

Turn.io Data Dictionary

Table & Column Descriptions

ai_events

AI Events is a partitioned table that logs all interactions with AI systems within the Turn.io platform. It tracks detailed metrics about each AI operation, including token usage, performance, and context information. This data is used for monitoring, debugging, billing, and analytics purposes.

Column	Description
uuid	A unique identifier for this AI event
timestamp	When this AI event occurred (used as the partition key)
event_type	The type of AI event (e.g., completion, embedding, function call)
evaluation_context_type	The context in which the AI was evaluated
prompt_tokens_count	Number of tokens used in the input prompt
completion_tokens_count	Number of tokens generated in the AI response
total_tokens_count	Total tokens used (prompt + completion)
run_external_id	External identifier for the AI run (from providers like OpenAI)
thread_external_id	External identifier for the conversation thread
assistant_external_id	External identifier for the AI assistant
number_uuid	The WhatsApp number associated with this AI event
journey_uuid	If applicable, the journey where this AI event occurred
assistant_uuid	If applicable, the Turn.io assistant that triggered this event
chat_uuid	If applicable, the chat conversation where this AI was used
session_id, session_external_id	Identifiers for the AI session
run_id	Internal identifier for the specific AI run
duration_ms	How long the AI operation took to complete in milliseconds
ai_vendor	The AI provider (e.g., OpenAI, Anthropic, Claude)
ai_model	The specific AI model used (e.g., gpt-4, gpt-3.5-turbo)
data	JSON data containing additional context or the full event details
inserted_at	When this record was created
updated_at	When this record was last modified

attachments

The Attachments table stores metadata about media files that are sent or received through the Turn.io platform. These attachments can include images, videos, audio files, documents, and other media types that are exchanged in WhatsApp conversations. The table tracks not only the basic details of the file but also additional processing information like transcriptions and auto-captions.

Column	Description
id	A unique identifier for this attachment
external_id	An identifier for this attachment in external systems (e.g., WhatsApp)
direction	Whether the attachment was incoming (received) or outgoing (sent)
mime_type	The MIME type of the file (e.g., "image/jpeg", "audio/mp3")
media_type	The category of media (e.g., "image", "video", "audio", "document")
media_object	JSON object containing metadata specific to this media type
uri	The location where the actual file is stored
number_id	The WhatsApp number associated with this attachment
faq_id	If this attachment is part of an FAQ, references that FAQ
card_id	If this attachment is part of a card, references that card
opt_in_id	If this attachment is part of an opt-in message, references that opt-in

external_id_timestamp	When the external ID was assigned
media_id	An alternative identifier for the media
media_id_timestamp	When the media ID was assigned
transcriptions	JSON data containing transcriptions of audio/video content
transcriptions_status	The status of the transcription process (e.g., "pending", "completed")
auto_caption	Automatically generated caption for images or videos
auto_caption_status	The status of the auto-captioning process
inserted_at	When this attachment record was created
updated_at	When this attachment record was last modified

cards

The Cards table stores interactive content elements used in the Turn.io platform. Cards represent structured message templates that can be sent to users through WhatsApp. They contain rich, formatted text content that can include emojis, formatting, and interactive elements. This table is central to Turn.io's ability to deliver consistent, reusable health information, FAQs, and guided interactions across multiple languages to serve diverse populations in social impact contexts.

Column	Description
id	A unique identifier for this card (e.g., "200006")
uuid	A globally unique identifier for this card (e.g., "32ac1dd6-xxxx-x0x0-0e63-f3d575xxxx84")
title	The display title of this card (e.g., "card_welcome")
content	The main text content of the card, which can include formatting, emojis, and menu options
type	The type or category of this card (e.g., "FAQ")
language	The language code for the card's content (e.g., "por" for Portuguese, "sot" for Sesotho)
save_to_field	The contact field where any response to this card should be saved
is_deleted	Soft deletion flag; true if this card has been removed (e.g., "true")
number_id	The WhatsApp number ID this card is associated with (e.g., "001", "1000")
error_message	Error message to display if there's an issue with the card
metadata	JSON data containing additional configuration or tracking information (e.g., {"migrated_from_faq":400000})
inserted_at	When this card was created
updated_at	When this card was last modified

chats

The Chats table is a core entity in the Turn.io platform that represents conversations between social impact organizations and their contacts through WhatsApp. Each chat record tracks the status, assignment, and metadata of a conversation thread. This table serves as the central hub connecting messages, contacts, operators, and various interaction data, making it one of the most critical tables for supporting life-improving conversations through WhatsApp.

