



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

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

Document functions

document_nr_seq()

Table: document

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

LADM Reference Object

FLOSS SOLA Extension

LADM Definition

Not Applicable

Columns

| Name | Type | Optional | Default | Description |
|------|------|----------|---------|-------------|
|------|------|----------|---------|-------------|

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

Constraints

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

Sequence: document_nr_seq

Allocates numbers 1 to 9999 for document number.

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_fk3 | From columns: request_type_requires_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 document::::Obiezione | c | Extension to LADM | |
| 23 | pdf | Pdf Scanned Document | x | | |
| 24 | tiff | Tiff Scanned Document | x | | |
| 25 | jpg | Jpg Scanned Document | x | | |
| 26 | tif | Tif Scanned Document | x | | |

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 several 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:::Misura 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 | From column: 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/ Responsibilities/ 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 transferring 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

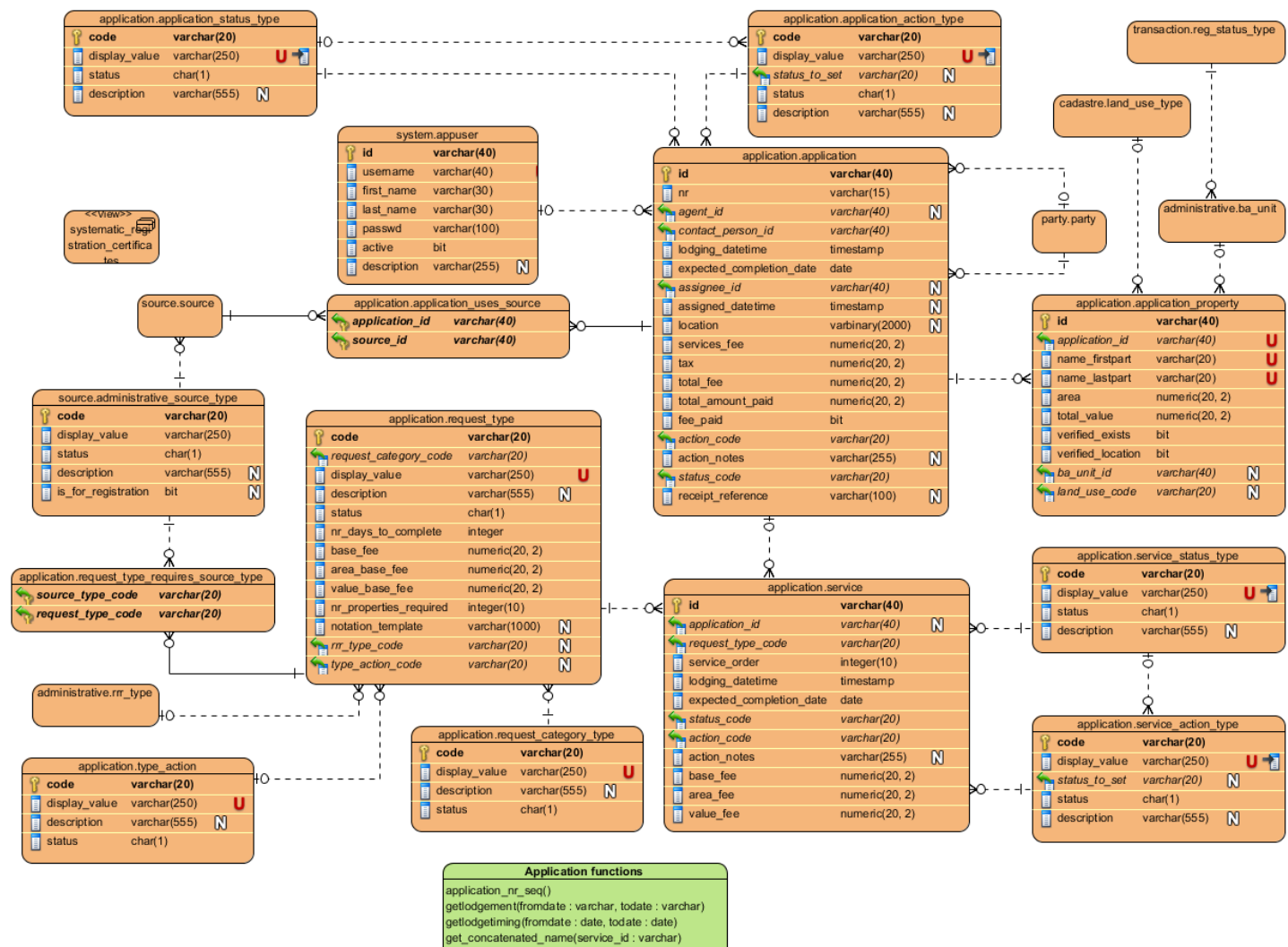


Table: service

Various forms of services provided by a land office
LADM Reference Object
FLOSS SOLA Extension
LADM Definition
Not 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.

LADM Reference Object

FLOSS SOLA Extension

LADM Definition

Not Applicable

Columns

| Name | Type | Optional | Default | Description |
|--------------------------|----------------|----------|---------|---|
| id | varchar(40) | False | | SOLA Extension - application identifier |
| nr | varchar(15) | False | | SOLA Extension - This is the application number that is exposed to the user. It is generated as the date + the ordinal number within that day. |
| 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 bound 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_fk1 | 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_fk15 | 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 validateSucceeded will be used instead when the validate is completed. |

Table: application_status_type

Reference Table / Code list for application status type

LADM Reference Object

FLOSS SOLA Extension

LADM Definition

Not Applicable

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_fk1 | 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:::Annullato | 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_fk110 | 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 precedenza | |
| 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 proprieta | |
| 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 Claim::::Registrazione Sistemica | |
| 42 | lodgeObjection | registrationServices | Lodge Objection::::Obiezioni | |

| 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 |
| 42 | c | 90 | 5.00 | 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 |
| 42 | 1 | | | |

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_fk11 | 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_fk120 | 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 | 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 | 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 Definition LADM Reference Object LA_Party LADM Definition Registered 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_fk1 | 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 | Tribes::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 | Licensed 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:::Cancelliere/ 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

| address.address | | | |
|---|----------------|--------------|---|
|  | id | varchar(40) | |
|  | description | varchar(255) | N |
|  | ext_address_id | varchar(40) | N |

