

17/10/2023

# Rockbuster Stealth

Data Dictionary

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# 1. Rockbuster Stealth

This is a documentation of a Rockbuster Stealth database containing information about Rockbuster's film inventory, customers, staff, rentals and payments. The database includes 14 tables and 7 views.

## 1.1. Database Entity Relationship Diagram (EDR)



## 2. Legend

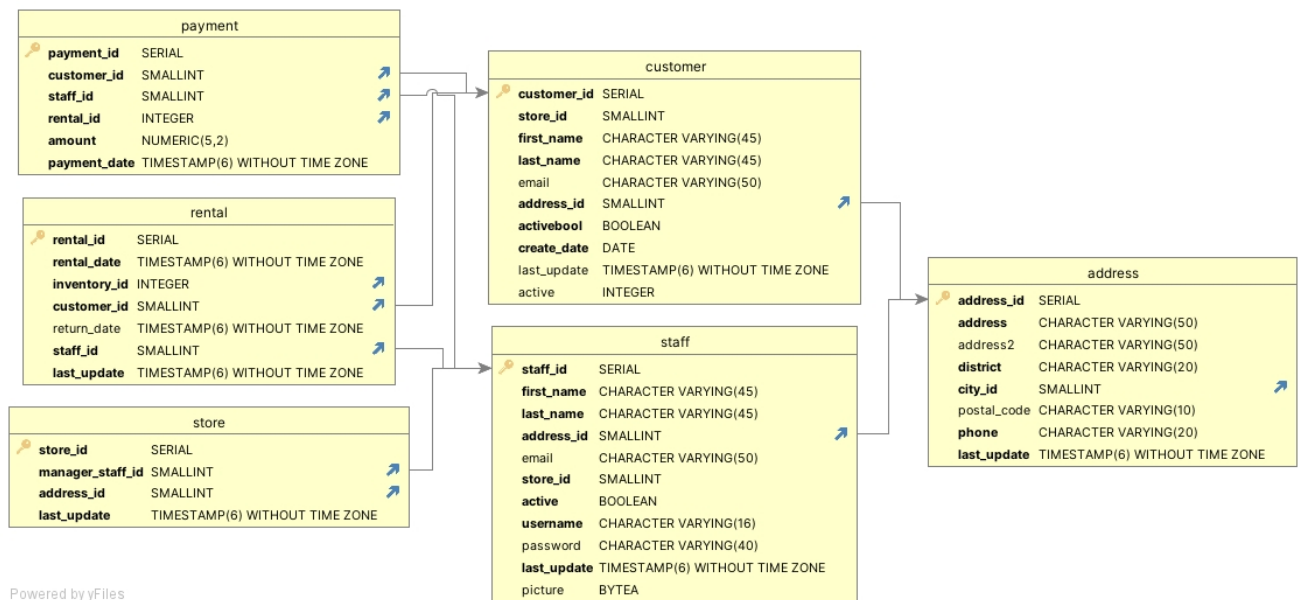


Primary Key



Foreign Key

### 3. People



Names, addresses and contact information of customers and staff members.

#### 3.1. Tables

##### 3.1.1. Table: customer

Contact details and account information including names and addresses of Rockbuster customers.

##### Columns

	Name	Data Type	Description
🔑	<b>Customer_id</b>	SERIAL	Unique number for each customer (primary key)
	<b>Store_id</b>	SMALLINT	Unique number for each store
	<b>First_name</b>	CHARACTER VARYING(45)	First name of the customer
	<b>Last_name</b>	CHARACTER VARYING(45)	Last name of the customer
	<b>Email</b>	CHARACTER VARYING (50)	Email address of the customer
🔗	<b>Address_id</b>	SMALLINT	Unique number for each address (of the customer in this case) (foreign key)
	<b>Activebool</b>	BOOLEAN	Whether the account is active (True) or not (False)
	<b>Create_date</b>	DATE	Date that the customer account/record was created
	<b>Last_update</b>	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated
	<b>Active</b>	INTEGER	Whether the account is active (1) or not (0) in binary numeral