Column	Description
id	A unique identifier for this chat (e.g., "86900000")
uuid	A globally unique identifier for this chat (e.g., "06bc7027-xxxx-xxxx-9938-68aa120xxx3")
number_id	References the WhatsApp number this chat is associated with (e.g., "555", "1000")
owner	The phone number or identifier of the chat recipient (e.g., "+2347060303033", "+919999999999")
type	The type of chat (e.g., "DIRECT" for one-to-one conversations)
state	The current state of the chat (e.g., "OPEN", "CLOSED")
state_reason	The reason for the current state (e.g., "Chat closed due to inactivity", "Re-opened by inbound message")
title	The display title for this chat (e.g., "Marina", "Marina Silva", "Marina Silva ")
icon	URL or reference to an icon for this chat
timestamp	The timestamp used for ordering chats, typically the time of the most recent activity
unread_count	The number of unread messages in this chat (e.g., "0", "58")
contact_id	References the contact this chat is with (e.g., "1082000", "100709000")
group_id	References the group this chat is with (for group chats)
assigned_to_id	References the account this chat is assigned to
assigned_to_timestamp	When this chat was assigned to the current operator

last_message_id	References the most recent message in this chat (e.g., "103000302", "434000286")
last_reaction_uuid	References the most recent message reaction in this chat
inbound_timestamp	When the most recent inbound message was received
outbound_timestamp	When the most recent outbound message was sent
invite_link	Invitation link for joining group chats
pinned_at	When this chat was pinned by an operator
is_blocked	Whether this chat is blocked from receiving messages (e.g., "false")
is_culled	Soft deletion flag; true if this chat has been removed (e.g., "false")
should_count_for_non_blocked_stats	Whether this chat should count in non-blocked statistics (e.g., "false", "true")
should_count_for_blocked_stats	Whether this chat should count in blocked statistics (e.g., "false")
inserted_at	When this chat record was created
updated_at	When this chat record was last modified

contact_details

The Contact Details table stores the actual information for contacts in the Turn.io platform. It implements a versioning system that preserves the history of contact data changes over time. Each record represents a specific version (generation) of a contact's information, with the actual data stored in a JSON structure that conforms to the associated contact schema. This design enables both current and historical views of contact information while supporting schema evolution.

Column	Description
id	A unique identifier for this contact details record
uuid	A globally unique identifier for this contact details record
contact_id	References the contact this data belongs to
contact_schema_id	References the schema defining the structure of this data
number_id	References the WhatsApp number this contact is associated with
generation	The version number of this contact data (increments with each update)
latest	Boolean flag indicating if this is the current version of the contact's data
fields	JSON object containing the actual contact field values
inserted_at	When this contact details record was created
updated_at	When this contact details record was last modified

contacts

The Contacts table is a fundamental entity in the Turn.io platform that represents individuals or organizations that can be communicated with through WhatsApp. Each record contains identification information, communication identifiers, and metadata about a contact. This table serves as the central registry of all entities that businesses can interact with through the platform, forming the foundation for conversations, messaging, and relationship management.

