

Data Dictionary

Rockbuster Stealth LLC

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Rockbuster Data Dictionary

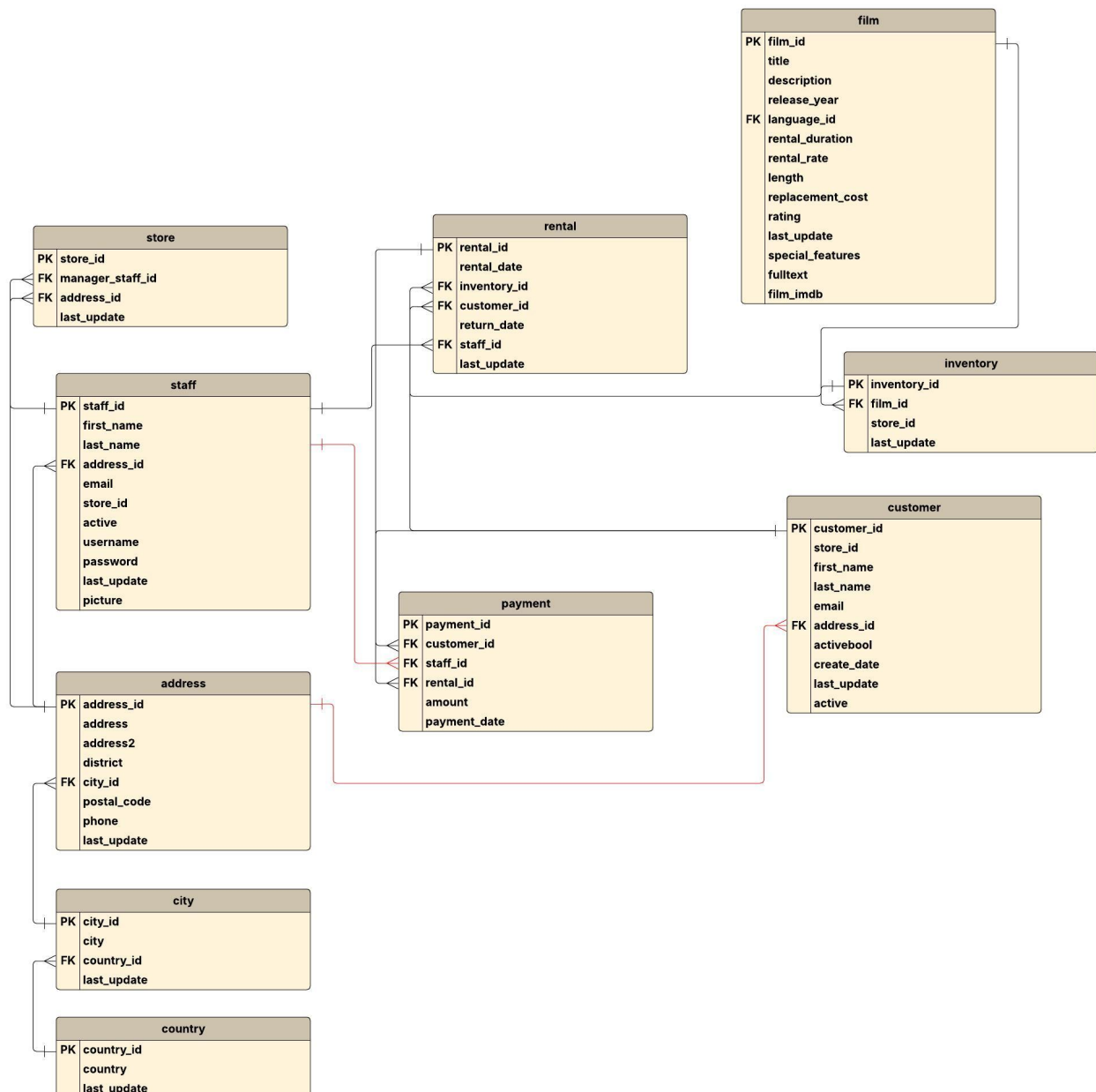
Executive Summary

This data dictionary offers a thorough overview of the Rockbuster Stealth LLC database structure. It covers all the main tables, such as customers, transactions, films, inventory, staff and locations, as well as sub-dimension tables used for categorisation and relationships, such as film_actor and film_category.

Each table includes column names, data types, descriptions, key constraints (PK/FK) and links to related tables. An entity-relationship diagram (ERD) and a schema explanation are also provided to visualise the data model. The dictionary ensures clarity and accuracy for technical users, analysts and stakeholders, and facilitates future queries, reporting and database management.

Entity Relationship Diagram (ERD)

The ERD below was created using Lucidchart. It contains key tables from Rockbuster's database, such as film, customer, rental, payment and inventory, along with their relationships. This visualisation helps to identify how data is connected throughout the system.



Schema Type

The Rockbuster database follows a snowflake schema: store → address → city → country

This can be seen from the normalisation of the dimension tables. For example, the 'store' table is linked to 'address', which is linked to 'city' and then 'country'.

This structure offers more flexibility and reduces redundancy in the data model.

