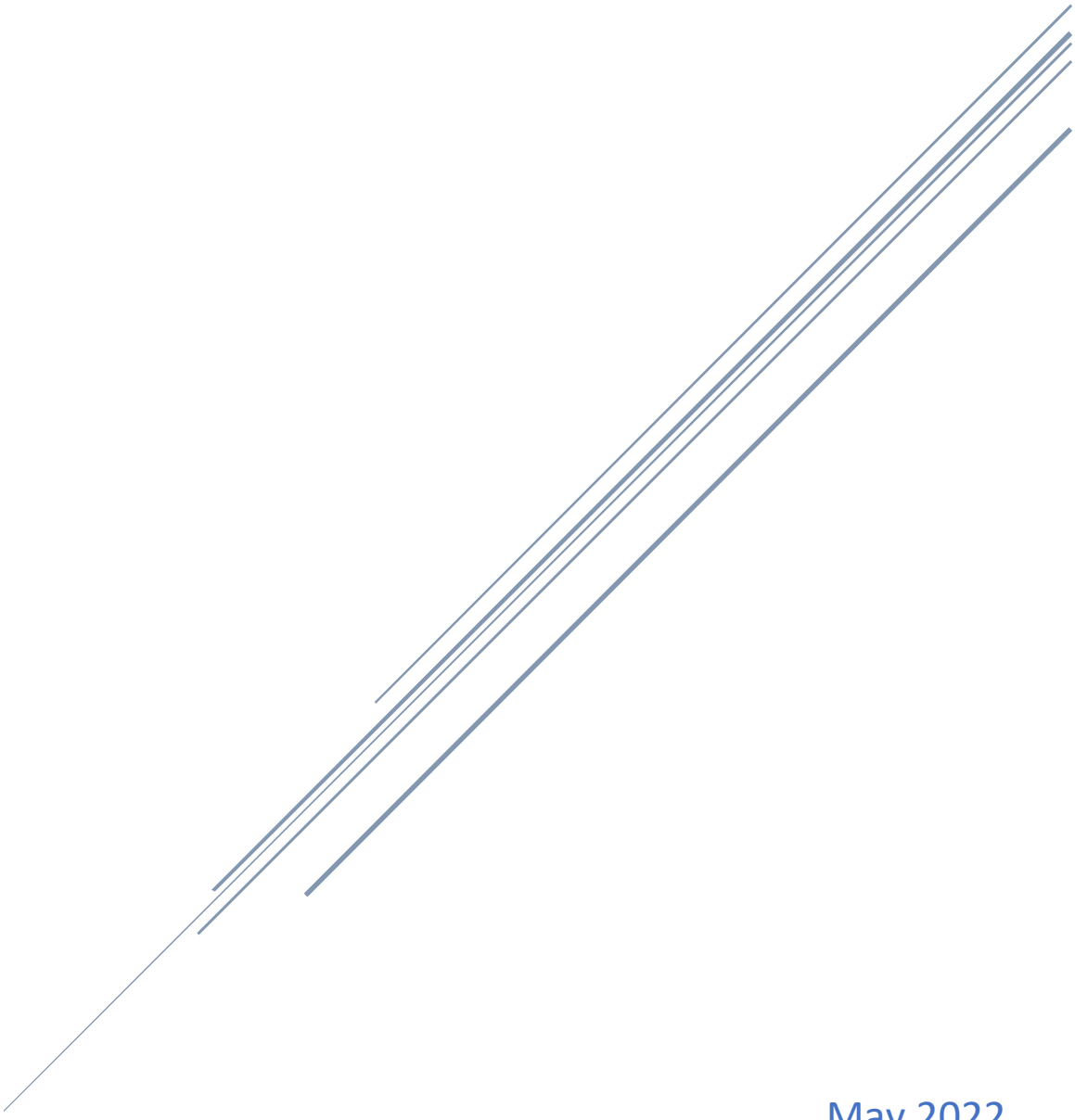
ROCKBUSTER STEALTH

Data Dictionary



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Kristina