Column	Description
id	A unique identifier for this contact
uuid	A globally unique identifier for this contact
type	The classification/type of this contact
organisation_id	References the organization this contact belongs to
number_id	References the WhatsApp number this contact is associated with
urn	The universal resource name that uniquely identifies this contact's address (e.g., phone number in WhatsApp format)
external_id	An identifier for this contact in external systems
details	JSON object containing additional contact information
version	The version number for tracking contact data changes
is_fallback_active	Whether fallback handling is enabled for this contact
failure_count	The number of consecutive messaging failures for this contact
last_update_origin	The source/system that last updated this contact record
import_datetime	When this contact was imported into the system
is_deleted	Soft deletion flag; true if this contact has been removed (Default false)
inserted_at	When this contact record was created
updated_at	When this contact record was last modified

faqs

The FAQs table stores frequently asked questions and their answers for each WhatsApp number managed on the Turn.io platform. This enables organizations to provide automated, multilingual self-service support to their users, reducing the load on human operators and ensuring consistent, accurate information is available 24/7.

Column	Description
id	Internal unique identifier for this FAQ entry
uuid	Globally unique identifier for this FAQ (e.g., "6b09f8d2-xxxx-xxxx-xxxx-4ebc41b1dxxx")
question	The question text as users might ask it (e.g., "How do I reset my password?")
answer	The answer text provided to users (e.g., "To reset your password, reply with RESET and follow the instructions sent to your WhatsApp.")
language	The language code for this FAQ (e.g., "en" for English, "es" for Spanish)
is_deleted	Whether this FAQ has been soft-deleted (true/false)
is_migrated	Whether this FAQ was migrated from a previous system (true/false)
number_id	References the WhatsApp number this FAQ is associated with
inserted_at	When this FAQ was created
updated_at	When this FAQ was last updated

flow_results

The Flow Results table stores responses and interactions collected from contacts during automated conversational flows or journeys in the Turn.io platform. This table captures structured data about how users respond to questions, surveys, or interactive elements within WhatsApp conversations, enabling organizations to collect and analyze feedback, preferences, and other valuable information from their audience.

Column	Description
uuid	A unique identifier for this flow result record
question_id	Identifier for the specific question or interaction point within a flow that generated this result
response	The actual response provided by the contact (e.g., selected option, text input, etc.)
response_metadata	Additional structured data about the response, stored as a JSON object
stack_uuid	Reference to the conversational flow stack this result belongs to
session_id	Identifier for the conversation session during which this response was collected
number_id	References the WhatsApp number used to collect this result
contact_id	References the contact who provided this response
stack_container_uuid	References the specific container within a journey stack that collected this result
inserted_at	When this flow result was created
updated_at	When this flow result was last modified

flow_results_data_packages

The Flow Results Data Packages table stores metadata and structural information about sets of flow results in the Turn.io platform. This table implements the Flow Results specification, an open standard for representing user interaction data from conversational services. Each record defines the structure, context, and descriptive information for a collection of related responses gathered through WhatsApp conversations, making the data interoperable and easier to analyze.

Column	Description
uuid	A unique identifier for this flow results data package
flow_results_specification_version	The version of the Flow Results specification being used (e.g., "1.0.0-rc1")
name	Machine-readable identifier for this data package
resources	JSON structure containing schema definitions and references to the actual result data
stack_uuid	Reference to the conversational flow stack that generated these results
title	Human-readable title for this data package
profile	Categorization of what type of flow this package represents
number_id	References the WhatsApp number used to collect this data
stack_container_uuid	References the specific container within a journey stack that collected these results
inserted_at	When this data package was created
updated_at	When this data package was last modified

message_attachments

The Message Attachments table maps media files (images, documents, audio, video) to the messages they belong to in WhatsApp conversations. Each record represents a file that was shared during a conversation, linking the attachment's storage information with the specific message and chat where it appeared. This enables rich media communication beyond text-only exchanges, which is crucial for effective engagement in social impact programs.