Data Dictionary

Dimension Tables	Column Name	Data Type	Description	Links To	Key
customer Customer's payments, rentals, and demographic info.	customer_id	INTEGER	Unique ID for each customer		PK
	store_id	INTEGER	Store the customer is assigned to.	store.store_id	FK
	first_name	VARCHAR(45) TEXT	Customer's first name		
	last_name	VARCHAR(45) TEXT	Customer's last name		
	email	VARCHAR(50) TEXT	Customer email address		
	address_id	INTEGER	Reference to address	address.address_id	FK
	activebool	BOOLEAN	Active status		
	create_date	DATE	Date the customer was added		
	last_update	TIMESTAMP	Last time record was updated		
address Used by customer, staff, and store for locations.	address_id	INTEGER	Unique ID for address		PK
	address	VARCHAR(50) TEXT	Street name and number		
	address2	VARCHAR(50) TEXT	Secondary address (optional)		
	district	TEXT	District/area		
	city_id	INTEGER	City of the address	city.city_id	FK
	postal_code	TEXT	Postal code		
	phone	TEXT	Phone number		
	last_update	TIMESTAMP	Last update timestamp		
city	city_id	INTEGER	Unique ID for city		PK
	city	TEXT	City name		
	country_id	SMALLINT	Reference to country table	country.country_id	FK
	last_update	TIMESTAMP	Last update timestamp		
country	country_id	SERIAL	Unique ID for country		PK
	country	VARCHAR(50)	Country name		
	last_update	TIMESTAMP	Last update timestamp		
payment Contains records of customer payments for rentals.	payment_id	INTEGER	Unique ID for each payment		PK
	customer_id	INTEGER	Customer who made the payment.	customer.customer_id	FK
	staff_id	INTEGER	Staff who processed the payment.	staff.staff_id	FK
	rental_id	INTEGER	Associated rental transaction.	rental.rental_id	FK
	amount	DECIMAL	The amount paid by the customer.		
	payment_date	TIMESTAMP	The date and time of the payment.		

Fact Tables	Column Name	Data Type	Description	Links To	Key
rental Details of rental transactions for films.	rental_id	INTEGER	Unique identifier for each rental.		PK
	rental_date	TIMESTAMP	The date and time the rental started.		
	inventory_id	INTEGER		inventory.inventory_id	FK
	customer_id	INTEGER	Customer who rented the film	customer.customer_id	FK
	return_date	TIMESTAMP	The date and time the film was returned.		
	staff_id	INTEGER	Staff handling the rental.	staff.staff_id	FK
	last_update	TIMESTAMP	Timestamp of the last update to the record.		
Dimension Tables	Column Name	Data Type	Description	Links To	Key
inventory	inventory_id	INTEGER	Unique ID for inventory item		PK
	film_id	INTEGER		film.film_id	FK
	store_id	INTEGER	Store where item is located	store.store_id	
	last_update	TIMESTAMP	Timestamp of the last update to the record.		

Dimension Tables	Column Name	Data Type	Description	Links To	Key
film Connected to inventory, film_category, film_actor.	film_id	INTEGER	Unique ID of the film		PK
	title	VARCHAR(255)	Name of the movie		
	description	TEXT	Short description or synopsis		
	release_year	YEAR	Year the film was released		
	language_id	INTEGER		language.language_id	FK
	rental_duration	INTEGER	Days the film can be rented		
	rental_rate	NUMERIC(4,2)	Daily rental price		
	length	INTEGER	Length of the film in minutes		
	replacement_cost	NUMERIC(5,2)	Cost to replace the film if lost.		
	rating	MPAA_RATING	Rating of the film		
	last_update	TIMESTAMP	Timestamp of the last update to the record.		
	special_features	TEXT	Special features included with the film.		
	fulltext	TEXT	Full-text search vector (optional).		
	film_imdb	VARCHAR	Optional IMDb reference (custom column).		

Dimension Tables	Column Name	Data Type	Description	Links To	Key
staff	staff_id	INTEGER	Unique ID for each staff member		PK
	first_name	VARCHAR	Staff member's first name		
	last_name	VARCHAR	Staff member's last name		
	email	VARCHAR	Email address of the staff		
	address_id	SMALLINT	Reference to address table	address.address_id	FK
	store_id	SMALLINT	Store the staff member is assigned to	store.store_id	
	username	VARCHAR	Staff login username		
	password	VARCHAR	Staff login password		
	active	BOOLEAN	Indicates if the staff member is active		
	picture	BYTEA	Optional profile picture		
	last_update	TIMESTAMP	Last time the record was updated		
store	store_id	INTEGER	Unique ID for each store		PK
	manager_staff_id	SMALLINT		staff.staff_id	FK
	address_id	SMALLINT		address.address_id	FK
	last_update	TIMESTAMP	Last time this record was updated		
Sub-Dimension Tables	Column Name	Data Type	Description	Links To	Key
film_actor	actor_id	SMALLINT	Reference to actor table	actor.actor_id	
	film_id	SMALLINT	Reference to film table	film.film_id	
	last_update	TIMESTAMP	Last time this relation was updated		
film_category	category_id	SMALLINT		category.category_id	
	film_id	SMALLINT		film.film_id	
	last_update	TIMESTAMP	Last time this relation was updated		
actor	first_name	VARCHAR(45)	Actor's first name		
	last_name	VARCHAR(45)	Actor's last name		
language	language_id	SERIAL	Unique ID of language		
	name	CHAR(20)	Language name (e.g., English, French)		
category	category_id	SMALLINT	Unique ID for category		
	name	VARCHAR(25)	Category name (e.g., Comedy)		
	last_update	TIMESTAMP	Last update timestamp		