<https://gemini.google.com/u/1/app/117b6ecbb3fe7734>

Okay, the next document we will update is the **View Specifications for Localized Master Data**.

This document contains specifications for public.v\_waypoint\_categories\_localized and public.v\_tags\_localized. The main updates will be to their "RLS & Security Notes" sections to ensure they align with the RLS changes made to their base tables and the overall security architecture. I'll call this updated version 1.1 of the view specifications.

## **View Specifications for Localized Master Data (Version 1.1)**

This document provides specifications for database views designed to support localized data retrieval for master tables in the Via di Francesco V2 database. These views primarily aim to simplify API development by pre-joining master table data with their corresponding translations. Version 1.1 updates RLS & Security Notes to align with platform-wide authentication and authorization enhancements.

### **1. View:** public.v\_waypoint\_categories\_localized

**1.1. View Name**

public.v\_waypoint\_categories\_localized

**1.2. Purpose & Primary Use-Cases**

* **Purpose**: To provide a consolidated view of waypoint categories along with all their available translations for labels and descriptions in a structured JSONB format.
* **Primary Use-Cases**:
  + Support API endpoints that list waypoint categories and need to return names and descriptions in a specific user-requested language or show all available translations.
  + Simplify backend queries by abstracting the join and aggregation logic required to fetch translations.
  + Populate UI elements like filter dropdowns or category lists where multilingual display is required.

**1.3. View Schema (Columns)**

| **Column Name** | **Data Type** | **Description** |
| --- | --- | --- |
| id | INTEGER | Inherited from waypoint\_categories\_master. Unique identifier for the waypoint category. |
| code | TEXT | Inherited from waypoint\_categories\_master. Short, stable, machine-readable code. |
| label | TEXT | Inherited from waypoint\_categories\_master. Primary reference language (English) label. |
| description | TEXT | Inherited from waypoint\_categories\_master. Optional primary reference language (English) description. |
| icon\_identifier | TEXT | Inherited from waypoint\_categories\_master. Name, class, or path for a UI icon. |
| requires\_detail\_table | TEXT | Inherited from waypoint\_categories\_master. Optional: Name of the specific detail table this category typically links to. |
| sort\_order | INTEGER | Inherited from waypoint\_categories\_master. Determines display order. |
| is\_active | BOOLEAN | Inherited from waypoint\_categories\_master. True if the category definition is active. |
| created\_at | TIMESTAMPTZ | Inherited from waypoint\_categories\_master. Timestamp of record creation. |
| updated\_at | TIMESTAMPTZ | Inherited from waypoint\_categories\_master. Timestamp of last update. |
| created\_by\_profile\_id | UUID | Inherited from waypoint\_categories\_master. Profile ID of the creator. |
| updated\_by\_profile\_id | UUID | Inherited from waypoint\_categories\_master. Profile ID of the last updater. |
| all\_translations | JSONB | A JSONB object containing all available translations for label and description, keyed by language code. Example: {"en": {"label": "Accommodation", "description": "Places to stay..."}, "it": {"label": "Alloggio", "description": "Luoghi di soggiorno..."}} |

**1.4. Underlying SQL Definition**

SQL

CREATE OR REPLACE VIEW public.v\_waypoint\_categories\_localized AS

SELECT

wcm.id,

wcm.code,

wcm.label, -- Primary English label

wcm.description, -- Primary English description

wcm.icon\_identifier,

wcm.requires\_detail\_table,

wcm.sort\_order,

wcm.is\_active,

wcm.created\_at,

wcm.updated\_at,

wcm.created\_by\_profile\_id,

wcm.updated\_by\_profile\_id,

(

SELECT

jsonb\_object\_agg(

tr.language\_code,

jsonb\_build\_object(

'label', MAX(CASE WHEN tr.column\_name = 'label' THEN tr.translated\_text ELSE NULL END),

'description', MAX(CASE WHEN tr.column\_name = 'description' THEN tr.translated\_text ELSE NULL END)

)

)

FROM public.translations tr

WHERE

tr.table\_name = 'waypoint\_categories\_master'

AND tr.row\_foreign\_key = wcm.id::TEXT

GROUP BY tr.row\_foreign\_key

) AS all\_translations

FROM

public.waypoint\_categories\_master wcm;