Column	Description
id	A unique identifier for this message attachment record
caption	The optional text description that accompanies the attachment when shared
filename	The name of the file as it appears to users
attachment_id	References the attachment record that contains the file's storage details
chat_id	References the chat where this attachment was shared
message_id	References the message that contains this attachment
number_id	References the WhatsApp number associated with this attachment
inserted_at	When this attachment record was created
updated_at	When this attachment record was last modified

message_tags

The Message Tags table links messages to tags (labels) that describe their content, intent, or classification within the Turn.io platform. Tags can be applied automatically (e.g., by AI or automation) or manually, and are used for analytics, filtering, automation, and reporting. Each tag can include a confidence score and additional metadata, supporting advanced use cases like intent detection, content moderation, or workflow routing.

Column	Description
id	Internal unique identifier for this message tag record
message_id	References the message being tagged
number_tag_id	References the tag (from the Number Tags table) applied to the message
confidence	Numeric score (0.0–1.0) indicating confidence in the tag assignment (e.g., 0.95 for high certainty)
metadata	JSON object with extra details about the tag assignment (e.g., source, AI model, rationale)
enabled	Whether this tag is currently active for the message (true/false)
inserted_at	When this tag was created
updated_at	When this tag was last updated

messages

The Messages table is the central repository for all communication content exchanged through the Turn.io platform. It stores every message sent and received via WhatsApp, including text, media, interactive elements, templates, and system messages. This table captures not only the content of messages but also their metadata, delivery status, context, and relationships to other platform entities. It serves as the fundamental record of all conversations that flow through the system.

Column	Description
id	A unique numeric identifier for this message (e.g., "300070000", "1777888777")
uuid	A globally unique identifier for this message (e.g., "7ef5b095-xxxx-xxxx-xxxx-e3f05ccbexxx")
message_type	The type of message (e.g., "text")
direction	The flow direction of this message ("inbound" for messages received from contacts, "outbound" for messages sent by the platform)
from_addr	The phone number of the message sender (e.g., "+254758999999", "+5561988999999")
addressees	An array of recipient phone numbers for this message (e.g., "["+5585987654321"]")
content	The text content of the message (e.g., "Hello world", "20")
rendered_content	The fully rendered text content, which may include formatting and localized elements
has_media	Whether this message contains media attachments (e.g., "false")
media_object	JSON object containing metadata about media attachments (e.g., "{}")
chat_id	References the chat this message belongs to (e.g., "300079000", "1000048000")
new_chat_id	If this message was moved to a different chat, references the new chat
author	JSON object with information about who created this message (e.g., {"id":"254751234567", "name":"Maureen", "type":"OWNER"})
author_type	The type of author (e.g., "OWNER", "SYSTEM")
external_id	The ID assigned by WhatsApp/Meta to this message (e.g., "wamid.XXxXXXU4NTg2MzgZOTI1FQIAE1234EJEOElYnjk0RTJCOTAYXXXXXX==")
external_timestamp	When this message was processed by external systems (e.g., "2023-01-26 145104")
number_id	References the WhatsApp number associated with this message (e.g., "1234", "5678")
template	JSON object containing information about the message template
interactive	JSON object containing data for interactive message components like buttons or lists
hsm	JSON object containing information for highly structured messages
localizable_params	Array of parameters used for localizing content
last_status	The current delivery status of this message (e.g., "delivered")
last_status_timestamp	When the last status was updated (e.g., "2024-06-25 235739")
is_handled	Whether this message has been processed by the system (e.g., "false")
is_deleted	Whether this message has been soft-deleted
deleted_reason	The reason for deletion if applicable
deleted_by_actor_id	References the actor who deleted this message
context_id	ID of the conversation context
context_from	Source of the conversation context
context_message_id	ID of the original message in a thread
context_forwarded	Whether this message was forwarded from another chat
context_frequently_forwarded	Whether this message has been frequently forwarded by users
in_reply_to	ID of the message this is replying to, enabling threaded conversations
source_type	The origin of this message (e.g., "CHANNEL_MESSAGE")
button_reply_id	ID of the button that was clicked if this is a button response
button_reply_title	Title of the button that was clicked
list_reply_id	ID of the list item selected if this is a list response
list_reply_title	Title of the list item selected
list_reply_description	Description of the list item selected
metadata	JSON object containing additional message metadata (e.g., "{}")
on_fallback_channel	Whether this message was sent via a fallback channel (e.g., "false")
inserted_at	When this message record was created
updated_at	When this message record was last updated

number_tags

The Number Tags table defines reusable labels (tags) that can be applied to messages or contacts for a specific WhatsApp number in the Turn.io platform. Tags help organizations categorize, filter, and automate their communications. Each tag has a display color, a unique value, and can be enabled or disabled as needed.

