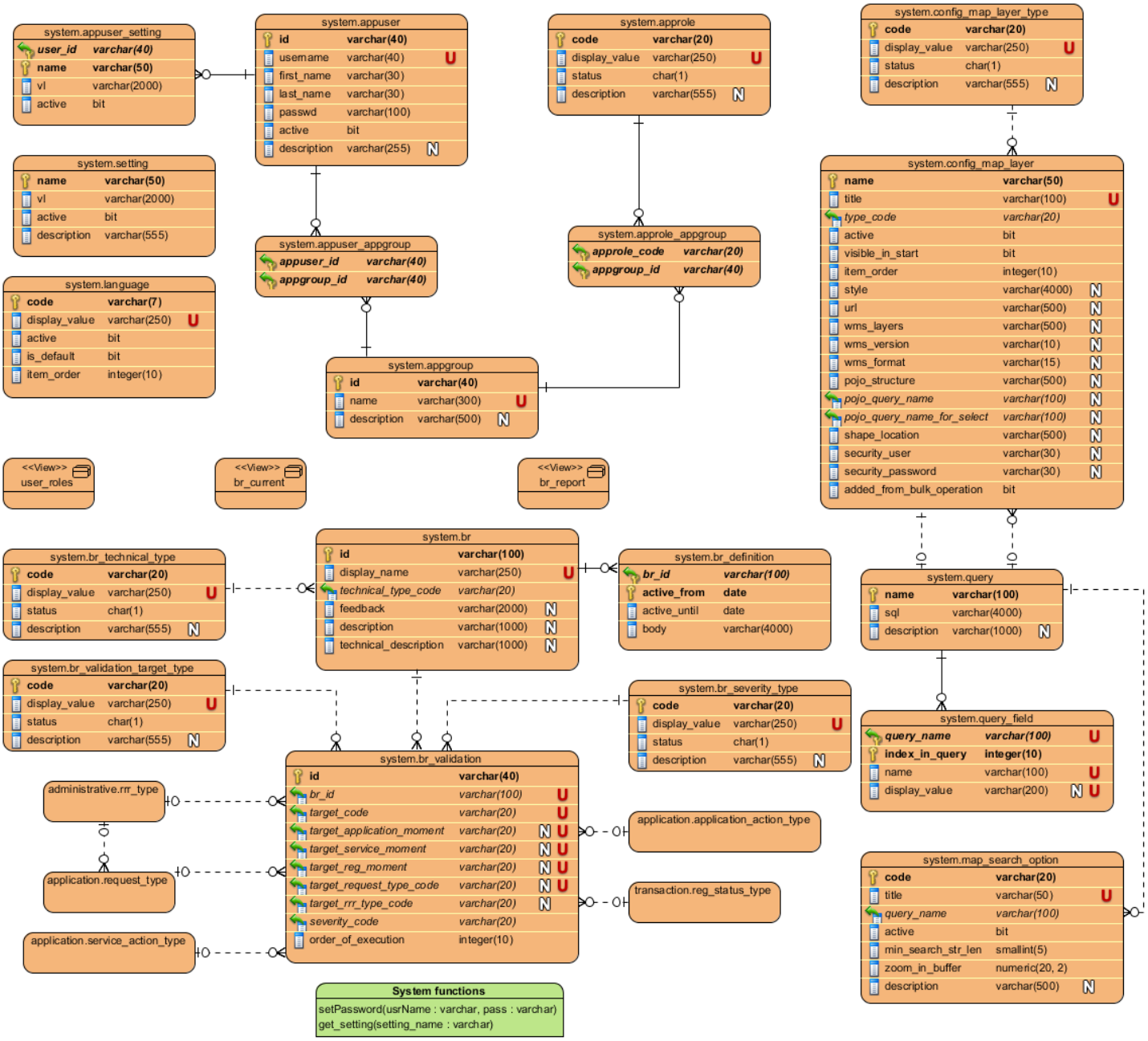


Table: appuser

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

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 (to)

Name	Information	Description
application_assignee_id_fk15	**From columns**: assignee_id **From Entity**: application **From cardinality**: 0..* **To Cardinality**: 0..1	FLOSS SOLA relationship - no refinement
appuser_setting_user_id_fk105	**From columns**: user_id **From Entity**: appuser_setting **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
appuser_appgroup_appuser_id_fk121	**From columns**: appuser_id **From Entity**: appuser_appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	id	username	first_name
1	test-id	test	Test

Nr	last_name	passwd	active	description
1	The BOSS	9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08	true	

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	2193	true	The srid of the geographic data that are administered in the system.
2	map-west	1776400	true	The most west coordinate. It is used in the map control.
3	map-south	5919888	true	The most south coordinate. It is used in the map control.
4	map-east	1795771	true	The most east coordinate. It is used in the map control.
5	map-north	5932259	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	public-notification-duration	30	true	The notification duration for the public display.

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_fk105	**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::::Inglese	true	true	1
2	it-IT	Italian::::Italiano	true	false	2

Table: config_map_layer

Sola extension: In this table are defined map layers for configuring the map component. The layers can be of different types. For the type of layers supported, check out the data in the table config_map_layer_type.

Columns

Name	Type	Optional	Default	Description
name	varchar(50)	False		**SOLA Extension** - name of map layer
title	varchar(100)	False		The title of the layer. The title is the one that will be visible to the users. It can be localizable.
type_code	varchar(20)	False		The map layer type
active	bool	False	true	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	Map layer order of display. Smaller this number, the lower in the list of layers the layer is found.
style	varchar(4000)	True		Map layer style given in SLD. The style can be used by layers of type shape, po_jo.
url	varchar(500)	True		Url is the end point of a server based map layer. It is used by layer of type wms.
wms_layers	varchar(500)	True		The layer names seperated with comma that will be requested for a wms layer.
wms_version	varchar(10)	True		The version of the wms server. Allowed values are 1.0.0, 1.1.0, 1.1.1., 1.3.0.
wms_format	varchar(15)	True		Format of the output for the wms layer. Allowed values are as defined by the wms server capabilities. Example: image/png or image/jpeg.
pojo_structure	varchar(500)	True		Plain old java object structure. It is given in the format as required by featuretype definition in geotools. It is used in layer type : po_jo. Example: theGeom:Polygon,label:""
pojo_query_name	varchar(100)	True		The name of the query that wil be used to retrieve the features for this layer. It is used from layer of type po_jo.
pojo_query_name_for_select	varchar(100)	True		Query name of the query that is used to select objects corresponding to the layer. It can be used from any layer type.
shape_location	varchar(500)	True		The location of the shapefile. It is used for layers of type shape. The client application must have access to this file.
security_user	varchar(30)	True		The username to access the layer. At the moment it is not used.
security_password	varchar(30)	True		The password to access the layer. At the moment it is not used.
added_from_bulk_operation	bool	False	false	If true, the layer is added during a bulk operation.