#### Links to

Table	Join	Description
Address	Customer.address_id = address.address_id	Customer_address_id_fkey Foreign key constraint referencing address.address_id

#### Links from



Table	Join	Description
Rental	Customer.customer_id = rental.customer_id	Rental_customer_id_fkey Foreign key constraint referencing customer.customer_id
Payment	Customer.customer_id = payment.customer_id	Payment_customer_id_fkey Foreign key constraint referencing customer.customer_id

#### Unique keys

Columns	Name/Description
Customer_id	Customer_pkey Primary key constraint
Address_id	Customer_address_id_fkey Foreign key constraint

#### 3.1.2. Table: staff

Contact details and account information including names, addresses and location of employment of Rockbuster staff members.

	Column	Data Type	Description
	Staff_id	SERIAL	Unique number for each staff member (primary key)
	First_name	CHARACTER VARYING (45)	First name of staff member
	Last_name	CHARACTER VARYING (45)	Last name of staff member
	Address_id	SMALLINT	Unique number for each address (of the staff member in this case) (foreign key)
	Email	CHARACTER VARYING (50)	Email address of staff member
	Store_id	SMALLINT	Unique number for each store
	Active	BOOLEAN	Whether the staff member is currently active (True) or not (False)
	Username	CHARACTER VARYING (16)	Username of the staff member
	Password	CHARACTER VARYING (40)	Password of the staff member
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated
	Picture	BYTEA	Picture of the staff member

#### Links to

Table	Join	Description
Address	staff.address_id = address.address_id	Staff_address_id_fkey Foreign key constraint referencing address.address_id

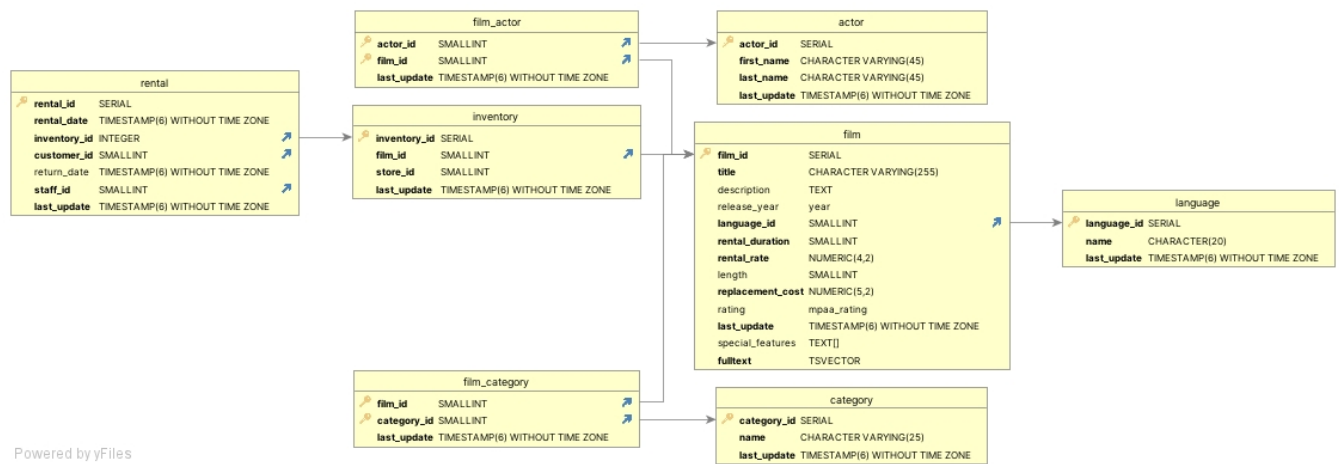
#### Links from

Table	Join	Description
Store	Staff.staff_id = store.manager_staff_id	Store_manager_staff_id_fkey Foreign key constraint referencing staff.staff_id
Rental	Staff.staff_id = rental.staff_id	Rental_staff_id_key Foreign key constraint referencing staff.staff_id
Payment	Staff.staff_id = payment.staff_id	Payment_staff_id_fkey Foreign key constraint referencing staff.staff_id

#### Unique keys

Columns	Name/Description
Staff_id	Staff_pkey Primary key constraint
Address_id	Staff_address_id_fkey Foreign key constraint

## 4. Products



Powered by yFiles

Information on actors, categories, and language of the films available at the Rockbuster inventory.