Column	Description
id	Internal unique identifier for this tag
uuid	Globally unique identifier for this tag (e.g., "6b09f8d2-xxxx-xxxx-xxxx-4ebc41b1d000")
value	The tag's value or label (e.g., "urgent", "health", "follow-up")
color	The display color for this tag, usually as a hex code (e.g., "#FF0000" for red)
enabled	Whether this tag is currently available for use (true/false)
number_id	References the WhatsApp number this tag belongs to
inserted_at	When this tag was created
updated_at	When this tag was last updated

statuses

The Statuses table tracks the delivery and read status of messages sent through the Turn.io platform. Each record represents a status update received from WhatsApp for a specific message, providing organizations with visibility into whether their messages have been delivered, read, or encountered errors. This table is critical for monitoring message delivery, measuring engagement, and identifying communication issues that may require attention.

Column	Description
id	A unique identifier for this status record
uuid	A globally unique identifier for this status record (e.g., "ee8db215-xxxx-xxxx-xxxx-60b4bd3ae140")
message_id	The ID of the message this status update is for (e.g., "1234511223")
message_uuid	The UUID of the message this status update is for (e.g., "d3eec919-xxxx-xxxx-xxxx-1218549158bd")
number_id	The ID of the WhatsApp number that sent the message (e.g., "1234", "123")
status	The current status of the message (e.g., "sent", "read")
timestamp	When this status change occurred on WhatsApp's platform
raw_body	The complete JSON payload received from WhatsApp containing detailed status information
description	Additional descriptive information about this status update
errors	Error details if the message failed to deliver
inserted_at	When this status record was created
updated_at	When this status record was last modified

accounts

The accounts table is a record of your internal organization team members that have been onboarded to your Turn environment within any capacity such as operator, builder and admin. This table allows you to map out operator names to chats using the chats table.

Column	Description
uuid	A globally unique identifier for this internal team member (e.g., "ee8db215-xxxx-xxxx-xxxx-60b4bd3ae140")
email	The email address of the internal team member (e.g., "jane.doe@example.com"). This is typically used for login and communication.
first_name	The first name of the internal team member (e.g., "Jane").
last_name	The last name of the internal team member (e.g., "Doe").
provider	The authentication provider used by the team member to sign in (e.g., "google", "microsoft").
preferred_language	The preferred language for the team member's inbox language, specified by a language code (e.g., "eng").
inserted_at	The timestamp indicating when the team member's account was created in the system.
updated_at	The timestamp indicating the last time the team member's account information was modified.

chat_events

Chat Events is a table that tracks significant events related to chat conversations within the Turn.io platform. It logs activities such as chat assignments, chat closures, and operator interactions. This data is used for analytics, performance monitoring, and insights about chat handling efficiency and operator productivity.

Column	Description
uuid	A unique identifier for this chat event
timestamp	When this chat event occurred (used as the partition key)
event_type	The type of chat event (e.g., "chat_assigned", "chat_closed")
time_elapsed_ms	In events that measure time intervals (for example time to close a chat), this field contains the elapsed time in milliseconds
number_uuid	The UUID of the WhatsApp number associated with this chat event
chat_uuid	The UUID of the chat conversation where this event occurred
operator_uuid	The UUID of the operator associated with this event (e.g., who closed or was assigned the chat)
closing_reason	The reason for closing the chat (e.g., "culling", "inactivity", "user_action") - only populated for chat_closed events
inserted_at	When this chat event record was created
updated_at	When this chat event record was last modified