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_fk106	**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_fk107	**From columns**: pojo_query_name **To Entity**: query **From cardinality**: 1 **To Cardinality**: 0..1	
config_map_layer_pojo_query_name_for_select_fk108	**From columns**: pojo_query_name_for_select **To Entity**: query **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	name	title	type_code	active
1	parcels	Parcels::::Particelle	pojo	true
2	pending-parcels	Pending parcels::::Particelle pendenti	pojo	true
3	roads	Roads::::Strade	pojo	true
4	survey-controls	Survey controls::::Piani di controllo	pojo	true
5	place-names	Places names::::Nomi di luoghi	pojo	true
6	applications	Applications::::Pratiche	pojo	true
7	parcels-historic-current-ba	Historic parcels with current titles	pojo	true
8	parcel-nodes	Parcel nodes	pojo	true
9	orthophoto	Orthophoto	wms	true

Nr	visible_in_start	item_order	style
1	true	20	parcel.xml

2	true	30	pending_parcels.xml
3	true	40	road.xml
4	true	50	survey_control.xml
5	true	60	place_name.xml
6	true	70	application.xml
7	true	10	parcel_historic_current_ba.xml
8	true	5	parcel_node.xml
9	false	1	

Nr	url	wms_layers	wms_version	wms_format
1				
2				
3				
4				
5				
6				
7				
8				
9	http://localhost:8085/geoserver/sola/wms	sola:nz_orthophoto	1.1.1	image/jpeg

Nr	pojo_structure
1	theGeom:Polygon,label:""
2	theGeom:Polygon,label:""
3	theGeom:MultiPolygon,label:""
4	theGeom:Point,label:""
5	theGeom:Point,label:""
6	theGeom:MultiPoint,label:""
7	theGeom:Polygon,label:""
8	theGeom:Polygon,label:""
9	

_query_name	pojo_query_name_for_select	shape
alResult.getParcels	dynamic.informationtool.get_parcel	
alResult.getParcelsPending	dynamic.informationtool.get_parcel_pending	
alResult.getRoads	dynamic.informationtool.get_road	
alResult.getSurveyControls	dynamic.informationtool.get_survey_control	
alResult.getPlaceNames	dynamic.informationtool.get_place_name	
alResult.getApplications	dynamic.informationtool.get_application	
alResult.getParcelsHistoricWithCurrentBA	dynamic.informationtool.get_parcel_historic_current_ba	
alResult.getParcelNodes		

Nr	security_user	security_password	added_from_bulk_operation
1			
2			
3			
4			
5			
6			
7			
8			
9			

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_fk106	**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: 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
config_map_layer_pojo_query_name_fk107	**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_fk108	**From columns**: pojo_query_name_for_select **From Entity**: config_map_layer **From cardinality**: 0..* **To Cardinality**: 0..1	
query_field_query_name_fk123	**From columns**: query_name **From Entity**: query_field **From cardinality**: 0..* **To Cardinality**: 1	
map_search_option_query_name_fk124	**From columns**: query_name **From Entity**: map_search_option **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr
1
2
3
4
5
6
7
8

9
10
11
12
13
14
15
16
17
18
19

	sql	description
t.getParcels	select co.id, co.name_firstpart || '/' || 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 st_area(co.geom_polygon)> power(5 * #{pixel_res}, 2)	
t.getParcelsPending	select co.id, co.name_firstpart || '/' || 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'))	
t.getSurveyControls	select id, label, st_asewkb(geom) as the_geom from cadastre.survey_control where ST_Intersects(geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	
t.getRoads	select id, label, st_asewkb(geom) as the_geom from cadastre.road where ST_Intersects(geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid})) and st_area(geom)> power(5 * #{pixel_res}, 2)	
t.getPlaceNames	select id, label, st_asewkb(geom) as the_geom from cadastre.place_name where ST_Intersects(geom, ST_SetSRID(ST_MakeBox3D(ST_Point(#{minx}, #{miny}),ST_Point(#{maxx}, #{maxy})), #{srid}))	

t.getApplications	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}))	
rmationtool.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, 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}))	
rmationtool.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'))))	
rmationtool.get_place_name	select id, label, st_asewkb(geom) as the_geom from cadastre.place_name where ST_Intersects(geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
rmationtool.get_road	select id, label, st_asewkb(geom) as the_geom from cadastre.road where ST_Intersects(geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	
rmationtool.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}))	
rmationtool.get_survey_control	select id, label, st_asewkb(geom) as the_geom from cadastre.survey_control where ST_Intersects(geom, ST_SetSRID(ST_GeomFromWKB(#{wkb_geom}), #{srid}))	

t.getParcelsHistoricWithCurrentBA	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}))	
rmationtool.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}))	
.cadastre_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	
.cadastre_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	

.cadastre_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= 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	
rch.cadastre_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'	Query used b BaUnitBean.l
t.getParcelNodes	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	

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_fk109	**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_fk110	**From columns**: br_id **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 1	
br_definition_br_id_fk118	**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_fk109	**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_application_moment	varchar(20)	True		The moment of execution of the rule if the target is the application.
target_service_moment	varchar(20)	True		The moment of execution of the rule if the target is the service.
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(20)	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.
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_service_request_type_valid	CHECK	Rule (target_request_type_code is null or (target_request_type_code is not null and target_code != 'application')) must be true It checks if the target_request_type_code is provided then the target_code must not be of value 'application'.
br_validation_rrr_rrr_type_valid	CHECK	Rule (target_rrr_type_code is null or (target_rrr_type_code is not null and target_code = 'rrr')) must be true It checks if the target_rrr_type_code is provided then the target_code must be of value 'rrr'.
br_validation_app_moment_unique	UNIQUE	Combination of (br_id, target_code, target_application_moment) is unique
br_validation_service_moment_unique	UNIQUE	Combination of (br_id, target_code, target_service_moment, target_request_type_code) is unique
br_validation_reg_moment_unique	UNIQUE	Combination of (br_id, target_code, target_reg_moment) is unique
br_validation_service_moment_valid	CHECK	Rule (target_code!= 'service' or (target_code = 'service' and target_application_moment is null and target_reg_moment is null)) must be true
br_validation_application_moment_valid	CHECK	Rule (target_code!= 'application' or (target_code = 'application' and target_service_moment is null and target_reg_moment is null)) must be true

br_validation_reg_moment_valid	CHECK	Rule (target_code in ('application', 'service') or (target_code not in ('application', 'service') and target_service_moment is null and target_application_moment is null)) must be true
br_validation_pkey	PRIMARY KEY	Combination of (id) is the primary key

Relationships (from)