### 4.1. Tables

#### 4.1.1. Table: inventory

List of films available for rental and their respective store.

	Column	Data Type	Description
	<b>Inventory_id</b>	SERIAL	Unique number for item in stock
	<b>Film_id</b>	SMALLINT	Unique number for each film
	<b>Store_id</b>	SMALLINT	Unique number for each store
	<b>Last_update</b>	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links to

Table	Join	Description
<b>Film</b>	Inventory.film_id = film.film_id	Inventory_film_id_fkey Foreign key constraint referencing film.film_id

#### Links from

Table	Join	Description
<b>Rental</b>	Inventory.inventory_id = rental.inventory_id	Rental_inventory_id_fkey Foreign key constraint referencing inventory.inventory_id



#### Unique keys

Columns	Name/Description
Inventory_id	Inventory_pkey Primary key constraint
Film_id	Inventory_film_id_fkey Foreign key constraint

#### 4.1.2. Table: film

Details including title, description, language, length, rating and specific rental instructions of the films available.

	Column	Data Type	Description
🔑	Film_id	SERIAL	Unique number for each film (primary key)
	Title	CHARACTER VARYING (45)	Title of the film
	Description	TEXT	Description of the film
	Release_year	Year	Year the film was released
🔑	Language_id	SMALLINT	Unique number for each language (in this case, language the film is in) (foreign key)
	Rental_duration	SMALLINT	Amount of time a customer can rent the film for (in days)
	Rental_rate	NUMERIC (4,2)	Price to rent the film (presumably per day)
	Length	SMALLINT	Duration of the movie (in minutes)
	Replacement_cost	NUMERIC (5,2)	Price to replace the film if lost or damaged
	Rating	Mpaa_rating	Age rating as given by the MPAA
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated
	Special_features	TEXT[]	Special features available with the disc/tape
	Fulltext	TSVECTOR	Text search vectors to facilitate searching for key terms related to the film

#### Links to

Table	Join	Description
Language	Film.language_id = language.language_id	Film_language_id_fkey Foreign key constraint referencing language.language_id

#### Links from


Table	Join	Description
<b>Film_actor</b>	Film.film_id = film_actor.film_id	Film_actor_film_id_fkey Foreign key constraint referencing film.film_id
<b>Inventory</b>	Film.film_id = inventory.film_id	Inventory_film_id_fkey Foreign key constraint referencing film.film_id
<b>Film_category</b>	Film.film_id = film_category.film_id	Film_category_film_id_fkey Foreign key constraint referencing film.film_id

#### Unique keys

Columns	Name/Description
<b>Film_id</b>	Film_pkey Primary key constraint
<b>Language_id</b>	Film_language_id_fkey Foreign key constraint

#### 4.1.3. Table: actor

First and last name of actors taking part in films stored in the database.

	Column	Data Type	Description
	<b>Actor_id</b>	SERIAL	Unique number for each actor (primary key)
	<b>First_name</b>	CHARACTER VARYING (45)	First name of the actor
	<b>Last_name</b>	CHARACTER VARYING (45)	Last name of the actor
	<b>Last_update</b>	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links from

Table	Join	Description
<b>Film_actor</b>	Actor.actor_id = film_actor.actor_id	Film_actor_actor_id_fkey Foreign key constraint referencing actor.actor_id

#### Unique keys

Columns	Name/Description
<b>Actor_id</b>	Actor_pkey Primary key constraint

#### 4.1.4. Table: category

Type of categories of films stored in the database.

