<https://gemini.google.com/u/1/app/951c86a3d09aaadb>

### 3\. Updated Production-Ready Specification

Target Table Name: public.workflow\_statuses\_master

Version: 2.1 (Checklist REV 05-18-25-A Applied)

Date: May 18, 2025

1. Purpose & Primary Use-Cases

- Mission Statement: Defines a standardized, lifecycle-managed set of workflow statuses (e.g., 'draft', 'pending\_review', 'published') applicable to content entities like `segment\_warnings`. It facilitates content moderation, lifecycle tracking, controlled visibility, and includes administrative audit trails.

- Key User-Story Touchpoints (Indirect):

- Pilgrim (Anna): Sees content (e.g., `segment\_warnings`) that has achieved a public-facing status like 'published'.

- Regional Content Manager (Sofia): Submits content which may transition through statuses like 'pending\_review'.

- Platform Administrator (Admin Team): Manages content review pipelines using these statuses.

2. Schema

| Column | Data Type | Constraints | Description |

| :------------------------ | :------------ | :--------------------------------------------------------------------------------------------------------- | :---------------------------------------------------------------------------------------------------------------------------------------- |

| code | text | Primary Key, CHECK (length(code) <= 50 AND code ~ '^[a-z0-9\_]+$') | Short, unique, machine-readable code for the status (e.g., 'draft'). Max 50 chars. |

| display\_name | text | Not Null, CHECK (length(display\_name) <= 255) | Default display name in the primary reference language (English). (Translatable via public.translations). Max 255 chars. |

| description | text | Nullable | Optional longer description (English). (Translatable via public.translations). |

| sort\_order | integer | Not Null, Default 0 | Defines display/priority order in UIs (e.g., for workflow progression). |

| is\_active | boolean | Not Null, Default true | If true, status is active and selectable. Set to false to retire. |

| created\_at | timestamptz | Not Null, Default now() | Timestamp of record creation. |

| updated\_at | timestamptz | Not Null, Default now() | Timestamp of last record update (auto-updated). |

| created\_by\_profile\_id | uuid | Nullable, Foreign Key to public.profiles(id) ON DELETE SET NULL | Profile ID of the admin who created the record. |

| updated\_by\_profile\_id | uuid | Nullable, Foreign Key to public.profiles(id) ON DELETE SET NULL | Profile ID of the admin who last updated the record. |

3. PostgreSQL DDL

SQL

```

CREATE TABLE public.workflow\_statuses\_master (

code text PRIMARY KEY CHECK (length(code) <= 50 AND code ~ '^[a-z0-9\_]+$'),

display\_name text NOT NULL CHECK (length(display\_name) <= 255),

description text NULL,

sort\_order integer NOT NULL DEFAULT 0,

is\_active boolean NOT NULL DEFAULT true, -- Added for consistency

created\_at timestamptz NOT NULL DEFAULT now(),

updated\_at timestamptz NOT NULL DEFAULT now(),

created\_by\_profile\_id UUID REFERENCES public.profiles(id) ON DELETE SET NULL,

updated\_by\_profile\_id UUID REFERENCES public.profiles(id) ON DELETE SET NULL

);

COMMENT ON TABLE public.workflow\_statuses\_master IS 'Master list of predefined workflow statuses for content lifecycle management (e.g., draft, pending\_review, published), with active flag and audit fields. Version 2.1.';

COMMENT ON COLUMN public.workflow\_statuses\_master.code IS 'Primary Key. Short, unique, machine-readable code for the status (e.g., ''pending\_review''). Recommended: snake\_case, lowercase.';

COMMENT ON COLUMN public.workflow\_statuses\_master.display\_name IS 'Default display name in the primary reference language (English). (Translatable via public.translations).';

COMMENT ON COLUMN public.workflow\_statuses\_master.description IS 'Optional longer description in the primary reference language (English), explaining the status. (Translatable via public.translations).';

COMMENT ON COLUMN public.workflow\_statuses\_master.sort\_order IS 'Defines the order for display or logical flow of statuses (e.g., 0 for earliest, 100 for final).';

COMMENT ON COLUMN public.workflow\_statuses\_master.is\_active IS 'Indicates if the workflow status is active and available for assignment (default true). Set to false to retire a status from new assignments.';

COMMENT ON COLUMN public.workflow\_statuses\_master.created\_at IS 'Timestamp of when this status record was created.';

COMMENT ON COLUMN public.workflow\_statuses\_master.updated\_at IS 'Timestamp of when this status record was last updated (auto-updated by trigger).';

COMMENT ON COLUMN public.workflow\_statuses\_master.created\_by\_profile\_id IS 'Profile ID of the administrator who created this status. FK to public.profiles(id).';

COMMENT ON COLUMN public.workflow\_statuses\_master.updated\_by\_profile\_id IS 'Profile ID of the administrator who last updated this status. FK to public.profiles(id).';

-- Indexes

CREATE INDEX ix\_workflow\_statuses\_master\_active\_sort\_order ON public.workflow\_statuses\_master (is\_active, sort\_order);

CREATE INDEX ix\_workflow\_statuses\_master\_created\_by\_profile\_id ON public.workflow\_statuses\_master (created\_by\_profile\_id) WHERE created\_by\_profile\_id IS NOT NULL;

CREATE INDEX ix\_workflow\_statuses\_master\_updated\_by\_profile\_id ON public.workflow\_statuses\_master (updated\_by\_profile\_id) WHERE updated\_by\_profile\_id IS NOT NULL;