Name	Information	Description
br_validation_br_id_fk110	**From columns**: br_id **To Entity**: br **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_severity_code_fk111	**From columns**: severity_code **To Entity**: br_severity_type **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_target_code_fk112	**From columns**: target_code **To Entity**: br_validation_target_type **From cardinality**: 0..* **To Cardinality**: 1	
br_validation_target_request_type_code_fk113	**From columns**: target_request_type_code **To Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_rrr_type_code_fk114	**From columns**: target_rrr_type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_application_moment_fk115	**From columns**: target_application_moment **To Entity**: application_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_service_moment_fk116	**From columns**: target_service_moment **To Entity**: service_action_type **From cardinality**: 0..* **To Cardinality**: 0..1	
br_validation_target_reg_moment_fk117	**From columns**: target_reg_moment **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 0..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_fk111	**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_fk112	**From columns**: target_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	display_value	status	description
1	application	Application::::Pratica	c	The target of the validation is the application. It accepts one parameter {id} which is the application id.
2	service	Service::::Servizio	c	The target of the validation is the service. It accepts one parameter {id} which is the service id.
3	rrr	Right or Restriction::::Diritto o Rstrizione	c	The target of the validation is the rrr. It accepts one parameter {id} which is the rrr id.
4	ba_unit	Administrative Unit::::Unita Amministrativa	c	The target of the validation is the ba_unit. It accepts one parameter {id} which is the ba_unit id.
5	source	Source::::Sorgente	c	The target of the validation is the source. It accepts one parameter {id} which is the source id.
6	cadastre_object	Cadastre Object::::Oggetto Catastale	c	The target of the validation is the transaction related with the cadastre change. It accepts one parameter {id} which is the transaction id.
7	bulkOperationSpatial	BUlk operation	c	The target of the validation is the transaction related with the bulk operations.

8	public_display	Public display	c	The target of the validation is the set of cadastre objects/ba units that belong to a certain last part. It accepts one parameter {lastPart} which is the last part.

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_fk118	**From columns**: br_id **To Entity**: br **From cardinality**: 0..* **To Cardinality**: 1	

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_fk119	**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
44	buildingRestriction	Register Building Restriction	c	Allows to make changes for registration of building restriction
45	cadastreChange	Cadastre Change	c	Allows to make changes to the cadastre
46	cadastrePrint	Cadastre Print	c	Allows to make prints of cadastre map
47	cancelProperty	Cancel Title	c	Allows to make changes to cancel title
48	caveat	Register Caveat	c	Allows to make changes for registration of caveat
49	cnclPowerOfAttorney	Cancel Power of Attorney	c	Allows to make changes to cancel power of attorney
50	cnclStandardDocument	Withdraw Standard Document	c	Allows to make changes to withdraw standard document
51	documentCopy	Print Archived Document	c	Allows to print an archived document

52	historicOrder	Register Historic Order	c	Allows to make changes for registration of historic order
53	limtedRoadAccess	Register Limited Road Access	c	Allows to make changes for registration of limited road access
54	mortgage	Register Mortgage	c	Allows to make changes for registration of mortgage
55	newApartment	Register Apartment	c	Allows to make changes for registration of an apartment
56	newDigitalTitle	Convert Title	c	Allows to make changes for digital conversion of an existing title
57	newFreehold	Freehold Title	c	Allows to make changes for registration of a new freehold title
58	newOwnership	Change Ownership	c	Allows to make changes for registration of ownership change
59	redefineCadastre	Redefine Cadastre	c	Allows to make changes to existing cadastre objects
60	registerLease	Lease	c	Allows to make changes for registration of a lease
61	regnOnTitle	General Title Registration	c	Allows to make changes for general (not specific) registration on a title
62	regnPowerOfAttorney	Power of Attorney	c	Allows to make changes for registration of power of attorney
63	regnStandardDocument	Standard Document	c	Allows to make changes for registration of a standard document
64	removeCaveat	Remove Caveat	c	Allows to make changes for the removal of a caveat
65	removeRestriction	Remove Restriction	c	Allows to make changes for the removal of a restriction
66	removeRight	Remove Right	c	Allows to make changes for the removal of a right
67	serviceEnquiry	Service Enquiry	c	Allows to make a service enquiry
68	servitude	Servitude	c	Allows to make changes for the registration of a servitude
69	surveyPlanCopy	Survey Plan Print	c	Allows to make a print of a Survey Plan
70	titleSearch	Title Search	c	Allows to make title search
71	varyCaveat	Vary Caveat	c	Allows to make changes for registration of a variation to a caveat
72	varyLease	Vary Lease	c	Allows to make changes for registration of a variation to a lease
73	varyMortgage	Vary Mortgage	c	Allows to make changes for registration of a variation to a mortgage
74	varyRight	Vary Right or Restriction	c	Allows to make changes for registration of a variation to a right or restriction
75	BulkApplication	Bulk operation application	c	Allows usage of Bulk Application
76	sysRegnReports	Systematic Registration Reports	c	Allows generation of Systematic Registration Reports

77	systematicRegn	Systematic Registration	c	Allows access to Systematic Registration

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_fk119	**From columns**: approle_code **To Entity**: approle **From cardinality**: 0..* **To Cardinality**: 1	
approle_appgroup_appgroup_id_fk120	**From columns**: appgroup_id **To Entity**: appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	approle_code	appgroup_id
1	DashbrdViewAssign	super-group-id
2	DashbrdViewUnassign	super-group-id
3	DashbrdViewOwn	super-group-id
4	ApplnView	super-group-id
5	ApplnCreate	super-group-id
6	ApplnStatus	super-group-id
7	ApplnAssignSelf	super-group-id
8	ApplnUnassignSelf	super-group-id
9	ApplnAssignOthers	super-group-id
10	ApplnUnassignOthers	super-group-id
11	BulkApplication	super-group-id
12	systematicRegn	super-group-id

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
approle_appgroup_appgroup_id_fk120	**From columns**: appgroup_id **From Entity**: approle_appgroup **From cardinality**: 0..* **To Cardinality**: 1	
appuser_appgroup_appgroup_id_fk122	**From columns**: appgroup_id **From Entity**: appuser_appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	id	name	description
1	super-group-id	Super group	This is a group of users that has right in anything. It is used in developement. In production must be removed.

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_fk121	**From columns**: appuser_id **To Entity**: appuser **From cardinality**: 0..* **To Cardinality**: 1	
appuser_appgroup_appgroup_id_fk122	**From columns**: appgroup_id **To Entity**: appgroup **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	appuser_id	appgroup_id
1	test-id	super-group-id

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_fk123	**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	4
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_place_name	0
11	dynamic.informationtool.get_place_name	1
12	dynamic.informationtool.get_place_name	2

13	dynamic.informationtool.get_road	0
14	dynamic.informationtool.get_road	1
15	dynamic.informationtool.get_road	2
16	dynamic.informationtool.get_application	0
17	dynamic.informationtool.get_application	1
18	dynamic.informationtool.get_application	2
19	dynamic.informationtool.get_survey_control	0
20	dynamic.informationtool.get_survey_control	1
21	dynamic.informationtool.get_survey_control	2
22	dynamic.informationtool.get_parcel_historic_current_ba	0
23	dynamic.informationtool.get_parcel_historic_current_ba	1
24	dynamic.informationtool.get_parcel_historic_current_ba	2
25	dynamic.informationtool.get_parcel_historic_current_ba	3
26	dynamic.informationtool.get_parcel_historic_current_ba	4