Pritchard

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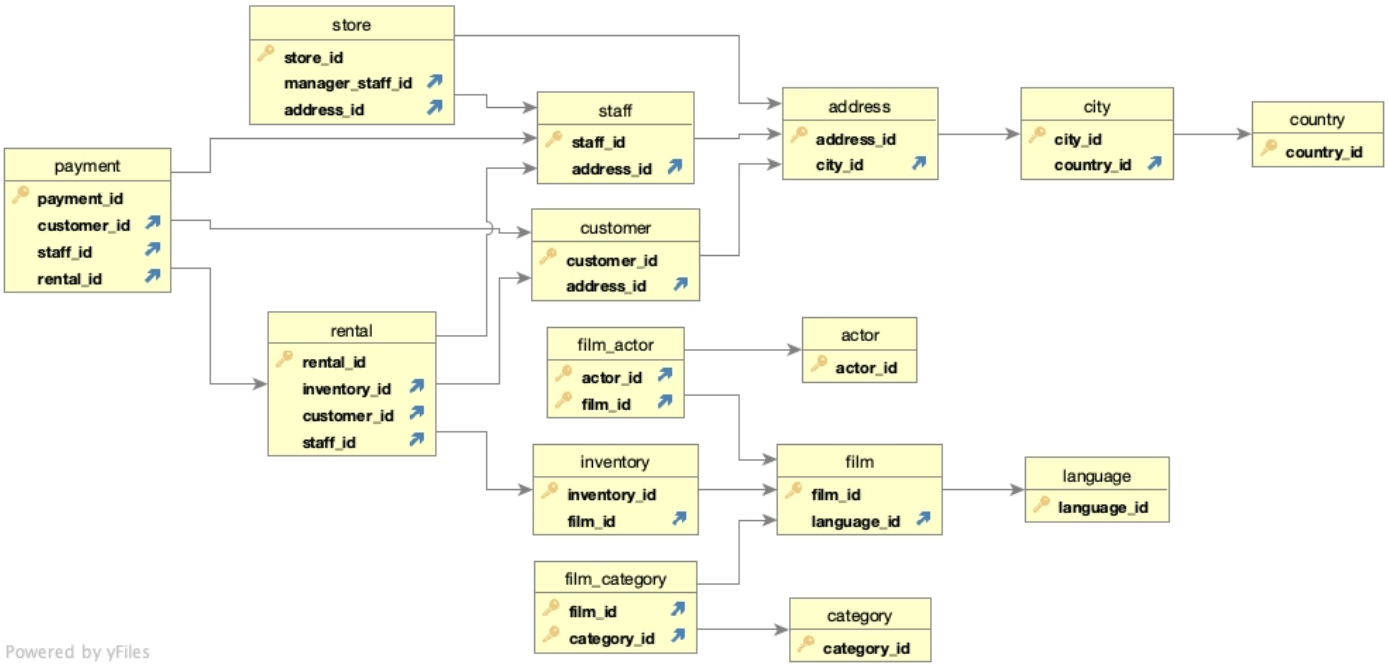
Legend