COMMENT ON VIEW public.v\_waypoint\_categories\_localized IS 'Provides waypoint categories with their English base fields and a JSONB column "all\_translations" containing all available label and description translations keyed by language code. Version 1.1';

COMMENT ON COLUMN public.v\_waypoint\_categories\_localized.label IS 'Primary reference language (English) label from waypoint\_categories\_master.';

COMMENT ON COLUMN public.v\_waypoint\_categories\_localized.description IS 'Primary reference language (English) description from waypoint\_categories\_master.';

COMMENT ON COLUMN public.v\_waypoint\_categories\_localized.all\_translations IS 'JSONB object with all translations for label and description, keyed by language code. E.g., {"en": {"label": "...", "description": "..."}, "it": {"label": "...", "description": "..."}}. Note: This currently includes only translations present in the public.translations table; base English text from the master table should be merged by the application/API layer if not also present in translations.';

**1.5. Key Dependencies**

* public.waypoint\_categories\_master (Version 1.2 or later, with updated RLS)
* public.translations

**1.6. Performance Considerations**

* The subquery with jsonb\_object\_agg can be resource-intensive if the translations table is very large and not properly indexed.
* **Required Indexes on** public.translations:
  + A composite index on (table\_name, row\_foreign\_key, language\_code, column\_name) is crucial.
  + CREATE INDEX IF NOT EXISTS idx\_translations\_lookup ON public.translations(table\_name, row\_foreign\_key, language\_code, column\_name);
* Queries on this view filtering by is\_active from the base table will benefit from the idx\_wc\_master\_is\_active index on waypoint\_categories\_master.

**1.7. RLS & Security Notes**

* **RLS Inheritance**: This view inherits Row-Level Security (RLS) policies from its base table, public.waypoint\_categories\_master.
* **Public Access**: The RLS policy on waypoint\_categories\_master ("Allow public read access to active waypoint categories") allows SELECT operations for all users (anonymous and authenticated) USING (is\_active = true). This means this view will only return active waypoint categories to general users.
* **Admin Access**: Users with the platform\_admin role (or other roles like admin granted explicit broader SELECT permissions on waypoint\_categories\_master via public.has\_role(TEXT)) may see all records (active and inactive) through this view, depending on the specifics of their RLS policies on the base table.
* **Translations Table Access**: It's assumed that if a user has permission to view a waypoint\_categories\_master record, they also have implicit permission to view its corresponding translations. The public.translations table itself might have its own RLS (e.g., ensuring users can only see translations for records they are allowed to see in the parent table), though typically view security on the parent record suffices.

**1.8. API Endpoints Supported**

* Primarily supports GET /waypoint\_categories by allowing easy extraction of translated fields based on a lang parameter processed at the API level by querying the all\_translations JSONB.

**1.9. Rationale for Creation**

* Decouples the API data retrieval logic from complex translation join/aggregation.
* Provides a consistent way to access localized content for waypoint categories.
* Improves query readability for developers using the view.

### **2. View:** public.v\_tags\_localized

**2.1. View Name**

public.v\_tags\_localized

**2.2. Purpose & Primary Use-Cases**

* **Purpose**: To provide a consolidated view of tags along with all their available translations for labels and descriptions in a structured JSONB format.
* **Primary Use-Cases**:
  + Support API endpoints that list tags (e.g., for filtering waypoints or events) and need to return names and descriptions in a specific user-requested language or show all available translations.
  + Simplify backend queries for fetching localized tag information.
  + Populate UI elements such as tag clouds or filter options with multilingual capabilities.