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

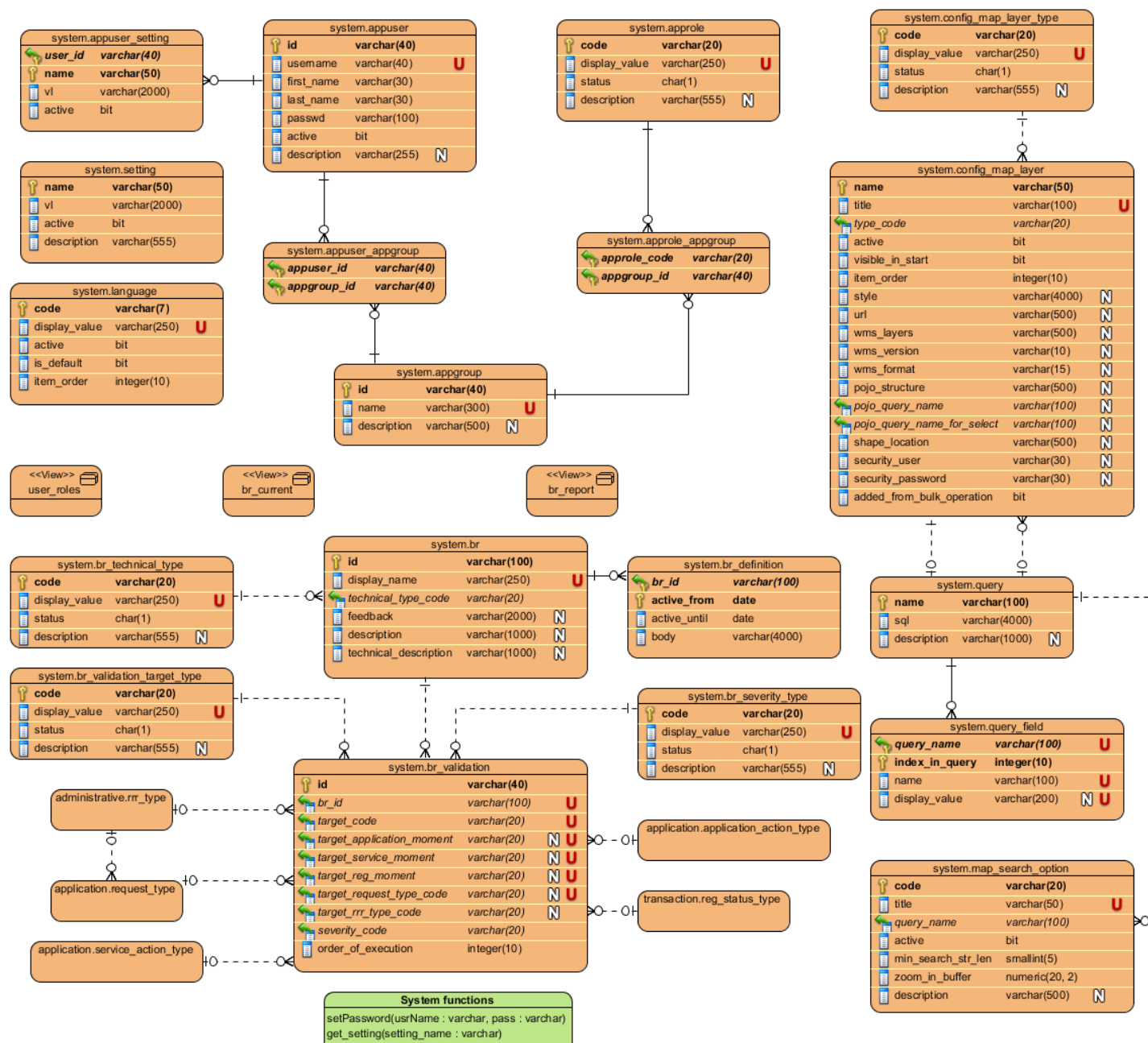


Table: appuser

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(16) | 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

The languages 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 separated 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 featurtype 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 will 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_parcel.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_fk10 | 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 |
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| | 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 | <pre> 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 </pre> | |
| ch.cadastre_object_by_baunit_id | <pre> 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' </pre> | Query used by BaUnitBean. |
| t.getParcelNodes | <pre> 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 </pre> | |

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_v4() | 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 technical 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_v4() | 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 | limitedRoadAccess | 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 to access Systematic Registration Service |
| 78 | lodgeObjection | Objection lodgment | c | Allows to access Lodge Objection Service |

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 |
| 13 | lodgeObjection | 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 exceed 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