	Primary key
	Foreign key

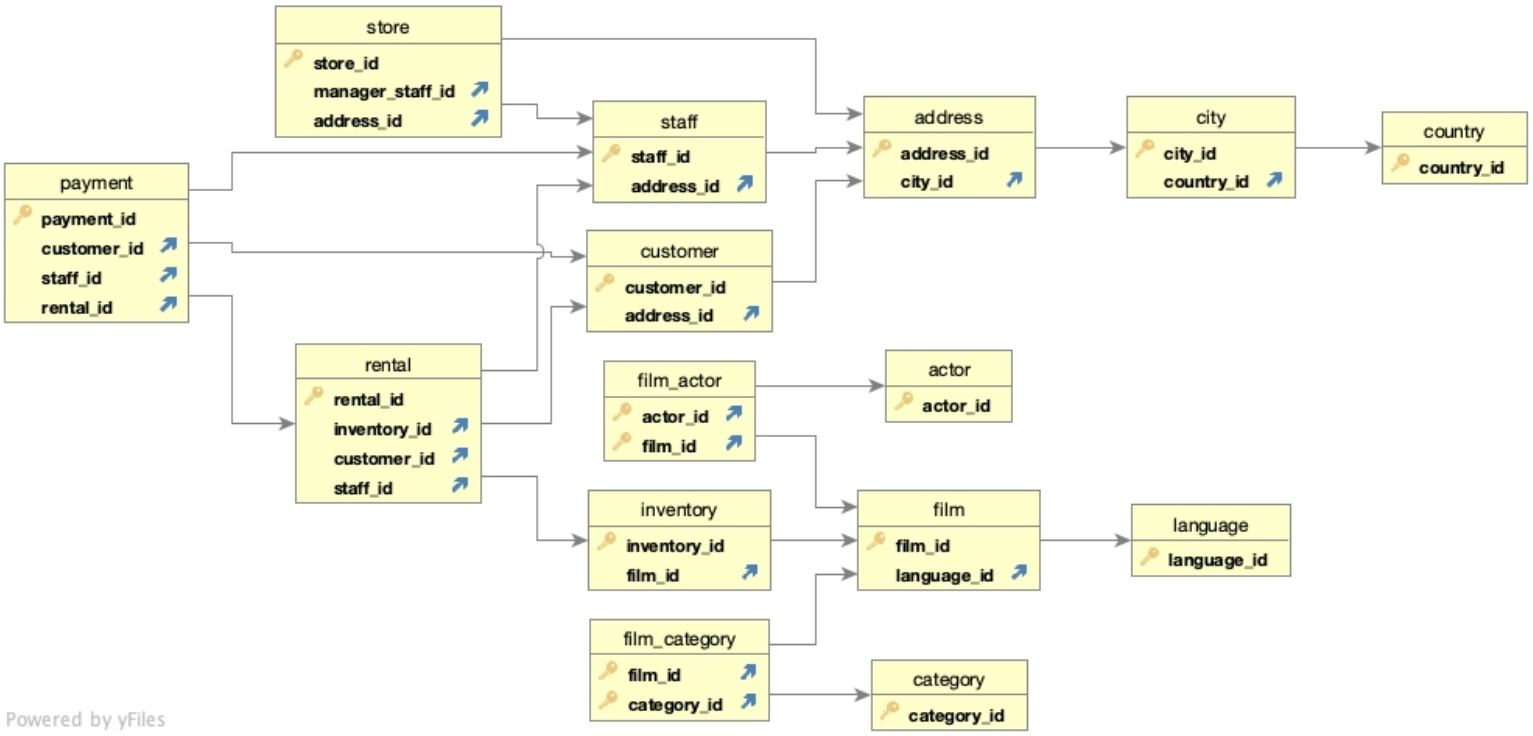


1. Rockbuster

The Rockbuster database supports the tracking of film rentals, inventory and payments along with information about customers, staff and films. The tables belong to the following departments: Sales, Marketing, Customer Support and Human Resources.

The Rockbuster database has a snowflake schema with sub-dimension tables. The fpayment table is the fact table, and the primary dimensions consist of customer, rental and staff. Customers, staff and store share common sub-dimensions for address, city and country. All film information is found in the rental tables sub-dimensions consisting of inventory, film_actor, actor, film, film_category, category and language.

2. Entity Relationship Diagram (ERD)



3. Payment

3.1. Tables

3.1.1. Table: payment

Fact table with revenue received from film rentals with the corresponding customer and staff ids.

Columns

	Name	Data type	Description
🔑	payment_id	SERIAL	Number assigned to payment - key
↗	customer_id	SMALLINT	Number assigned to customer
↗	staff_id	SMALLINT	Number assigned to staff
↗	rental_id	INTEGER	Number assigned to rental
	amount	NUMERIC(5,2)	Price for rental
	payment_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date of payment

Linked to

Table	Join	Title / Name / Description
Customer	Payment.customer_id = customer.customer_id	payment_customer_id_fkey
Rental	Payment.rental_id = rental.rental_id	payment_rental_id_fkey
staff	Payment.staff_id = staff.staff_id	payment_staff_id_fkey