Nr	name	display_value
1	parcel_nr	Parcel number::::Numero Particella
2	ba_units	Properties::::Proprieta
3	area_official_sqm	Official area (m2)::::Area ufficiale (m2)
4	id	
5	the_geom	
6	id	
7	parcel_nr	Parcel number::::Numero Particella
8	area_official_sqm	Official area (m2)::::Area ufficiale (m2)
9	the_geom	
10	id	
11	label	Name::::Nome
12	the_geom	
13	id	
14	label	Name::::Nome
15	the_geom	
16	id	
17	nr	Number::::Numero
18	the_geom	
19	id	
20	label	Label::::Etichetta
21	the_geom	
22	id	
23	parcel_nr	Parcel number::::Numero Particella
24	ba_units	Properties::::Proprieta
25	area_official_sqm	Official area (m2)::::Area ufficiale (m2)

26	the_geom	

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_fk124	**From columns**: query_name **To Entity**: query **From cardinality**: 0..* **To Cardinality**: 1	

Data

Nr	code	title	query_name	active
1	NUMBER	Number	map_search.cadastre_object_by_number	true

2	BAUNIT	Property number	map_search.cadastre_object_by_baunit	true
3	OWNER_OF_BAUNIT	Property owner	map_search.cadastre_object_by_baunit_owner	true

Nr	min_search_str_len	zoom_in_buffer	description
1	3	50	
2	3	50	
3	3	50	

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.

administrative

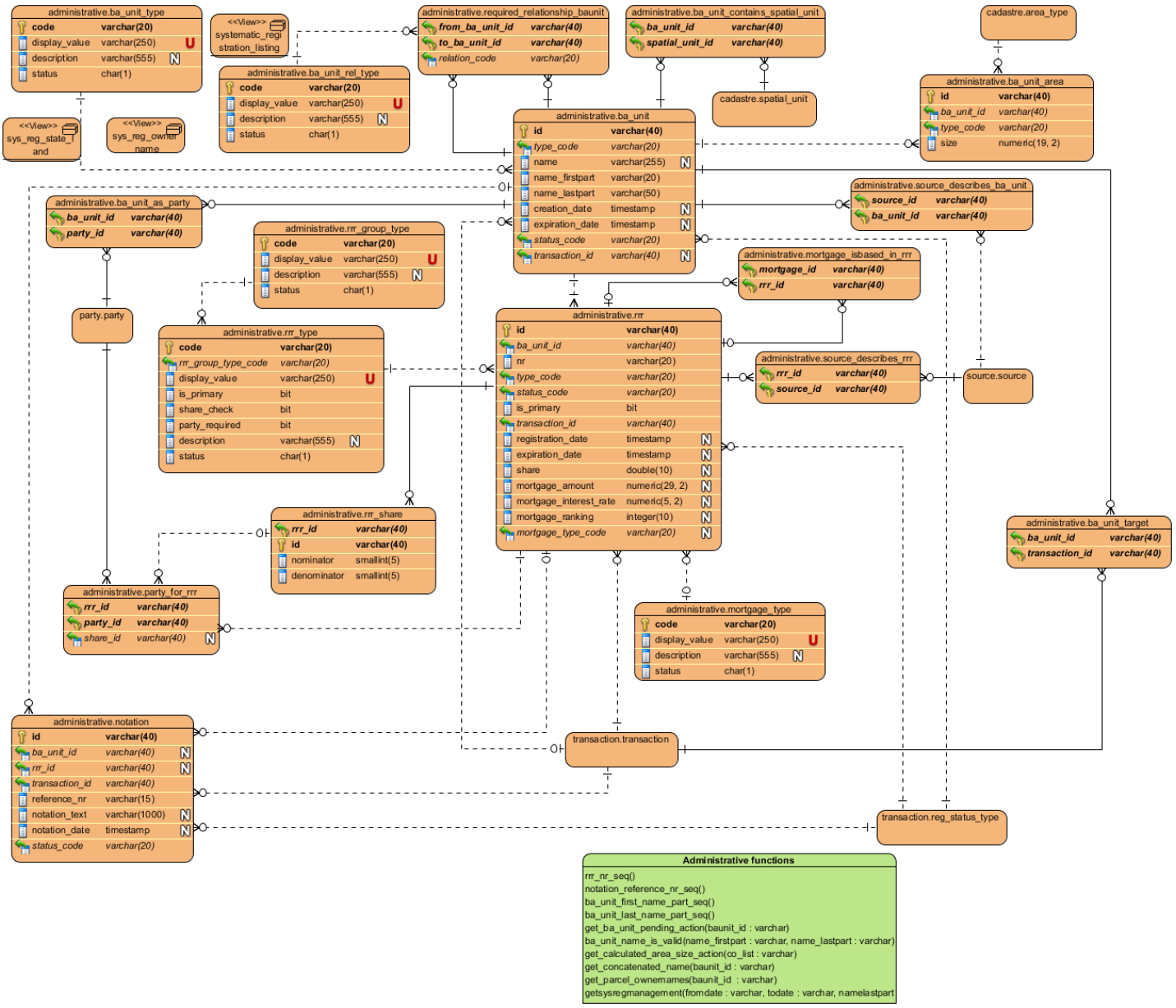


Table: rrr_type

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_fk22	**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
request_type_rrr_type_code_fk21	**From columns**: rrr_type_code **From Entity**: request_type **From cardinality**: 0..* **To Cardinality**: 0..1	
rrr_type_code_fk78	**From columns**: type_code **From Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
br_validation_target_rrr_type_code_fk114	**From columns**: target_rrr_type_code **From Entity**: br_validation **From cardinality**: 0..* **To Cardinality**: 0..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

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

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_fk22	**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: ba_unit

Refer to LADM DefinitionLADM Reference Object LA_BAUnitLADM DefinitionBasic 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	'basicPropertyUnit'	**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.
creation_date	timestamp	True		LADM Extension The date the ba_unit is formally recognised. In the case of titles, the date of issue
expiration_date	timestamp	True		LADM Extension The date on which a ba_unit ceases to have validity
status_code	varchar(20)	False	'pending'	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_fk75	**From columns**: type_code **To Entity**: ba_unit_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

ba_unit_status_code_fk76	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_transaction_id_fk77	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
source_describes_ba_unit_ba_unit_id_fk41	**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_fk43	**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_fk44	**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_fk57	**From columns**: ba_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
ba_unit_as_party_ba_unit_id_fk60	**From columns**: ba_unit_id **From Entity**: ba_unit_as_party **From cardinality**: 0..* **To Cardinality**: 1	
notation_ba_unit_id_fk64	**From columns**: ba_unit_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 0..1	
ba_unit_area_ba_unit_id_fk66	**From columns**: ba_unit_id **From Entity**: ba_unit_area **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_ba_unit_id_fk72	**From columns**: ba_unit_id **From Entity**: ba_unit_target **From cardinality**: 0..* **To Cardinality**: 1	
rrr_ba_unit_id_fk79	**From columns**: ba_unit_id **From Entity**: rrr **From cardinality**: 1..* **To Cardinality**: 1	LADM Definition - no refinement

application_property_ba_unit_id_fk100	**From columns**: ba_unit_id **From Entity**: application_property **From cardinality**: 0..* **To Cardinality**: 0..1	SOLA Extension relationship - no refinement