**2.3. View Schema (Columns)**

| **Column Name** | **Data Type** | **Description** |
| --- | --- | --- |
| id | INTEGER | Inherited from tags\_master. Unique identifier for the tag. |
| tag\_code | TEXT | Inherited from tags\_master. Short, stable, machine-readable code. |
| label | TEXT | Inherited from tags\_master. Primary reference language (English) label. |
| description | TEXT | Inherited from tags\_master. Optional primary reference language (English) description. |
| tag\_type | TEXT | Inherited from tags\_master. Optional: A way to group tags (e.g., 'amenity', 'event\_theme'). |
| icon\_identifier | TEXT | Inherited from tags\_master. Optional: Name, class, or path for a UI icon. |
| sort\_order | INTEGER | Inherited from tags\_master. Determines display order. |
| is\_active | BOOLEAN | Inherited from tags\_master. True if the tag definition is active. |
| created\_at | TIMESTAMPTZ | Inherited from tags\_master. Timestamp of record creation. |
| updated\_at | TIMESTAMPTZ | Inherited from tags\_master. Timestamp of last update. |
| created\_by\_profile\_id | UUID | Inherited from tags\_master. Profile ID of the creator. |
| updated\_by\_profile\_id | UUID | Inherited from tags\_master. Profile ID of the last updater. |
| all\_translations | JSONB | A JSONB object containing all available translations for label and description, keyed by language code. Example: {"en": {"label": "Pilgrim Menu", "description": "Offers special menu..."}, "it": {"label": "Menu Pellegrino", "description": "Offre menu speciale..."}} |

**2.4. Underlying SQL Definition**

SQL

CREATE OR REPLACE VIEW public.v\_tags\_localized AS

SELECT

tm.id,

tm.tag\_code,

tm.label, -- Primary English label

tm.description, -- Primary English description

tm.tag\_type,

tm.icon\_identifier,

tm.sort\_order,

tm.is\_active,

tm.created\_at,

tm.updated\_at,

tm.created\_by\_profile\_id,

tm.updated\_by\_profile\_id,

(

SELECT

jsonb\_object\_agg(

tr.language\_code,

jsonb\_build\_object(

'label', MAX(CASE WHEN tr.column\_name = 'label' THEN tr.translated\_text ELSE NULL END),

'description', MAX(CASE WHEN tr.column\_name = 'description' THEN tr.translated\_text ELSE NULL END)

)

)

FROM public.translations tr

WHERE

tr.table\_name = 'tags\_master'

AND tr.row\_foreign\_key = tm.id::TEXT

GROUP BY tr.row\_foreign\_key

) AS all\_translations

FROM

public.tags\_master tm;

COMMENT ON VIEW public.v\_tags\_localized IS 'Provides tags with their English base fields and a JSONB column "all\_translations" containing all available label and description translations keyed by language code. Version 1.1';

COMMENT ON COLUMN public.v\_tags\_localized.label IS 'Primary reference language (English) label from tags\_master.';

COMMENT ON COLUMN public.v\_tags\_localized.description IS 'Primary reference language (English) description from tags\_master.';

COMMENT ON COLUMN public.v\_tags\_localized.all\_translations IS 'JSONB object with all translations for label and description, keyed by language code. E.g., {"en": {"label": "...", "description": "..."}, "it": {"label": "...", "description": "..."}}. Note: This currently includes only translations present in the public.translations table; base English text from the master table should be merged by the application/API layer if not also present in translations.';

**2.5. Key Dependencies**

* public.tags\_master (Version 1.3 or later, with updated RLS)
* public.translations

**2.6. Performance Considerations**

* Similar to v\_waypoint\_categories\_localized, performance hinges on the jsonb\_object\_agg subquery.
* **Required Indexes on** public.translations:
  + The composite index idx\_translations\_lookup ON public.translations(table\_name, row\_foreign\_key, language\_code, column\_name) is essential.
* Queries on this view filtering by is\_active or tag\_type from the base table will benefit from indexes on tags\_master (idx\_tags\_master\_is\_active, idx\_tags\_master\_tag\_type).

**2.7. RLS & Security Notes**

* **RLS Inheritance**: This view inherits RLS policies from its base table, public.tags\_master.
* **Public Access**: The RLS policy on tags\_master ("Allow public read access to active tags") permits SELECT for all users USING (is\_active = true). Consequently, this view will only expose active tags to the general public.
* **Admin/Manager Access**: Users with roles like platform\_admin, admin, or regional\_content\_manager (if granted broader SELECT on tags\_master via public.has\_role(TEXT)) may see all tag records (active and inactive) through this view, guided by their respective RLS on the base table.
* **Translations Table Access**: Access to translations is implicitly granted if the user can view the parent tag record.

**2.8. API Endpoints Supported**

* Primarily supports GET /tags by allowing easy extraction of translated fields based on a lang parameter processed at the API level by querying the all\_translations JSONB.

**2.9. Rationale for Creation**

* Simplifies API logic for retrieving localized tag data.
* Offers a consistent interface for accessing translated tag content.
* Reduces query complexity in the application/API layer.