	Column	Data Type	Description
🔑	Category_id	SERIAL	Unique number for each category of film (primary key)
	Name	CHARACTER VARYING (25)	Name of the category of film
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links from

Table	Join	Description
Film_category	Category.category_id = film_category.category_id	Film_category_category_id_fkey Foreign key constraint referencing category.category_id

#### Unique keys

Columns	Name/Description
Category_id	Category_pkey Primary key constraint

#### 4.1.5. Table: film\_actor

Establishes a link between the list of films available and the list of actors based on what films the actors are present in.

	Column	Data Type	Description
🔑	Actor_id	SMALLINT	Unique number for each actor (foreign key)
🔑	Film_id	SMALLINT	Unique number for each film (foreign key)
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links to

Table	Join	Description
Actor	Film_actor.actor_id = actor.actor_id	Film_actor_actor_id_fkey Foreign key constraint referencing actor.actor_id
Film	Film_actor.film_id = film.film_id	Film_actor_film_id_fkey Foreign key constraint referencing film.film_id

#### Unique keys

Columns	Name/Description
<b>Actor_id</b>	Film_actor_actor_id_fkey Foreign key constraint
<b>Film_id</b>	Film_actor_film_id_fkey Foreign key constraint
<b>Actor_id/film_id</b>	Film_actor_pkey Composite key acting as primary key constraint

#### 4.1.6. Table: film\_category

Establishes a link between the list of films available and the list of categories based on the category the movie is placed in.

	Column	Data Type	Description
🔑	<b>Film_id</b>	SMALLINT	Unique number for each film
🔑	<b>Category_id</b>	SMALLINT	Unique number for each category of film
	<b>Last_update</b>	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links to

Table	Join	Description
<b>Film</b>	Film_category.film_id = film.film_id	Film_category_film_id_fkey Foreign key constraint referencing film.film_id
<b>Category</b>	Film_category.category_id = category.category_id	Film_category_category_id_fkey Foreign key constraint referencing category.category_id

#### Unique keys

Columns	Name/Description
<b>Film_id</b>	Film_category_film_id_fkey Foreign key constraint
<b>Category_id</b>	Film_category_category_id_fkey Foreign key constraint
<b>Film_id/category_id</b>	Film_category_pkey Composite key acting as primary key constraint

#### 4.1.7. Table: language

List of possible languages a film might be in.

	Column	Data Type	Description
🔑	Language_id	SERIAL	Unique number for each language (primary key)
	Name	CHARACTER (20)	Name of the language
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