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_fk75	**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	basicPropertyUnit	Basic Property Unit::::Unita base Proprieta	This is the basic property unit that is used by default	c
2	leasedUnit	Leased Unit::::Unita Affitto		x
3	propertyRightUnit	Property Right Unit::::Unita Diritto Proprieta		x
4	administrativeUnit	Administrative Unit		x

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		

Constraints

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

Relationships (from)

Name	Information	Description

rrr_type_code_fk78	**From columns**: type_code **To Entity**: rrr_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
rrr_ba_unit_id_fk79	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 1..* **To Cardinality**: 1	LADM Definition - no refinement
rrr_status_code_fk80	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
rrr_transaction_id_fk81	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
rrr_mortgage_type_code_fk82	**From columns**: mortgage_type_code **To Entity**: mortgage_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
mortgage_isbased_in_rrr_rrr_id_fk37	**From columns**: rrr_id **From Entity**: mortgage_isbased_in_rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
mortgage_isbased_in_rrr_mortgage_id_fk38	**From columns**: mortgage_id **From Entity**: mortgage_isbased_in_rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
source_describes_rrr_rrr_id_fk39	**From columns**: rrr_id **From Entity**: source_describes_rrr **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement
notation_rrr_id_fk65	**From columns**: rrr_id **From Entity**: notation **From cardinality**: 0..* **To Cardinality**: 0..1	
rrr_share_rrr_id_fk68	**From columns**: rrr_id **From Entity**: rrr_share **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_rrr_id_fk70	**From columns**: rrr_id **From Entity**: party_for_rrr **From cardinality**: 0..* **To Cardinality**: 1	

Triggers

Name	Event
change_from_pending	before update

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_fk82	**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_fk37	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 0..1	
mortgage_isbased_in_rrr_mortgage_id_fk36	**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_fk39	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	SOLA Extension relationship - no refinement
source_describes_rrr_source_id_fk40	**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
source_id	varchar(40)	False		In Sola the source is referenced instead of the Administrative source. **LADM Definition** Administrative source identifier
ba_unit_id	varchar(40)	False		**LADM Definition** Basic unit identifier

Constraints

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

Relationships (from)

Name	Information	Description
source_describes_ba_unit_ba_unit_id_fk41	**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_fk42	**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_fk43	**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_fk44	**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_fk45	**From columns**: relation_code **To Entity**: ba_unit_rel_type **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_fkey	**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: ba_unit_contains_spatial_unit

Defines the spatial unit(s) associated with ba_unitLADM Reference Object Implements the many to many relationship LA_BAUnit - LA_SpatialUnitLADM 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_fk57	**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_fk58	**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_fk59	**From columns**: spatial_unit_id **To Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 0..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_ba_unit_id_fk60	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_as_party_party_id_fk61	**From columns**: party_id **To Entity**: party **From cardinality**: 0..* **To Cardinality**: 1	

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.
notation_date	timestamp	True		LADM Extension The date the notation is formalised/registered
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_transaction_id_fk62	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
notation_status_code_fk63	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
notation_ba_unit_id_fk64	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
notation_rrr_id_fk65	**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_ba_unit_id_fk66	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_area_type_code_fk67	**From columns**: type_code **To Entity**: area_type **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_fk68	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
party_for_rrr_rrr_id_fk69	**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_fk69	**From columns**: rrr_id,share_id **To Entity**: rrr_share **From cardinality**: 0..* **To Cardinality**: 0..1	
party_for_rrr_rrr_id_fk70	**From columns**: rrr_id **To Entity**: rrr **From cardinality**: 0..* **To Cardinality**: 1	
party_for_rrr_party_id_fk71	**From columns**: party_id **To Entity**: party **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_fk72	**From columns**: ba_unit_id **To Entity**: ba_unit **From cardinality**: 0..* **To Cardinality**: 1	
ba_unit_target_transaction_id_fk73	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

View: sys_reg_state_land

It retrieves the list of owners for cadastre_object

View: systematic_registration_listing

It retrieves the list of owners for cadastre_object

View: sys_reg_owner_name

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		Id of ba unit.
name_lastpart	varchar		

Function: get_calculated_area_size_action

It returns the sum of parcel areas for the selected ba unit id if any

Parameters

Name	Type	Direction	Description
co_list	varchar		

Function: get_concatenated_name

This function returns the concatenated list of spatial objects contained in a ba_unit for each rrr, if any. If there are no spatial objects then it only returns that it is a property.

Parameters

Name	Type	Direction	Description
baunit_id	varchar		

Function: get_parcel_ownernames

Parameters

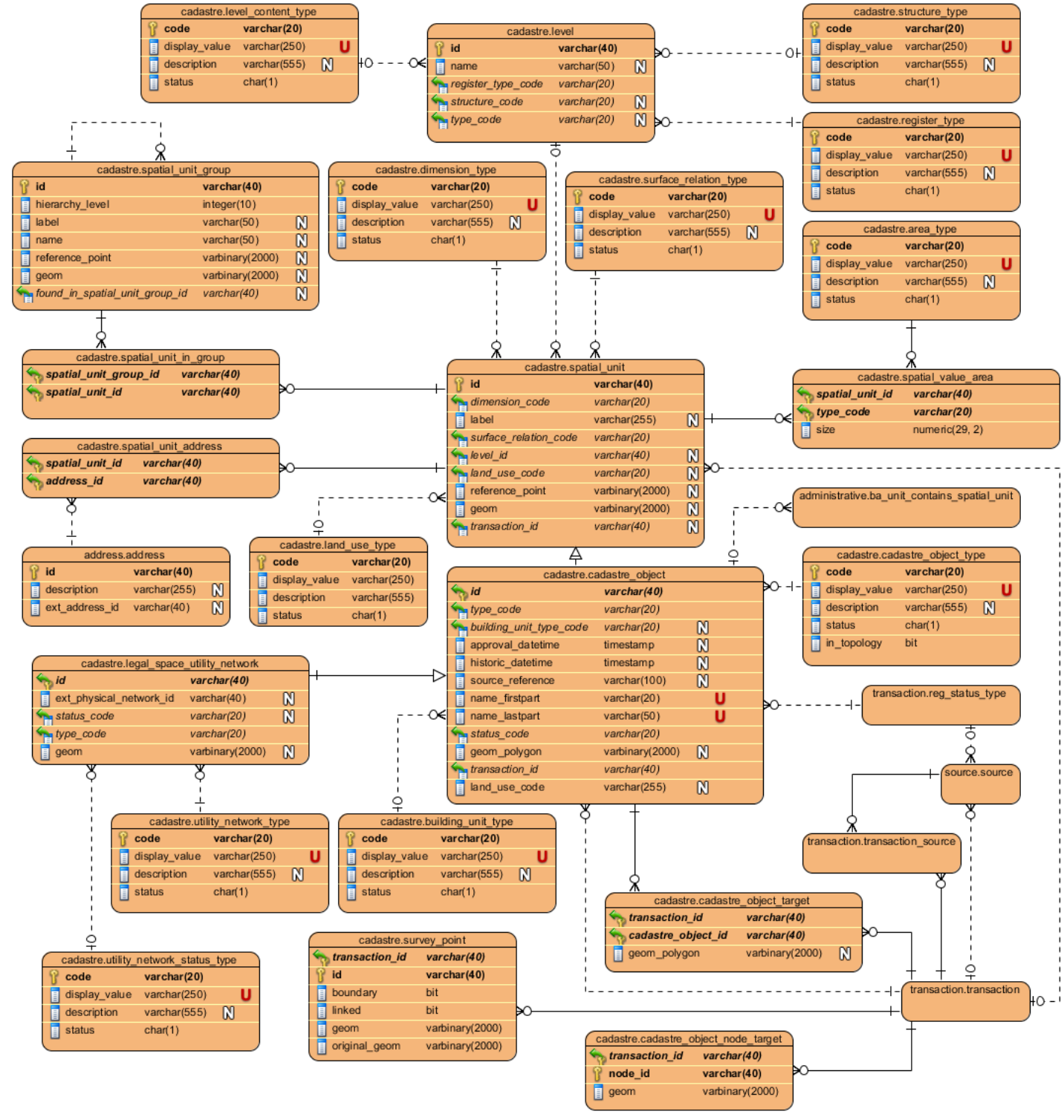
Name	Type	Direction	Description
baunit_id	varchar		