```

4. Triggers/Functions

- `updated\_at` Trigger:

SQL

```

-- Assumes public.set\_current\_timestamp\_updated\_at() function is created globally.

CREATE TRIGGER set\_workflow\_statuses\_master\_updated\_at

BEFORE UPDATE ON public.workflow\_statuses\_master

FOR EACH ROW

EXECUTE FUNCTION public.set\_current\_timestamp\_updated\_at();

```

- Orphaned Translation Cleanup Trigger Function (Conceptual definition, to be created globally):

SQL

```

-- CREATE OR REPLACE FUNCTION public.cleanup\_related\_translations()

-- RETURNS TRIGGER AS $$

-- BEGIN

-- DELETE FROM public.translations

-- WHERE table\_identifier = TG\_TABLE\_NAME::text

-- AND row\_foreign\_key = OLD.code; -- Uses OLD.code as PK is 'code'

-- RETURN OLD;

-- END;

-- $$ LANGUAGE plpgsql SECURITY DEFINER;

```

\*(Actual attachment in Next-Action Checklist. The global function might need adjustment or a specific version if it assumes PK is always `id`.)\*

5. JSON Schema Mirror

JSON

```

{

"title": "workflow\_status\_master",

"description": "Defines a standardized workflow status for content lifecycle, with active flag and audit fields. Version 2.1.",

"type": "object",

"properties": {

"code": { "type": "string", "description": "PK. Unique machine-readable code (snake\_case).", "maxLength": 50, "pattern": "^[a-z0-9\_]+$" },

"display\_name": { "type": "string", "description": "Default display name (English). Translatable.", "maxLength": 255 },

"description": { "type": ["string", "null"], "description": "Optional description (English). Translatable." },

"sort\_order": { "type": "integer", "description": "UI display/flow order.", "default": 0 },

"is\_active": { "type": "boolean", "description": "True if status is active and assignable.", "default": true },

"created\_at": { "type": "string", "format": "date-time", "description": "Creation timestamp.", "readOnly": true },

"updated\_at": { "type": "string", "format": "date-time", "description": "Last update timestamp.", "readOnly": true },

"created\_by\_profile\_id": { "type": ["string", "null"], "format": "uuid", "description": "Profile ID of creator." },

"updated\_by\_profile\_id": { "type": ["string", "null"], "format": "uuid", "description": "Profile ID of last updater." }

},

"required": [ "code", "display\_name", "sort\_order", "is\_active" ]

}

```

6. Relationships & Integrity

- This is a master data table. PK is `code`.

- Referenced by `segment\_warnings.workflow\_status\_code` (FK) and potentially other content tables.

- `ON DELETE RESTRICT` is implicitly appropriate for FKs from content tables referencing this table. An active status in use should not be deletable. Use `is\_active = false` to retire a status from being newly assigned.

- Foreign keys `created\_by\_profile\_id` and `updated\_by\_profile\_id` reference `public.profiles(id) ON DELETE SET NULL`.

7. Multilingual Strategy

- Translatable Fields: `display\_name`, `description`. These store primary reference language text (English).

- Translation Mechanism: Uses `public.translations`. `AFTER DELETE` trigger needed for cleanup. The `row\_foreign\_key` in `translations` will store `workflow\_statuses\_master.code`.