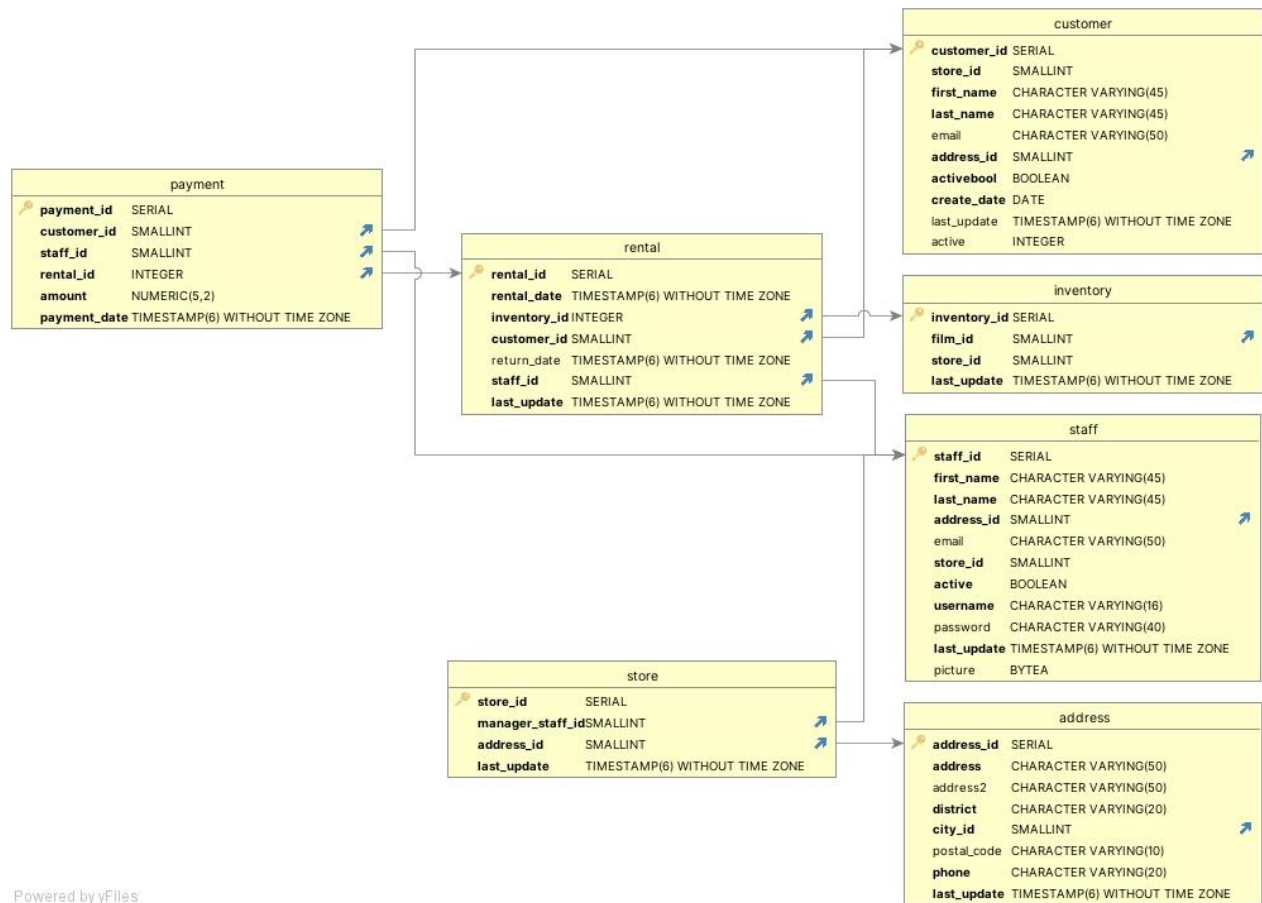
#### Links from

Table	Join	Description
Film	Language.language_id = film.language_id	Film_language_id_fkey Foreign key constraint referencing language.language_id

#### Unique keys

Columns	Name/Description
Language_id	Language_pkey Primary key constraint

## 5. Sales



Powered by yFiles

Information on stores, rental details and payment information.

### 5.1. Tables

#### 5.1.1. Table: store

Address and manager assigned to each store location.

	Column	Data Type	Description
🔑	Store_id	SERIAL	Unique number for each store (primary key)
🔑	Manager_staff_id	SMALLINT	Unique number for each store manager (foreign key)
🔑	Address_id	SMALLINT	Unique number for each address (of the store in this case) (foreign key)
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links to

Table	Join	Description
Staff	Store.manager_staff_id = staff.staff_id	Store_manager_staff_id_fkey Foreign key constraint referencing staff.staff_id
Address	Store.address_id = address.address_id	Store_address_id_fkey Foreign key constraint referencing address.address_id

#### Unique keys

Columns	Name/Description
Address_id	Store_address_id_fkey Foreign key constraint
Manager_staff_id	Store_manager_staff_id_fkey Foreign key constraint
Store_id	Store_pkey Primary key constraint

#### 5.1.2. Table: rental

Details of each individual rental transaction including item rented, rental date, return date and member of staff handling the transaction.