Function: getsysregmanagement

Parameters

Name	Type	Direction	Description
fromdate	varchar		
todate	varchar		
namelastpart	varchar		

cadastre



Cadastre functions

cadastre_object_name_is_valid(name_firstpart : varchar, name_lastpart : varchar)
add_topo_points(source : varbinary, target : varbinary)
snap_geometry_to_geometry(geom_to_snap : varbinary, target_geom : varbinary, snap_distance : float, change_target_if_needed : bit, snapped : bit, target_is_changed : bit)

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
land_use_code	varchar(20)	True		
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
transaction_id	varchar(40)	True		The transaction that is used during the bulk operation that has introduced teh spatial unit. This transaction id is used in case the bulk operation has to be rolled back.

Constraints

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

Relationships (from)

Name	Information	Description
spatial_unit_dimension_code_fk46	**From columns**: dimension_code **To Entity**: dimension_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_unit_surface_relation_code_fk47	**From columns**: surface_relation_code **To Entity**: surface_relation_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_unit_level_id_fk48	**From columns**: level_id **To Entity**: level **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
spatial_unit_land_use_code_fk125	**From columns**: land_use_code **To Entity**: land_use_type **From cardinality**: 0..* **To Cardinality**: 0..1	

spatial_unit_transaction_id_fk129	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 0..1	

Relationships (to)

Name	Information	Description
cadastre_object_id_fk52	**From columns**: id **From Entity**: cadastre_object **From cardinality**: 1 **To Cardinality**: 1	
ba_unit_contains_spatial_unit_spatial_unit_id_fk52	**From columns**: spatial_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_value_area_spatial_unit_id_fk83	**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_fk85	**From columns**: spatial_unit_id **From Entity**: spatial_unit_address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement
spatial_unit_in_group_spatial_unit_id_fk89	**From columns**: spatial_unit_id **From Entity**: spatial_unit_in_group **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_fk46	**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: 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_fk47	**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	'all'	**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_register_type_code_fk49	**From columns**: register_type_code **To Entity**: register_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
level_structure_code_fk50	**From columns**: structure_code **To Entity**: structure_type **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement
level_type_code_fk51	**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_fk48	**From columns**: level_id **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 0..1	LADM relationship - no refinement

Data

Nr	id	name	register_type_code	structure_code	type_code
1	cadastreObject	Cadastre object	all	polygon	primaryRight

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_fk49	**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_fk50	**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_fk51	**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: cadastre_object

It is a specialisation of spatial_unit. Cadastre objects are targeted from cadastre change and redefine cadastre processes.

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(20)	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		
land_use_code	varchar(255)	True	'residential'	

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_fk52	**From columns**: id **To Entity**: spatial_unit **From cardinality**: 1 **To Cardinality**: 1	
cadastre_object_type_code_fk53	**From columns**: type_code **To Entity**: cadastre_object_type **From cardinality**: 0..* **To Cardinality**: 1	

cadastre_object_status_code_fk54	**From columns**: status_code **To Entity**: reg_status_type **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_building_unit_type_code_fk55	**From columns**: building_unit_type_code **To Entity**: building_unit_type **From cardinality**: 0..* **To Cardinality**: 0..1	
cadastre_object_transaction_id_fk56	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Relationships (to)

Name	Information	Description
ba_unit_contains_spatial_unit_spatial_unit_id_fk59	**From columns**: spatial_unit_id **From Entity**: ba_unit_contains_spatial_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
legal_space_utility_network_id_fk90	**From columns**: id **From Entity**: legal_space_utility_network **From cardinality**: 1 **To Cardinality**: 1	
cadastre_object_target_cadastre_object_id_fk93	**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_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	It shows if the cadastre objects of this type are in a topology.

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_fk53	**From columns**: type_code **From Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
spatial_unit_temporary_cadastre_object_type_code_fk128	**From columns**: cadastre_object_type_code **From Entity**: spatial_unit_temporary **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status	in_topology
1	parcel	Parcel::::Particella		c	true
2	buildingUnit	Building Unit::::Unita Edile		c	false
3	utilityNetwork	Utility Network::::Rete Utilita		c	false

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: 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
ba_unit_area_type_code_fk67	**From columns**: type_code **From Entity**: ba_unit_area **From cardinality**: 0..* **To Cardinality**: 1	
spatial_value_area_type_code_fk84	**From columns**: type_code **From Entity**: spatial_value_area **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_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_fk83	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_value_area_type_code_fk84	**From columns**: type_code **To Entity**: area_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_fk85	**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_fk86	**From columns**: address_id **To Entity**: address **From cardinality**: 0..* **To Cardinality**: 1	FLOSS SOLA relationship - no refinement

Table: spatial_unit_group

Refer to LADM Definition

LADM Reference Object
LA_SpatialUnitGroup

LADM Definition
Any number of spatial units, considered as a single entity

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		**LADM Definition** - The identifier of the spatial unit group
hierarchy_level	integer	False		**LADM Definition** - The level in the hierarchy of the (administrative or zoning) subdivision
label	varchar(50)	True		**LADM Definition** - Short textual description of the spatial unit group
name	varchar(50)	True		**LADM Definition** - The name of the spatial unit group
reference_point	GEOMETRY	True		**LADM Definition** - The coordinates of a point within the spatial unit group
geom	GEOMETRY	True		**SOLA Extension** - the spatial geometry for a spatial unit group
found_in_spatial_unit_group_id	varchar(40)	True		**LADM Definition** - the identifier of the spatial unit group where the spatial unit is found

