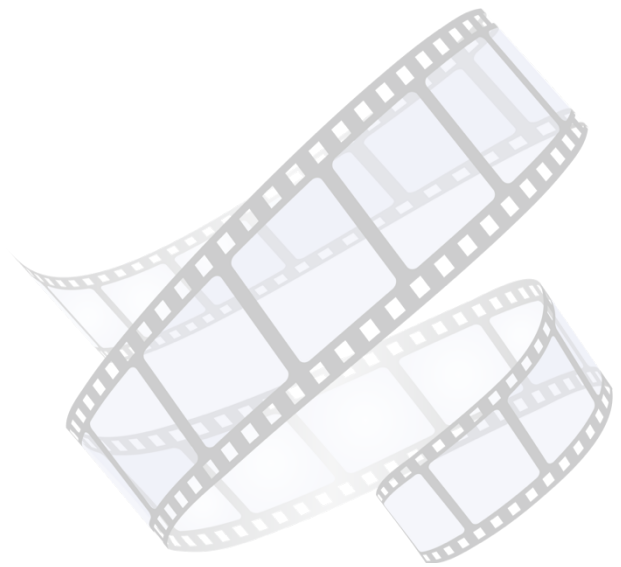


Rockbuster

Data Dictionary



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1. Rockbuster

This is a data dictionary based on PostgreSQL of the **Rockbuster**'s database

The Rockbuster database contains information about Rockbuster's film inventory, customers, and payments, among other information.

You can download Rockbuster database here:

- <http://www.postgresqltutorial.com/wp-content/uploads/2019/05/dvdrental.zip>

2. Entity Relationship Diagram (ERD)



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Customers, staffs, and stores are tables are linked to one table, 'address' that holds IDs for all customers, staffs, and stores. Similarly, film actors, film category, and inventory are linked to one table, 'film' that holds IDs for all films. All tables have relationships with other tables in the database.

3. Tables

3.1. Table: payment

Category: Fact Table

Description: Payment transactions made by customers and handled staff members

Columns

Column	Key	Data Type	Description
payment_id	Primary	SERIAL	A unique identifier assigned to a payment
customer_id	Foreign	SMALLINT	A unique identifier assigned to a customer
staff_id	Foreign	SMALLINT	A unique identifier assigned to a staff
rental_id	Foreign	INTEGER	A unique identifier assigned to a film rental
amount		NUMERIC(5,2)	Amount paid
payment_date		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the payment was made

Links to

Table	Join	Description
customer	payment.customer_id = customer.customer_id	Foreign key constraint referencing customer.customer_id
staff	payment.staff_id = staff.staff_id	Foreign key constraint referencing staff.staff_id
rental	payment.rental_id = rental.rental_id	Foreign key constraint referencing rental.rental_id

3.2. Table: rental

Category: Fact Table

Description: Customer movie rentals and returns

Columns

Column	Key	Data Type	Description
rental_id	Primary	SERIAL	A unique identifier assigned to a film rental
rental_date		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the film was rented
inventory_id	Foreign	INTEGER	A unique identifier assigned to an inventoried film
customer_id	Foreign	SMALLINT	A unique identifier assigned to a customer
return_date		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the film was returned
staff_id	Foreign	SMALLINT	A unique identifier assigned to a staff
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
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inventory	rental.inventory_id = inventory.inventory_id	Foreign key constraint referencing inventory.inventory_id
customer	rental.customer_id = customer.customer_id	Foreign key constraint referencing customer.customer_id
staff	rental.staff_id = staff.staff_id	Foreign key constraint referencing staff.staff_id

Linked from

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

3.3. Table: store

Category: Dimension Table

Description: Stores with associated store managers

Columns

Column	Key	Data Type	Description
store_id	Primary	SERIAL	A unique identifier assigned to a store
manager_staff_id	Foreign	SMALLINT	A unique identifier assigned to a manager-level staff
address_id	Foreign	SMALLINT	A unique identifier assigned to an address
last_update		TIMESTAMP(6) WITHOU TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
staff	store.manager_staff_id = staff.staff_id	Foreign key constraint referencing staff.staff_id
address	store.address_id = address.address_id	Foreign key constraint referencing address.address_id

3.4. Table: film_actor

Category: Dimension Table

Description: Actors in association with the films that they made appearances on.