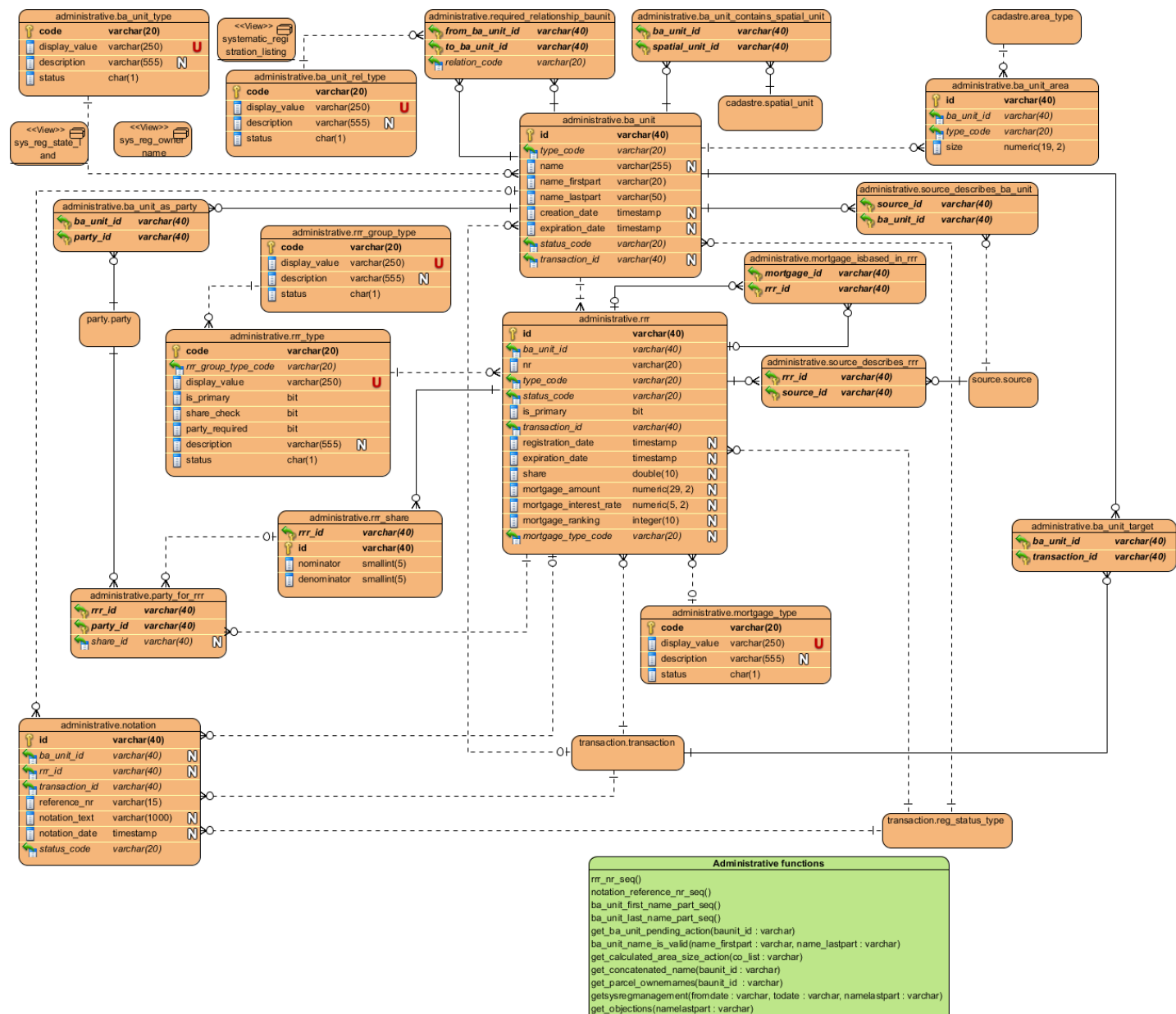


Table: rrr_type

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 Acquedotti | 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 | 'basicProperty' | 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_fk4 | 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_fk4 | 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_fk4 | 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_fk5 | 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:::Unità base Proprieta | This is the basic property unit that is used by default | c |
| 2 | leasedUnit | Leased Unit:::Unità Affitto | | x |
| 3 | propertyRightUnit | Property Right Unit:::Unità 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 brought 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 separate 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_fk38 | 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_fk4 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | From columns: spatial_unit_id To Entity: cadastre_object From cardinality: 0..* To Cardinality: 0..1 | |

Table: ba_unit_as_party

LADM Definition LA_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 participate 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