Constraints

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

Relationships (from)

Name	Information	Description
spatial_unit_group_found_in_spatial_unit_group_id_fkey	**From columns**: found_in_spatial_unit_group_id **To Entity**: spatial_unit_group **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Relationships (to)

Name	Information	Description
spatial_unit_in_group_spatial_unit_group_id_fkey	**From columns**: spatial_unit_group_id **From Entity**: spatial_unit_in_group **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

Table: spatial_unit_in_group

Implements the many-to-may relationship between spatial_unit_group and spatial_unit

LADM Reference Object
Relationship LA_SpatialUnitGroup - LA_SpatialUnit

LADM Definition
Not defined

Columns

Name	Type	Optional	Default	Description
spatial_unit_group_id	varchar(40)	False		**LADM Definition** - Identifier of the spatial unit group
spatial_unit_id	varchar(40)	False		**LADM Definition** - Spatial unit identifier

Constraints

Name	Type	Explanation
spatial_unit_in_group_pkey	PRIMARY KEY	Combination of (spatial_unit_group_id,spatial_unit_id) is the primary key

Relationships (from)

Name	Information	Description
spatial_unit_in_group_spatial_unit_group_id_fk88	**From columns**: spatial_unit_group_id **To Entity**: spatial_unit_group **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement
spatial_unit_in_group_spatial_unit_id_fk89	**From columns**: spatial_unit_id **To Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_id_fk90	**From columns**: id **To Entity**: cadastre_object **From cardinality**: 1 **To Cardinality**: 1	
legal_space_utility_network_status_code_fk91	**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_fk92	**From columns**: type_code **To Entity**: utility_network_type **From cardinality**: 0..* **To Cardinality**: 1	LADM relationship - no refinement

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_fkey	**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_fkey	**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: 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_fk93	**From columns**: cadastre_object_id **To Entity**: cadastre_object **From cardinality**: 0..* **To Cardinality**: 1	
cadastre_object_target_transaction_id_fk94	**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	If the survey point is part of a boundary
linked	bool	False	false	If the survey point is linked.
geom	GEOMETRY	False		The current position of the point.
original_geom	GEOMETRY	False		The original position of the point.

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_fk95	**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_fk98	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	

Table: land_use_type

Reference Table / Code list for types of land useLADM Reference Object ExtLandUseLADM DefinitionNot Defined

Columns

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

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
spatial_unit_land_use_code_fk125	**From columns**: land_use_code **From Entity**: spatial_unit **From cardinality**: 0..* **To Cardinality**: 0..1	
application_property_land_use_code_fk126	**From columns**: land_use_code **From Entity**: application_property **From cardinality**: 0..* **To Cardinality**: 0..1	

Data

Nr	code	display_value	description	status
1	commercial	Commercial::::ITALIANO		c
2	residential	Residential::::ITALIANO		c
3	industrial	Industrial::::ITALIANO		c
4	agricultural	Agricultural::::ITALIANO		c

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: 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: 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

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		The source geometry
target	geometry		The target geometry

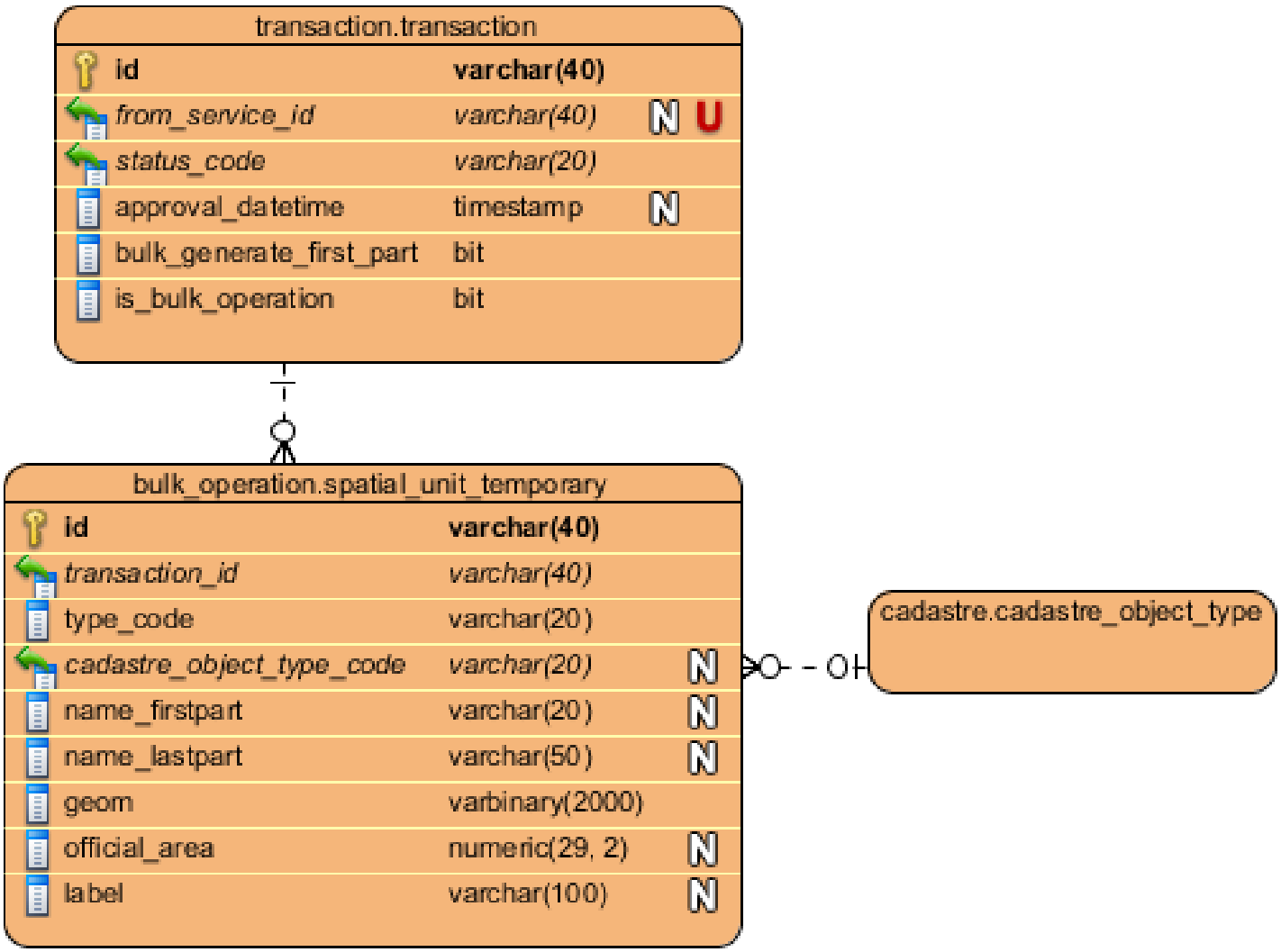
Function: snap_geometry_to_geometry

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	Geometry that has to be snapped. It can be point, linestring or polygon
target_geom	geometry	inout	Geometry that will be the target to used for snapping.
snap_distance	float		The snap distance in map units
change_target_if_needed	bool		It gives if it is allowed to change target during snapping
snapped	bool	out	An output value showing if the geometry is snapped. If it is a linestring or polygon, even if one point of them is snapped it returns true.
target_is_changed	bool	out	It shows if the target changed during the snapping process.