3.2. Views

3.2.1. View: Sales_by_film_category

Categories of movies and total sales

Columns

	Name	Data type	Description
	category	varchar	
	total_sales	numeric	

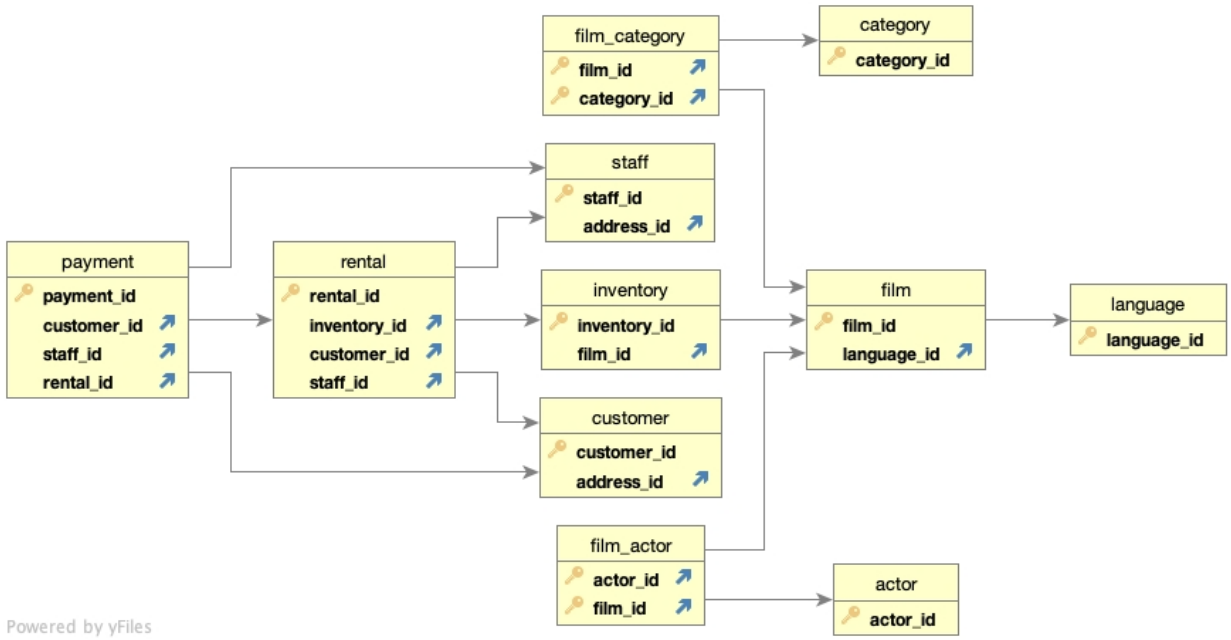
3.2.2. View: sales_by_store

Stores (including manager id) and their total sales.

Columns

	Name	Data type	Description
	store	text	
	manager	text	
	total_sales	numeric	

4. Rental



Rental holds information about film inventory and the films actors and cetegories

4.1. Tables

4.1.1. Table: Rental

Columns

	Name	Data Type	Description
🔑	rental_id	SERIAL	Identity / Auto increment column Primary key for rental records
	rental_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date of rental
↗	inventory_id	INTEGER	Number assigned to inventory
↗	customer_id	SMALLINT	Number assigned to customer
	return_date	TIMESTAMP (6) WITHOUT TIME ZONE	Return date for rental
↗	staff_id	SMALLINT	Number assigned to staff
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description
payment	rental.customer_id = payment.customer_id	payment_rental_id_fkey

Linked to

Table	Join	Title / Name / Description
Inventory	rental.inventory _id = inventory.inventory_id	rental_inventory_id_fkey
Customer	Rental.customer_id = =customer.customer_id	rental_customer_id_fkey
staff	Rental.staff_id = staff.staff_id	rental_staff_id_key

4.1.2. Table: film_actor

Columns

	Name	Data type	Description
	actor_id	SMALLINT	Number assigned to actor - key
	film_id	SMALLINT	Number assigned to film - key
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked to

Table	Join	Title / Name / Description
actor	film_actor.actor_id = actor.actor_id	film_actor_actor_id_fkey
Film	film_actor.film_id = film.film_id	film_actor_film_id_fkey

4.1.3. Table: inventory

Columns

	Name	Data type	Description
	inventory_id	SERIAL	Number assignt to inventory - key
	film_id	SMALLINT	Number assigned to film
	store_id	SMALLINT	Number assigned to store
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description
rental	rental.inventory_id = inventory.inventory_id	rental_inventory_id_fkey

Linked to

Table	Join	Title / Name / Description
film	inventory.film_id = film.film_id	inventory_film_id_fkey

4.1.4. Table: film_category

Columns

	Name	Data type	Description
	film_id	SMALLINT	Number assigned to film - key
	category_id	SMALLINT	Number assigned to film category - key
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked to