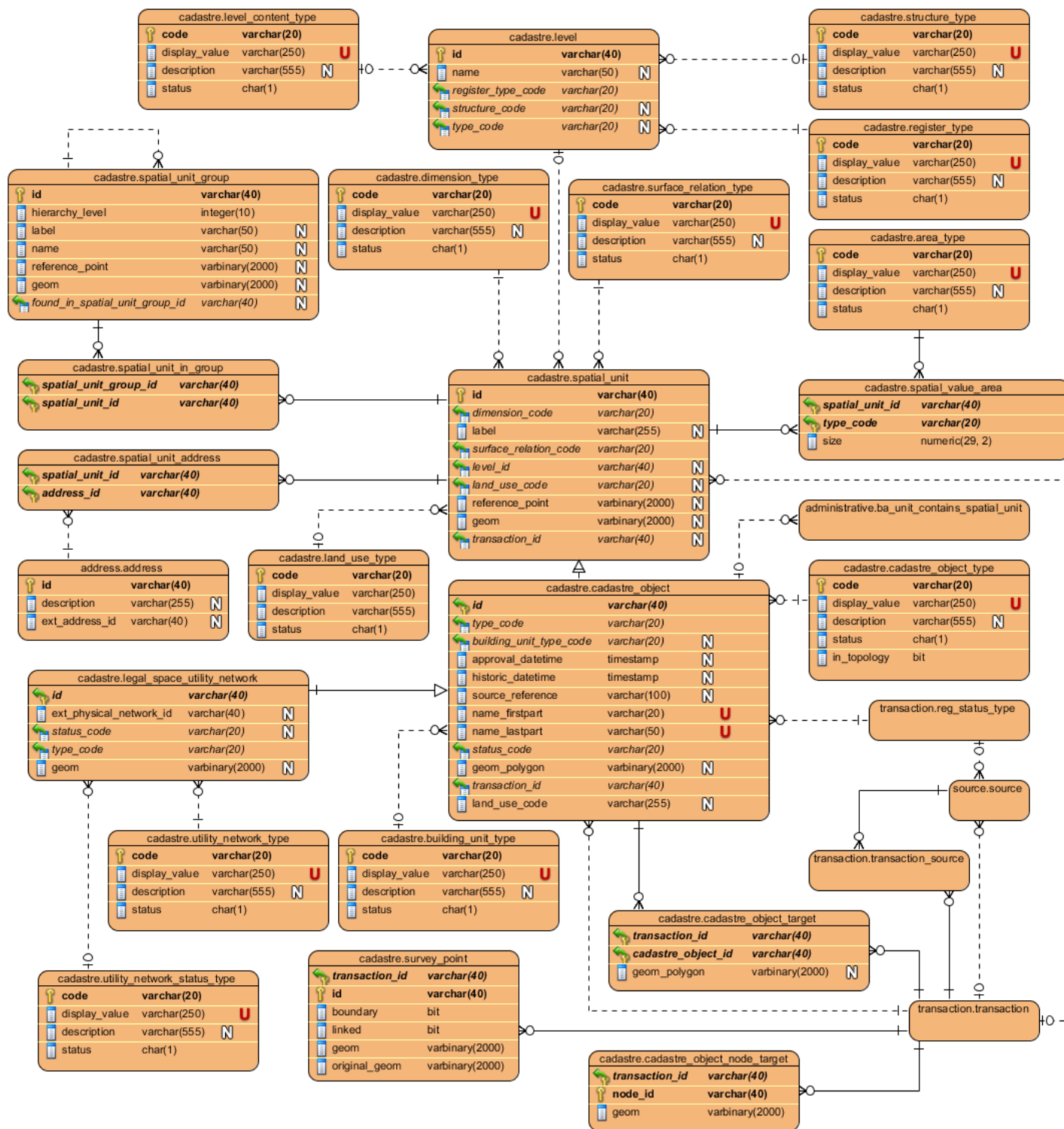
| Name | Type | Direction | Description |
|--------------|---------|-----------|-------------|
| fromdate | varchar | | |
| todate | varchar | | |
| namelastpart | varchar | | |

Function: get_objections

Parameters

| Name | Type | Direction | Description |
|--------------|---------|-----------|-------------|
| 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 the 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_fk58 | 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_fk66 | 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_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:::Unità Edile | | c | false |
| 3 | utilityNetwork | Utility Network:::Rete Utilità | | 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 | 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 | 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 | 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-many 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_fk89 | 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_refinement | From columns: status_code From Entity: legal_space_utility_network From cardinality: 0..* To Cardinality: 0..1 | LADM relationship - no refinement |

Data

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

Table: utility_network_type

Reference Table / Code list of utility network types

LADM Reference Object

LA_

LADM Definition

Not Defined

Columns

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

Constraints

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

Relationships (to)

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

Data

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

Table: 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_fk9 | From columns: cadastre_object_id To Entity: cadastre_object From cardinality: 0..* To Cardinality: 1 | |
| cadastre_object_target_transaction_id_fk9 | 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 | 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