bulk_operation



Bulk operation functions

move_spatial_units(transaction_id_v : varchar, change_user_v : varchar)
move_cadastre_objects(transaction_id_v : varchar, change_user_v : varchar)
move_other_objects(transaction_id_v : varchar, change_user_v : varchar)
clean_after_rollback()

Table: spatial_unit_temporary

This table is used as a temporary place where the cadastre objects coming from the bulk operations will be staying before they are pushed to the cadastre_object table.
 From within this table different checks will happen and name parts will be generated if necessary.

Columns

Name	Type	Optional	Default	Description
id	varchar(40)	False		Unique meaningless identifier
transaction_id	varchar(40)	False		The transaction id which bundles cadastre objects loaded in one operation.
type_code	varchar(20)	False		Type of the object that will be uploaded.
cadastre_object_type_code	varchar(20)	True		Considered if type_code = 'cadastre_object'. The type of the cadastre object.
name_firstpart	varchar(20)	True		Considered if type_code = 'cadastre_object'. See cadastre_object.name_firstpart
name_lastpart	varchar(50)	True		Considered if type_code = 'cadastre_object'. See cadastre_object.name_lastpart
geom	GEOMETRY	False		The geometry of the temporary cadastre object. It can be anything.
official_area	numeric(29, 2)	True		Considered if type_code = 'cadastre_object'. The official area if defined.
label	varchar(100)	True		Considered if type_code different from 'cadastre_object'. The label that will be used for the generic spatial object.

Constraints

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

Relationships (from)

Name	Information	Description
spatial_unit_temporary_transaction_id_fk127	**From columns**: transaction_id **To Entity**: transaction **From cardinality**: 0..* **To Cardinality**: 1	
spatial_unit_temporary_cadastre_object_type_code_fk128	**From columns**: cadastre_object_type_code **To Entity**: cadastre_object_type **From cardinality**: 0..* **To Cardinality**: 0..1	

Function: move_spatial_units

This function moves the temporary spatial units to the destination tables. This function is called after the bulk opearation transaction is created from the bulk opeation apllication.

Parameters

Name	Type	Direction	Description
transaction_id_v	varchar		
change_user_v	varchar		The user that is connected to the system and that is doing the changes.

Function: move_cadastre_objects

This function will move the cadastre objects from the bulk operation schema to the cadastre schema.

Parameters

Name	Type	Direction	Description
transaction_id_v	varchar		
change_user_v	varchar		The user that is connected to the system and that is doing the changes.

Function: move_other_objects

This function is used to move other kinds of spatial objects except the cadastre objects.
The function will add a new level if need together with a new structure type if it is not found.

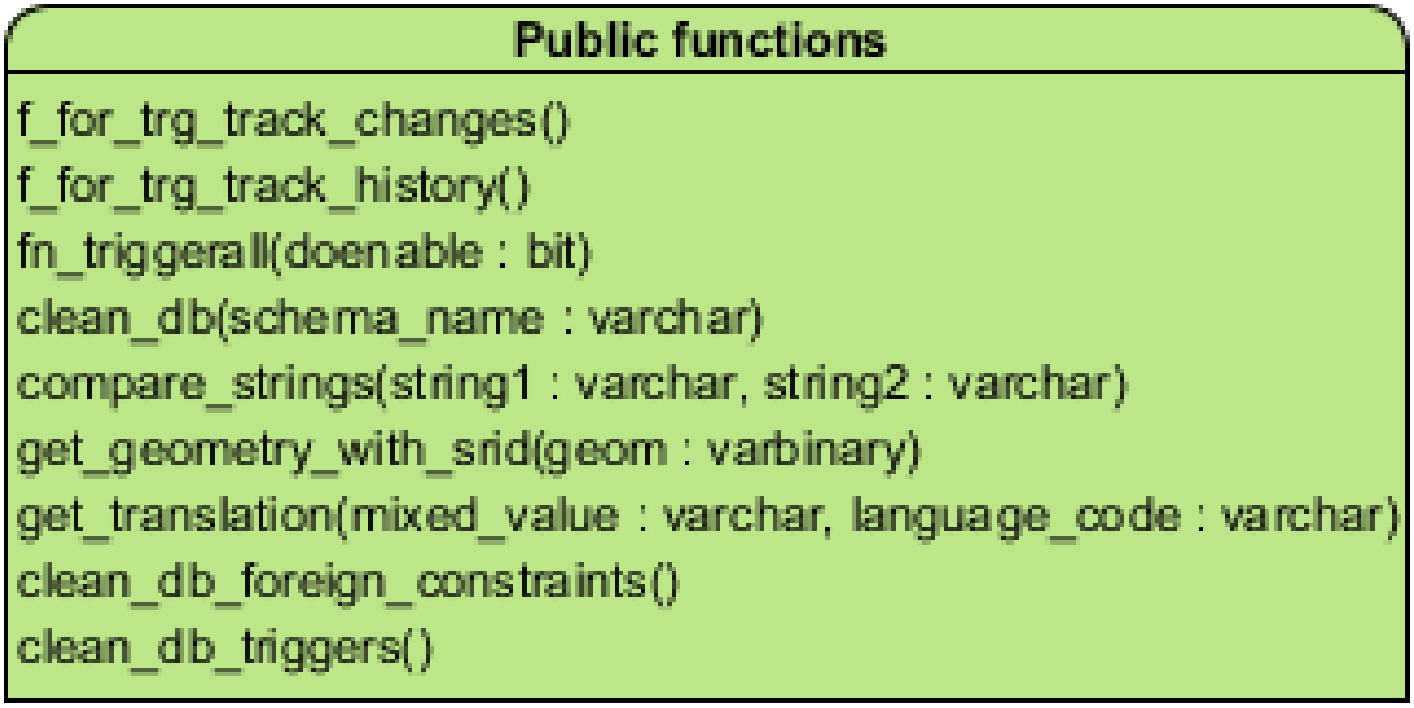
Parameters

Name	Type	Direction	Description
transaction_id_v	varchar		
change_user_v	varchar		The user connected to the system doing the transaction.

Function: clean_after_rollback

This function is executed to run clean up tasks after the transaction of bulk operation is rolledback.

public



Function: f_for_trg_track_changes

This function is called from triggers in every table that has the columns to track changes.
If the change_user is null then it is filled with the value from the database user prefixed by 'db:'. 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.