Table	Join	Title / Name / Description
film	film_category.film_id = film.film_id	film_category_film_id_fkey
category	film_category.category_id = category.category_id	film_category_category_id_fkey

4.1.5. Table: actor

Columns

	Name	Data type	Description
	actor_id	SERIAL	Number assigned to actor - key
	first_name	CHARACTER VARYING(45)	Actors first name
	last_name	CHARACTER VARYING(45)	Actors last name
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description

film_actor	film_actor.actor_id = actor.actor_id	film_actor_actor_id_fkey

4.1.6. Table: film

Columns

	Name	Data type	Description
	film_id	SERIAL	Number assigned to film - key
	title	CHARACTER VARYING(255)	Film name
	description	TEXT	Description of film
	release_year	year	Year film was released
	language_id	SMALLINT	Number assigned to language of film
	rental_duration	SMALLINT	Rental length in days
	rental_rate	NUMERIC(4,2)	Price of film rental
	length	SMALLINT	Length of film
	replacement_cost	NUMERIC(5,2)	Cost to replace film
	rating	mpaa_rating	Rating of film
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated
	special_features	TEXT[]	Special features included with film i.e trailers, behind the scenes…
	fulltext	TSVECTOR	Keywords for describing film

Linked from

Table	Join	Title / Name / Description
film_actor	film_actor.film_id = film.film_id	film_actor_film_id_fkey
inventory	inventory.film_id = film.film_id	inventory_film_id_fkey
film_category	film_category.film_id = film.film_id	film_category_film_id_fkey

Linked to

Table	Join	Title / Name / Description
language	film.language_id = language.language_id	film_language_id_fkey

4.1.7. Table: category

Columns

	Name	Data type	Description
	category_id	SERIAL	Number assigned to category(genre) – key
	name	CHARACTER VARYING(25)	genre
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description
film_category	film_category.category_id = category.category_id	film_category_category_id_fkey

4.1.8. Table: language

Columns

	Name	Data type	Description
	language_id	SERIAL	Number assigned to language - key
	name	CHARACTER(20)	Language name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description
film	film.language_id = language.language_id	film_language_id_fkey

4.2. Views

4.2.1. View: actor_info

Individual actors (names) and films (category and description)

Columns

	Name	Data type	Description
	actor_id	int4	
	first_name	varchar	

	last_name	varchar	
	film_info	text	

4.2.2. View: film_cantonese_view

All films in Cantonese including all film table inputs

Columns

	Name	Data type	Description
	film_id	int4	
	title	varchar	
	description	text	
	release_year	year	
	language_id	int2	
	rental_duration	int2	
	rental_rate	numeric	
	length	int2	
	replacement_cost	numeric	
	rating	mpaa_rating	
	last_update	timestamp	
	special_features	_text	
	fulltext	tsvector	

4.2.3. View: film_english_view

All films in English including all film table inputs

Columns

	Name	Data type	Description
	film_id	int4	
	title	varchar	
	description	text	
	release_year	year	
	language_id	int2	
	rental_duration	int2	
	rental_rate	numeric	
	length	int2	
	replacement_cost	numeric	
	rating	mpaa_rating	
	last_update	timestamp	
	special_features	_text	
	fulltext	tsvector	

4.2.4. View: film_list

Individual film rental details including price, actor and category

Columns

	Name	Data type	Description
	fid	int4	
	title	varchar	
	description	text	
	category	varchar	
	price	numeric	
	length	int2	
	rating	mpaa_rating	
	actors	text	