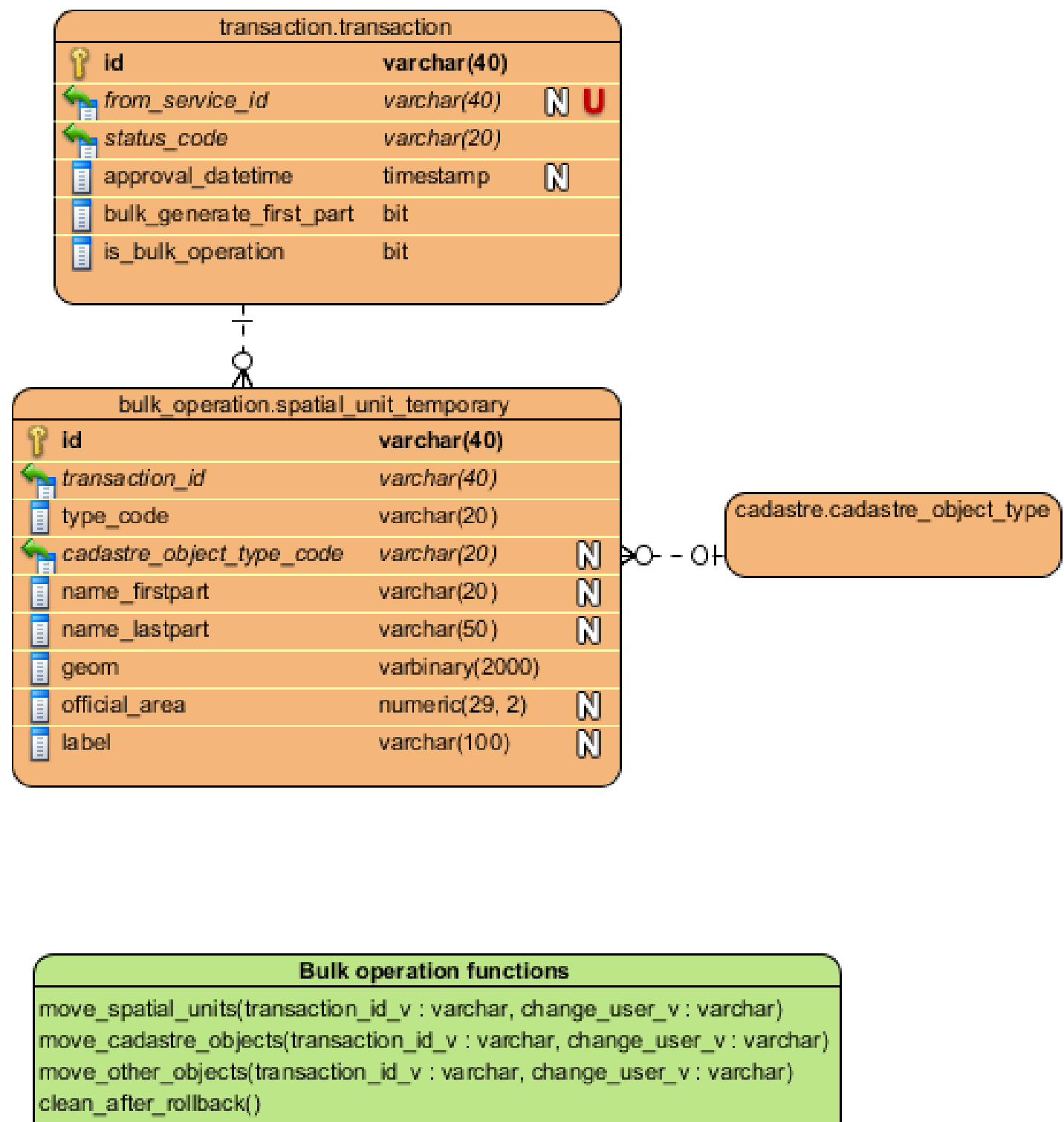


Table: spatial_unit_temporary

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_fk1 | From columns: transaction_id To Entity: transaction From cardinality: 0..* To Cardinality: 1 | |
| spatial_unit_temporary_cadastre_object_type_code_fk1 | 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 operation transaction is created from the bulk operation application.

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

Public functions

```
f_for_trg_track_changes()
f_for_trg_track_history()
fn_triggerall(doenable : bit)
clean_db(schema_name : varchar)
compare_strings(string1 : varchar, string2 : varchar)
get_geometry_with_srid(geom : varbinary)
get_translation(mixed_value : varchar, language_code : varchar)
clean_db_foreign_constraints()
clean_db_triggers()
```

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.