

ClaimTrackPRO Data Model Overview

This document describes the data model used by **ClaimTrackPRO**, a Directus-powered application for managing insurance claims. Each collection represents a table in the Directus database. Fields within these collections store specific attributes or create relationships to other collections. Together they form a structured schema that supports claim intake, tracking, documentation and workflow.

Core Collections

Addresses

The addresses collection stores normalized postal addresses that can be referenced from carriers, insureds, policies and claims. Normalizing addresses avoids duplication and makes it easy to reuse the same address across multiple entities. Key fields include:

- **id** – primary key (UUID).
- **label** – descriptive label (e.g., “Loss Location for claim CTP-20251001”).
- **street_1, street_2, city, state, postal_code, county, country** – individual components of the address **【411732822647767†screenshot】** . Collecting these separately allows for flexible formatting and searching.

The collection does not define relationships; other collections store a relation field pointing to an address record.

Carriers

Insurance carriers are stored in the `carriers` collection. Fields include:

- **address** – many-to-one relation to the addresses collection, allowing each carrier to be linked to a postal address **【28056184582618†screenshot】** .
- **id** – primary key (UUID).
- **name** – name of the carrier.
- **naic** – NAIC code.
- **phone, email, claims_email_intake** – contact details **【28056184582618†screenshot】** . The last field records the email address used by the carrier for claim intakes.

This structure supports contacting the carrier and linking them to policies and claims.

Claim Documents

Files attached to claims are stored in `claim_documents`. Important fields:

- **claim** – many-to-one relation to `claims` (the claim to which the document belongs).
- **file** – Directus file field storing the uploaded document

- **category** – text field categorizing the document (e.g., “photo”, “invoice”).
- **uploaded_by** – relation to staff who uploaded the document; **uploaded_at** – timestamp of upload **【651180085665074†screenshot】** .
- **notes** – free-form notes.

Claim Events

This collection records system or workflow events associated with a claim. It enables event-driven architecture and audit trails. Fields include:

- **claim** – relation to claims **【729320977666052†screenshot】** .
- **payload** – JSON field storing event data (e.g., status changes).
- **event_type** – text describing the type of event.
- **created_at** – timestamp of event creation; **created_by** – relation to the user or staff member who triggered it **【729320977666052†screenshot】** .

Claim Notes

Notes added to claims are stored in `claim_notes`. Fields:

- **claim** – relation to claims **【644562628693087†screenshot】** .
- **visibility** – determines who can see the note (e.g., adjuster vs. client).
- **created_by** – relation to staff who authored the note; **created_at** – timestamp **【644562628693087†screenshot】** .
- **note** – rich text of the note.

Claim Status

`claim_status` is a lookup table listing the possible statuses a claim can have (e.g., New, Assigned, Inspection). It contains only three fields: **id**, **name**, and **sort** **【877476279700972†screenshot】** . Claims refer to this table through a many-to-one relationship.

Claim Tasks

Tasks linked to claims help manage workflows (inspections, documentation, follow-ups). Each record includes:

- **claim** – relation to claims **【409486914877868†L42-L50】** .
- **status** – dropdown enumerating task status (e.g., pending, completed) **【409486914877868†L42-L50】** .
- **priority** – dropdown for priority (e.g., high, medium, low) **【409486914877868†L44-L48】** .

- **assignee** – relation to a staff member responsible for the task 【409486914877868†L48-L50】 .
- **title, details** – descriptive fields.
- **due_date** – date the task is due 【409486914877868†L50-L56】 .

Claim Type

`claim_type` is a lookup table for the type of claim (residential, commercial, auto, flood, etc.). It mirrors `claim_status` with fields **id**, **name**, and **sort** 【686804329803555†L38-L47】 .

Claims

The `claims` collection represents the core claim record and ties together many other entities. Major fields are:

- **id** – primary key (UUID).
- **claim_number** – number provided by the carrier.
- **display_id** – a friendly ID used in the UI.
- **carrier** – relation to carriers 【702705949674847†L48-L50】 .
- **policy** – relation to policies 【702705949674847†L50-L52】 .
- **claim_type** – relation to `claim_type` 【702705949674847†L52-L54】 .
- **status** – relation to `claim_status` 【702705949674847†L54-L56】 .
- **loss_cause** – relation to `loss_cause` 【702705949674847†L56-L58】 .
- **primary_insured, secondary_insured** – relations to insureds 【702705949674847†L58-L60】 .
- **loss_location** – relation to addresses capturing where the loss occurred 【702705949674847†L62-L63】 .
- **assigned_to_user** – relation to staff or directus users who manage the claim 【702705949674847†L64-L65】 .
- **date_of_loss, reported_date, closed_date** – date fields capturing lifecycle milestones 【702705949674847†L66-L70】 .
- **deductible, reserve_amount** – numeric fields for financial tracking 【702705949674847†L70-L74】 .
- **description** – narrative describing the incident 【702705949674847†L74-L79】 .
- **created_by, updated_by** – hidden fields storing the staff member or user who created/updated the record 【702705949674847†L76-L80】 .

This table acts as the hub of the system. It connects carriers, policies, claim types, statuses, causes, insured parties, loss locations and staff assignments.