	Columns	Data Type	Description
🔑	Rental_id	SERIAL	Unique number for each rental operation (primary key)
	Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the movie was rented
🔑	Inventory_id	INTEGER	Unique number for item in stock (foreign key)
🔑	Customer_id	SMALLINT	Unique number for each customer (foreign key)
	Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the movie was returned
🔑	Staff_id	SMALLINT	Unique number for each staff member (foreign key)
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links from

Table	Join	Description
Payment	Rental.rental_id = payment.rental_id	Payment_rental_id_fkey Foreign key constraint referencing rental.rental_id

Links to





Table	Join	Description
<b>Inventory</b>	Rental.inventory_id = inventory.inventory_id	Rental_inventory_id_fkey Foreign key constraint referencing inventory.inventory_id
<b>Customer</b>	Rental.customer_id = customer.customer_id	Rental_customer_id_fkey Foreign key constraint referencing customer.customer_id
<b>Staff</b>	Rental.staff_id = staff.staff_id	Rental_staff_id_key Foreign key constraint referencing staff.staff_id

Unique keys

Columns	Name/Description
<b>Rental_id</b>	Rental_pkey Primary key constraint
<b>Inventory_id</b>	Rental_inventory_id_fkey Foreign key constraint
<b>Customer_id</b>	Rental_customer_id_fkey Foreign key constraint
<b>Staff_id</b>	Rental_staff_id_key Foreign key constraint

### 5.1.3. Table: payment

Details of each individual payment including staff member handling the payment, paying customer, amount paid and date of payment.

	Column	Data Type	Description
	<b>Payment_id</b>	SERIAL	Unique number for each payment transaction (primary key)
	<b>Customer_id</b>	SMALLINT	Unique number for each customer (foreign key)
	<b>Staff_id</b>	SMALLINT	Unique number for each staff member (foreign key)
	<b>Rental_id</b>	INTEGER	Unique number for each rental operation (foreign key)
	<b>Amount</b>	NUMERIC(5,2)	Amount paid by customer
	<b>Payment_date</b>	TIMESTAMP(6) WITHOUT TIME ZONE	Data and time of the payment transaction