8. Role-Based Workflow & RLS Notes

- Management: Primarily by Platform Administrators. Changes are significant.

- RLS Policies:

- 🟢 Authenticated users can read active statuses:

SQL

```

CREATE POLICY "select\_active\_workflow\_statuses\_for\_authenticated"

ON public.workflow\_statuses\_master FOR SELECT TO authenticated

USING (is\_active = true);

```

- 🟢 Platform Administrators have full control:

SQL

```

CREATE POLICY "admin\_all\_access\_on\_workflow\_statuses\_master"

ON public.workflow\_statuses\_master FOR ALL

USING (public.has\_role\_on\_profile(auth.uid(), 'admin\_platform')) -- Example admin role

WITH CHECK (public.has\_role\_on\_profile(auth.uid(), 'admin\_platform'));

```

\*(Assumes `public.has\_role\_on\_profile(UUID, TEXT)` helper function exists)\*

9. ENUM vs Lookup Discussion

- 🟢 Correctly a lookup table. Preferred for extensibility, i18n, data management, and dynamic use in application logic.

10. UI/UX Enablement

- Admin UI: `display\_name` (translated) populates dropdowns for status assignment, ordered by `sort\_order`, filtered by `is\_active = true`.

- Content Systems: Used to filter content queues (e.g., "items pending review").

11. Auditing & Lifecycle Management

- Audit Columns: `created\_at`, `updated\_at`, `created\_by\_profile\_id`, `updated\_by\_profile\_id`.

- Lifecycle: Managed by `is\_active` flag. Retiring a status involves setting `is\_active = false`.

12. Scalability & Future-Proofing

- Audit Columns: Implemented.

- Stability: Workflow statuses are typically stable.

- Generic Use: Can be referenced by any other table needing content workflow.

13. Seed Data (V1 Example)

SQL

```

INSERT INTO public.workflow\_statuses\_master

(code, display\_name, description, sort\_order, is\_active, created\_by\_profile\_id, updated\_by\_profile\_id)

VALUES

('draft', 'Draft', 'Content is being prepared and is not visible publicly or for review.', 10, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('pending\_review', 'Pending Review', 'Content has been submitted and is awaiting review by a moderator or administrator.', 20, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('published', 'Published', 'Content has been approved and is visible to the relevant audience (e.g., public).', 40, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('needs\_revision', 'Needs Revision', 'Content has been reviewed and requires changes by the author before it can be published.', 30, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('archived', 'Archived', 'Content is no longer current or actively displayed but is retained for historical purposes.', 50, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('rejected', 'Rejected', 'Content was reviewed but deemed unsuitable for publication.', 60, true, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]'),

('internal\_use\_only', 'Internal Use Only', 'Content is for internal platform use and not for public display.', 5, false, '[ADMIN\_PROFILE\_UUID]', '[ADMIN\_PROFILE\_UUID]');

-- Replace [ADMIN\_PROFILE\_UUID] with an actual admin user's profile\_id

```

14. Next-Action Checklist

- 🔴 Ensure `public.profiles` table exists before running DDL for FK constraints.

- 🔴 Ensure RLS helper `public.has\_role\_on\_profile(UUID, TEXT)` exists and is SECURITY DEFINER hardened if necessary.

- 🔴 Ensure `public.set\_current\_timestamp\_updated\_at()` function exists.

- 🔴 Ensure `public.cleanup\_related\_translations()` function is robust enough to handle text PKs (like `code` here) or a specific version is made.

- 🔴 Implement DDL: Execute `CREATE TABLE` for `public.workflow\_statuses\_master`.

- 🔴 Apply `updated\_at` Trigger.

- 🔴 Create Indexes as defined.

- 🔴 Implement Orphaned Translation Cleanup Trigger: After `public.translations` table exists, create `trigger\_cleanup\_workflow\_statuses\_translations` using `public.cleanup\_related\_translations()` (adapted for text PK `code`) on this table.

- 🔴 Populate Initial Seed Data, replacing `[ADMIN\_PROFILE\_UUID]` with a valid `profiles.id`.

- 🟢 Review initial status definitions (`code`, `display\_name`, `sort\_order`, `is\_active`) with stakeholders.

- 🟢 Plan administrative interface for managing these statuses (likely infrequent changes after setup).