Claims Contacts

`claims_contacts` is a junction table linking claims to additional contacts beyond the insureds. It contains:

- **id** – primary key.
- **claims_id** – relation to a record in `claims` 【213748713975747†L40-L46】 .
- **contacts_id** – relation to a record in `contacts` 【213748713975747†L44-L46】 .

This table supports many-to-many relationships between claims and contacts (e.g., attorneys, contractors).

Contacts

General contact records (such as adjusters, clients, attorneys) reside in `contacts`. Fields include:

- **id** – primary key.
- **role** – text describing the contact’s role (e.g., client, attorney).
- **first_name**, **last_name** – personal names.
- **company** – organization name.
- **phone**, **email** – contact details.
- **notes** – optional notes 【182982551282734†L42-L56】 .

Claims can link to these contacts via the `claims_contacts` junction table.

Insureds

The `insureds` collection stores primary or secondary insured parties linked to policies and claims. Fields are:

- **type** – dropdown specifying whether the insured is a person or organization 【614133472668438†L42-L46】 .
- **mailing_address** – relation to addresses for the insured’s mailing address 【614133472668438†L42-L46】 .
- **id** – primary key.
- **first_name**, **last_name** – for person insureds; **org_name** – for organization insureds 【614133472668438†L46-L53】 .
- **primary_phone**, **primary_email** – main contact information 【614133472668438†L52-L58】 .
- **alt_phone**, **alt_email** – alternate contact fields 【614133472668438†L58-L60】 .

Loss Cause

Another lookup table, `loss_cause` lists the cause of loss (fire, water, wind, theft, other). It mirrors `claim_status` and `claim_type` with fields **id**, **name**, and **sort** [【876302845299406†screenshot】](#) .

Policies

Policies are stored in the `policies` collection. Fields include:

- **carrier** – relation to carriers specifying the insurer [【946419665550887†L42-L44】](#) .
- **named_insured** – relation to insureds identifying the insured party [【946419665550887†L42-L44】](#) .
- **policy_type** – dropdown (e.g., general, auto). Additional types can be added later [【946419665550887†L46-L47】](#) .
- **id** – primary key.
- **policy_number** – number assigned by the carrier [【946419665550887†L48-L51】](#) .
- **effective_date**, **expiration_date** – dates marking the policy’s active period [【946419665550887†L52-L54】](#) .

Roles (Directus Roles)

`roles` is a system collection that defines permission sets. Each role record has:

- **id** – primary key.
- **name** – human-readable name.
- **key** – unique key used by Directus for permissions.
- **description** – text describing the role’s purpose [【668798043198960†L40-L48】](#) .

These roles are linked to staff through the `staff_roles` junction.

Staff

Employees or contractors who work on claims are stored in `staff`. Fields include:

- **id** – primary key.
- **status** – dropdown representing employment status (e.g., active, inactive) [【847755840900195†L40-L46】](#) .
- **sort** – numeric ordering field.
- **user_created**, **date_created**, **user_updated**, **date_updated** – accountability fields linking to Directus users and capturing timestamps [【847755840900195†L48-L54】](#) .
- **first_name**, **last_name**, **email**, **phone** – contact details [【847755840900195†L56-L62】](#) .
- **is_1099** – boolean indicating if the staff member is a 1099 contractor [【847755840900195†L64-L65】](#) .

- **user** – relation to `directus_users` (optional), linking a staff record to an actual Directus authentication account **【847755840900195†L64-L66】** .

Staff Roles

`staff_roles` is a junction table linking each staff member to one or more Directus roles. It contains:

- **id** – primary key.
- **status** – dropdown for record status (active/inactive) **【265260825798758†L41-L45】** .
- **sort** – numeric ordering field **【265260825798758†L46-L48】** .
- **user_created, date_created, user_updated, date_updated** – audit fields **【265260825798758†L48-L55】** .
- **staff_id** – relation to `staff` **【265260825798758†L56-L58】** .
- **role_id** – relation to `roles` **【265260825798758†L56-L59】** .

This junction enables assigning multiple roles to a staff member without duplicating data in the `staff` table.

How the System Works Together

The ClaimTrackPRO data model is centered around the **claims** collection. A claim references a **carrier** and a **policy**, which in turn references a **named insured**. Each claim is categorized by **claim_type**, has a **status**, and records the **cause of loss**. Claims also point to two insured parties (primary and secondary) and a **loss_location** address. Staff members can be assigned to manage the claim via the **assigned_to_user** field.

Supporting tables enable additional functionality:

- **Contacts** and **claims_contacts** allow linking any number of contacts (e.g., attorneys, contractors) to a claim.
- **Claim tasks** provide workflow management, with priorities, statuses and assignees.
- **Claim notes, claim documents** and **claim events** record the narrative, attachments and audit history of each claim.
- **Policies** tie carriers to insured parties and provide policy details; claims refer back to policies to ensure the correct coverage information is applied.
- **Staff** and **staff_roles** manage the human resources side, assigning roles (via the **roles** system collection) to each staff member.
- **Lookup tables** (`claim_type`, `claim_status`, `loss_cause`) ensure standardized values are used across the system and can be expanded without modifying the core schema.

Overall, this normalized relational design supports flexibility (through junction tables and lookups), ensures data integrity (by linking to normalized collections like addresses), and provides an audit trail through accountability fields and event logs.