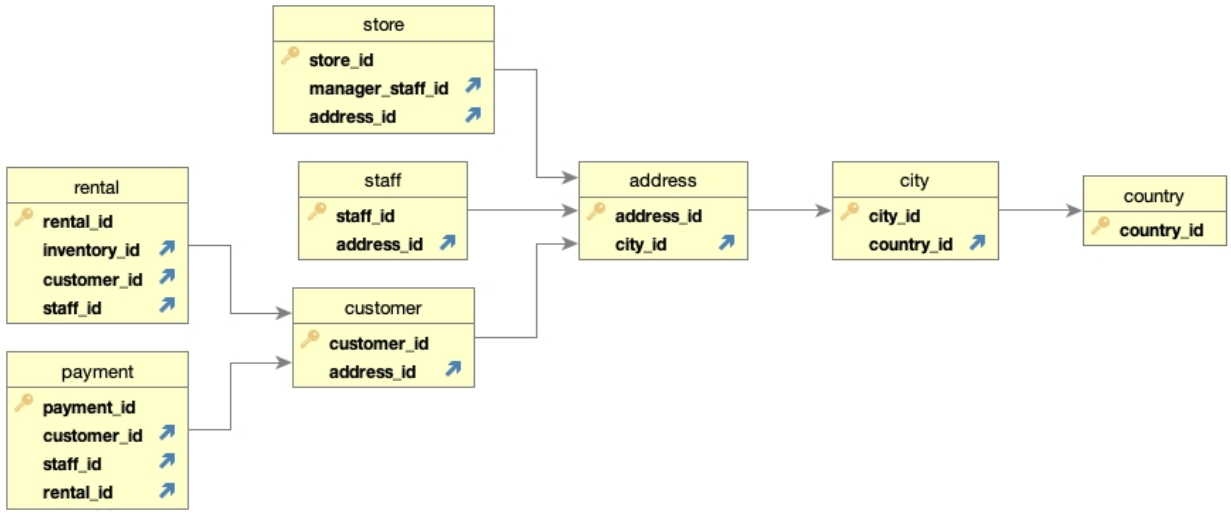
4.2.5. View: nicer_but_slower_film_list

Displays films that have slower story lines

Columns

	Name	Data type	Description
	fid	int4	
	title	varchar	
	description	text	
	category	varchar	
	price	numeric	
	length	int2	
	rating	mpaa_rating	
	actors	text	

5. Customer



Names and addresses of individual customers

5.1. Tables

5.1.1. Table: Customer

Columns

	Name	Data type	Description
🔑	customer_id	SERIAL	Number assigned to customer - key
	store_id	SMALLINT	Number assigned to store
	first_name	CHARACTER VARYING(45)	Customer first name
	last_name	CHARACTER VARYING(45)	Customer last name
	email	CHARACTER VARYING(50)	Customer email
↗	adress_id	SMALLINT	Number assigned to address - key
	activebool	BOOLEAN	Current customer
	create_date	DATE	Date entry was created
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated
	active	INTEGER	Is customer active?

Linked to

Table	Join	Title / Name / Description
address	customer.address_id = address.address_id	customer_address_id_fkey

Linked from

Table	Join	Title / Name / Description
payment	customer.payment_id = payment.payment_id	payment_customer_id_fkey
rental	customer.rental_id = rental.rental_id	rental_customer_id_fkey

5.1.2. Table: Address

Columns

	Name	Data type	Description
	address_id	SERIAL	Number assigned to address - key
	address	CHARACTER VARYING(50)	Street address
	address2	CHARACTER VARYING(50)	Secondary address
	district	CHARACTER VARYING(20)	District
	city_id	SMALLINT	Number assigned to city
	postal_code	CHARACTER VARYING(10)	Postal code
	phone	CHARACTER VARYING(20)	Phone number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry last updated

Linked to

Table	Join	Title / Name / Description
city	city.address_id = address.address_id	fk_address_city

Linked from

Table	Join	Title / Name / Description
customer	customer.address_id = address.address_id	customer_address_id_fkey
staff	staff.address_id = address.address_id	staff_address_id_fkey
store	store.address_id = address.address_id	store_address_id_fkey

5.1.3. Table: City

Columns

	Name	Data type	Description

	city_id	SERIAL	Number assigned to city - key
	city	CHARACTER VARYING(50)	City name
	country_id	SMALLINT	Number assigned to country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry last updated

Linked to

Table	Join	Title / Name / Description
country	city.country_id = country.country_id	fk_city

Linked from

Table	Join	Title / Name / Description
address	city.city_id = address.city_id	fk_address_city

5.1.4. Table: Country

Columns

	Name	Data type	Description
	country_id	SERIAL	Number assigned to country - key
	country	CHARACTER VARYING(50)	Country name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry last updated

Linked from

Table	Join	Title / Name / Description
city	city.country_id = country.country_id	fk_city

