https://gemini.google.com/u/1/app/21b8e85b3e611787

New View Spec: v\_meal\_type\_tags\_localized

### **1. View Name**

public.v\_meal\_type\_tags\_localized

### **2. Purpose & Primary Use-Cases**

* **Purpose**: To provide a consolidated and denormalized view of meal\_type\_tags\_master records, including all their available translations for label and description fields in a structured JSONB format, alongside all other master table attributes.
* **Primary Use-Cases**:
  + Simplify API development by providing a single source for a meal type tag and all its translations.
  + Support API endpoints that list meal type tags or display details for a specific meal type tag where multilingual representation is required (e.g., for filtering food establishments or displaying meal services).
  + Facilitate easier data fetching for frontend components that need to display localized meal type tag information.

### **3. View Schema (Columns)**

| **Column** | **Data Type** | **Description** |
| --- | --- | --- |
| id | integer | Inherited from meal\_type\_tags\_master. Unique identifier for the meal type tag. |
| code | text | Inherited from meal\_type\_tags\_master. Short, stable, machine-readable code (e.g., 'breakfast\_colazione'). |
| label | text | Inherited from meal\_type\_tags\_master. Primary reference language (English) label for the meal type tag. |
| description | text | Inherited from meal\_type\_tags\_master. Optional primary reference language (English) description of the meal type tag. |
| icon\_identifier | text | Inherited from meal\_type\_tags\_master. Name, class, or path for a UI icon. |
| sort\_order | integer | Inherited from meal\_type\_tags\_master. Determines display order in UI lists. |
| is\_active | boolean | Inherited from meal\_type\_tags\_master. True if the meal type tag is active and available for use. |
| created\_at | timestamp with time zone | Inherited from meal\_type\_tags\_master. Timestamp of record creation. |
| updated\_at | timestamp with time zone | Inherited from meal\_type\_tags\_master. Timestamp of last update. |
| created\_by\_profile\_id | uuid | Inherited from meal\_type\_tags\_master. Profile ID of the user/admin who created this record. |
| updated\_by\_profile\_id | uuid | Inherited from meal\_type\_tags\_master. Profile ID of the user/admin who last updated this record. |
| all\_translations | jsonb | A JSONB object containing all available translations for label and description, keyed by language code. Example: {"en": {"label": "...", "description": "..."}, "it": {"label": "...", "description": "..."}}. Includes primary English text if present in translations table. |

### **4. Underlying SQL Definition**

SQL

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

SELECT

mttm.id,

mttm.code,

mttm.label, -- Primary English label

mttm.description, -- Primary English description

mttm.icon\_identifier,

mttm.sort\_order,

mttm.is\_active,

mttm.created\_at,

mttm.updated\_at,

mttm.created\_by\_profile\_id,

mttm.updated\_by\_profile\_id,

(

SELECT

jsonb\_object\_agg(

tr.language\_code,

jsonb\_build\_object(

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

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

)

)

FROM public.translations tr

WHERE

tr.table\_identifier = 'meal\_type\_tags\_master'

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

GROUP BY tr.row\_foreign\_key

) AS all\_translations

FROM

public.meal\_type\_tags\_master mttm;

COMMENT ON VIEW public.v\_meal\_type\_tags\_localized IS 'Provides meal type tags with their base English fields and a JSONB column "all\_translations" containing all available label and description translations keyed by language code. Version 1.0';

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

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

COMMENT ON COLUMN public.v\_meal\_type\_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": "..."}}. Base English text from master table should be merged by application/API layer if not also present in translations table with code ''en''.';

### **5. Key Dependencies**

* public.meal\_type\_tags\_master (Version 1.3 or later, which includes is\_active and audit columns)
* public.translations (Version 2.1 or later)

### **6. Performance Considerations**

* The subquery using jsonb\_object\_agg can be resource-intensive without proper indexing on public.translations.
* **Required Index on** public.translations: A composite index on (table\_identifier, row\_foreign\_key, language\_code, column\_identifier) is crucial. (Assumed to be idx\_translations\_lookup\_multi\_col).
* Queries on this view filtering by is\_active will benefit from the idx\_mttm\_is\_active index on meal\_type\_tags\_master.
* For very high-read scenarios, a materialized view could be a V2+ optimization.

### **7. RLS & Security Notes**

* RLS policies from public.meal\_type\_tags\_master (e.g., filtering by is\_active = true) will be inherited by this view.
* Access to public.translations is assumed if a user can see the master record.
* Define with SECURITY INVOKER (default for views).

### **8. API Endpoints Supported (Conceptual)**

* GET /meta/meal-type-tags?lang=it: List all active meal type tags with translations.
* GET /meta/meal-type-tags/{tag\_code}: Get a specific meal type tag with translations.
* Useful for UIs that allow filtering food establishments or listing services by meal types.

### **9. Rationale for Creation**

* Decouples API data retrieval from complex translation join/aggregation logic.
* Provides a consistent, denormalized structure for accessing localized meal type tag content.
* Improves query readability and maintainability for developers.

### **10. Key Considerations & Definitions**

* **Primary Language Fallback**: The API/application layer needs to handle fallback to primary English fields if a translation for a requested language is not available in all\_translations.
* **Data Freshness**: As a standard view, it reflects the current state.

### **11. Scalability & Future-Proofing**

* Performance depends on translations table indexing.
* Adding new translatable fields to meal\_type\_tags\_master would require updating this view definition.

### **12. Next-Action Checklist**

* 🔴 **Create View**: Execute the DDL to create public.v\_meal\_type\_tags\_localized.
* 🔴 **Verify Index on** translations: Ensure the recommended composite index on public.translations exists.
* 🟠 **API Layer Integration**: Plan API consumption of this view.
* 🟢 **Testing**: Test view performance.
* 🟢 **Documentation**: Document this view.