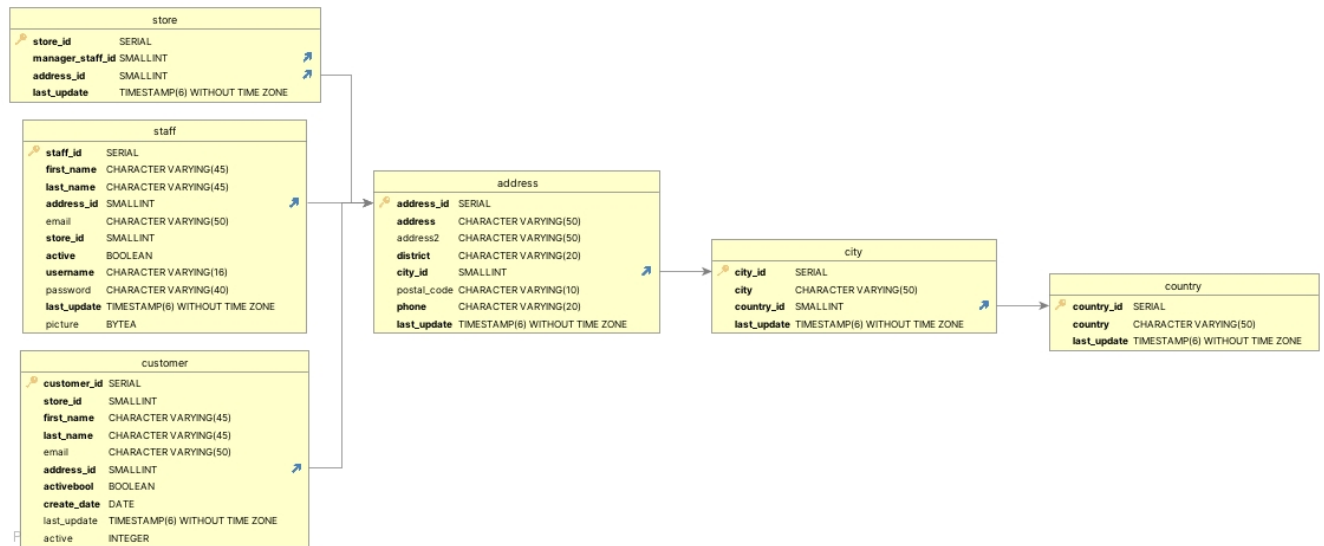
*Links to*

Table	Join	Description
Customer	Payment.customer_id = customer.customer_id	Payment_customer_id_fkey Foreign key constraint referencing customer.customer_id
Staff	Payment.staff_id = staff.staff_id	Payment_staff_id_fkey Foreign key constraint referencing staff.staff_id
Rental	Payment.rental_id = rental.rental_id	Payment_rental_id_fkey Foreign key constraint referencing rental.rental_id

*Unique keys*

Columns	Name/Description
Payment_id	Payment_pkey Primary key constraint
Customer_id	Payment_customer_id_fkey Foreign key constraint
Staff_id	Payment_staff_id_fkey Foreign key constraint
Rental_id	Payment_rental_id_fkey Foreign key constraint

## 6. Location





Information on which address ids are based off, including address, city and country.

### 6.1. Tables

#### 6.1.1. Table: address

Full address information used for customers, staff members and store locations.

	Column	Data Type	Description
	<b>Address_id</b>	SERIAL	Unique number for each address (primary key)
	<b>Address</b>	CHARACTER VARYING (50)	First line of the address (generally street name and door number)
	<b>Address2</b>	CHARACTER VARYING (50)	Second line of the address if needed
	<b>District</b>	CHARACTER VARYING (20)	District level administrative division, depending on country (state, province, district, etc)
	<b>City_id</b>	SMALLINT	Unique number for each city (foreign key)
	<b>Postal_code</b>	CHARACTER VARYING (10)	Postal code
	<b>Phone</b>	CHARACTER VARYING (20)	Phone number associated with the address
	<b>Last_update</b>	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links from

Table	Join	Description
Customer	Address.address_id = customer.address_id	Customer_address_id_fkey Foreign key constraint referencing address.address_id
Staff	Address.address_id = staff.address_id	Staff_address_id_fkey Foreign key constraint referencing address.address_id
Store	Address.address_id = store.address_id	Store_address_id_fkey Foreign key constraint referencing address.address_id

#### Links to



Table	Join	Description
City	Address.city_id = city.city_id	Fk_address_city Foreign key constraint referencing city.city_id

#### Unique keys

Columns	Name/Description
Address_id	Address_pkey Primary key constraint
City_id	Fk_address_city Foreign key constraint

#### 6.1.2. Table: city

List of cities included in addresses of customers, staff members and store locations.

	Column	Data Type	Description
	City_id	SERIAL	Unique number for each city (primary key)
	City	CHARACTER VARYING (50)	Name of the city
	Country_id	SMALLINT	Unique number for each country (the city is located at) (foreign key)
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

#### Links from

Table	Join	Description
Address	City.city_id = address.city_id	Fk_address_city Foreign key constraint referencing city.city_id

*Links to*

Table	Join	Description
Country	City.country_id = country.country_id	Fk_city Foreign key constraint referencing country.country_id

*Unique keys*

Columns	Name/Description
City_id	City_pkey Primary key constraint
Country_id	Fk_city Foreign key constraint

### 6.1.3. Table: country

List of countries included in address of customers, staff members and store locations.

	Column	Data Type	Description
🔑	Country_id	SERIAL	Unique number for each country (primary key)
	Country	CHARACTER VARYING (50)	Name of the country
	Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date and time that the table was last updated

*Links from*

Table	Join	Description
City	Country.country_id = city.country_id	Fk_city Foreign key constraint referencing country.country_id

*Unique keys*

Columns	Name/Description
Country_id	Country_pkey Primary key constraint