5.2. Views

5.2.1. View: customer_list

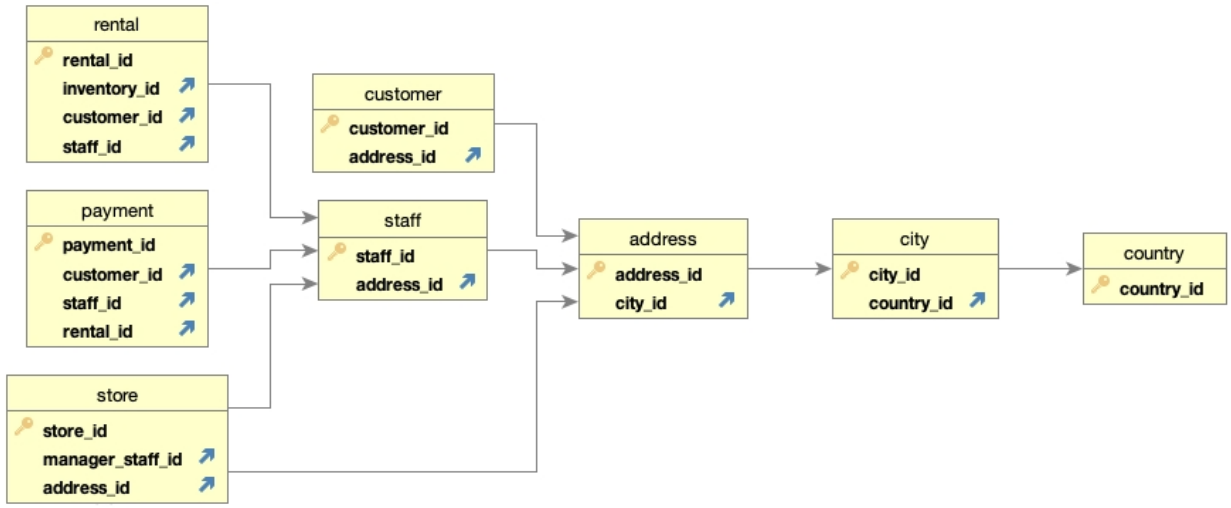
Individual customers (names and addresses) that rent Rockbuster products

Columns

	Name	Data type	Description
	id	int4	
	name	text	
	address	varchar	

	zip code	varchar	
	phone	varchar	
	city	varchar	
	country	varchar	
	notes	text	
	sid	int2	

6. Staff



Name, address of individual staff and store addresses

6.1. Tables

6.1.1. Table: Staff

Columns

	Name	Data type	Description
🔑	staff_id	SERIAL	Number assigned to staff - key
	first_name	CHARACTER VARYING(45)	Staff first name
	last_name	CHARACTER VARYING(45)	Staff last name
↗	address_id	SMALLINT	Number assigned to staff address
	email	CHARACTER VARYING(50)	Staff email
	store_id	SMALLINT	Number assigned to store they work at
	active	BOOLEAN	Are they currently a staff member

	username	CHARACTER VARYING(16)	Login username
	password	CHARACTER VARYING(40)	Login password
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated
	picture	BYTEA	Image of staff

Linked to

Table	Join	Title / Name / Description
address	staff.address_id = address.address_id	staff_address_id_fkey

Linked from

Table	Join	Title / Name / Description
payment	payment.staff_id = staff.staff_id	payment_staff_id_fkey
rental	rental.staff_id = staff.staff_id	rental_staff_id_key
store	store.manager_staff_id = staff.staff_id	store_manager_staff_id_fkey

6.1.2. Table: Store

Columns

	Name	Data type	Description
	store_id	SERIAL	Number assigned to store – key
	manager_staff_id	SMALLINT	Number assigned to store manager
	address_id	SMALLINT	Number assigned to store address
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date entry last updated

Linked to

Table	Join	Title / Name / Description
staff_id	store.manager_staff_id = staff.staff_id	store_manager_staff_id_fkey
address	store.address_id = address.address_id	store_address_id_fkey

6.2. Views

6.2.1. View: staff_list

Individual staff (names and addresses) that work for Rockbuster globally.

Columns

	Name	Data type	Description
	id	int4	
	name	text	
	address	varchar	
	zip code	varchar	
	phone	varchar	
	city	varchar	
	country	varchar	
	sid	int2	