Columns

Column	Key	Data Type	Description
actor_id	Primary/ Foreign	SMALLINT	A unique identifier assigned to an actor
film_id	Primary/ Foreign	SMALLINT	A unique identifier assigned to a film
last_update		TIMESTAMP(6) WITHOU TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
actor	film_actor.actor_id = actor.actor_id	Foreign key constraint referencing actor.actor_id
film	film_actor.film_id = film.film_id	Foreign key constraint referencing film.film_id

Linked from

Table	Join	Description
actor	film_actor.actor_id = actor.actor_id	Foreign key constraint referencing film_actor.actor_id
film	film_actor.film_id = film.film_id	Foreign key constraint referencing film_actor.film_id

3.5. Table: inventory

Category: Dimension Table

Description: Inventoried films with stored stores

Columns

Column	Key	Data Type	Description
inventory_id	Primary	SERIAL	A unique identifier assigned to an inventoried film
film_id	Foreign	SMALLINT	A unique identifier assigned to a film
store_id		SMALLINT	A unique identifier assigned to a store
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
film	inventory.film_id = film.film_id	Foreign key constraint referencing film.film_id

Linked from

Table	Join	Description
rental	inventory.rental_id = rental_inventory_id	Foreign key constraint referencing inventory.inventory_id

3.6. Table: film_category

Category: Dimension Table

Description: Category information for films

Columns

Column	Key	Data Type	Description
film_id	Primary/ Foreign	SMALLINT	A unique identifier assigned to a film
category_id	Primary/ Foreign	SMALLINT	A unique identifier assigned to a film category
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
film	film_category.film_id = film.film_id	Foreign key constraint referencing film.film_id
category	film_category.category_id = category.category_id	Foreign key constraint referencing category.category_id

Linked from

Table	Join	Description
film	film_category.film_id = film.film_id	Foreign key constraint referencing film_category.film_id
category	film_category.category_id = category.category_id	Foreign key constraint referencing film_category.category_id

3.7. Table: customer

Category: Dimension Table

Description: Customer details with their active/inactive status

Columns

Column	Key	Data Type	Description
customer_id	Primary	SERIAL	A unique identifier assigned to a customer
store_id		SMALLINT	A unique identifier assigned to a store
first_name		CHARACTER VARYING(45)	Customer's first name
last_name		CHARACTER VARYING(50)	Customer's last name
email		CHARACTER VARYING(50)	Customer's email address
address_id	Foreign	SMALLINT	A unique identifier assigned to an address
activebool		BOOLEAN	An indicator whether the customer status is active or inactive
created_date		DATE	Date when the customer record was created
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated
active		INTEGER	An indicator whether the customer status is active or inactive

Links to

Table	Join	Description
address	customer.address_id = address.address_id	Foreign key constraint referencing address.address_id

Linked from

Table	Join	Description
rental	customer.customer_id = rental.customer_id	Foreign key constraint referencing customer.customer_id

3.8. Table: staff

Category: Dimension Table

Description: Staff details including names, addresses, emails, associated stores, IDs and passwords, and pictures

Columns

Column	Key	Data Type	Description
staff_id	Primary	SERIAL	A unique identifier assigned to a staff
first_name		CHARACTER VARYING(45)	Staff's first name
last_name		CHARACTER VARYING(45)	Staff's last name
address_id	Foreign	SMALLINT	A unique identifier assigned to an address
email		CHARACTER VARYING(50)	Staff's email address
store_id		SMALLINT	A unique identifier assigned to a store
active		BOOLEAN	An indicator whether the staff status is active or inactive
username		CHARACTER VARYING(16)	Staff's username
password		CHARACTER VARYING(40)	Staff's password
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated
picture		BYTEA	Staff's profile picture

Links to

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

Linked from

Table	Join	Description
payment	staff.staff_id = payment.staff_id	Foreign key constraint referencing staff.staff_id
rental	staff.staff_id = rental.staff_id	Foreign key constraint referencing staff.staff_id
store	staff.staff_id = store.staff_id	Foreign key constraint referencing staff.staff_id

3.9. Table: actor

Category: Dimension Table

Description: Actor first and last names

Columns

Column	Key	Data Type	Description
actor_id	Primary	SERIAL	A unique identifier assigned to an actor
first_name		CHARACTER VARYING(45)	Actor's first name
last_name		CHARACTER VARYING(45)	Actor's last name

Column	Key	Data Type	Description
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Linked from

Table	Join	Description
film_actor	actor.actor_id = film_actor.actor_id	Foreign key constraint referencing actor.actor_id

3.10. Table: film

Category: Dimension Table

Description: Film details including title, description, length, rental rate & duration, replacement cost, replacement cost, and special features

Columns

Column	Key	Data Type	Description
film_id	Primary	SERIAL	A unique identifier assigned to a film
title		CHARACTER VARYING(255)	Film title
description		TEXT	Film description
release_year		year	Film release year
language_id	Foreign	SMALLINT	A unique identifier assigned to a language
rental_duration		SMALLINT	Allowed number of days of a rental
rental_rate		NUMERIC(4,2)	Price for rental
length		SMALLINT	Film length
replacement_cost		NUMERIC(5,2)	The cost to buy the same film in case of replacement
rating		mpaa_rating	Film rating
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated
special_features		TEXT[]	Any special features associated with the film
fulltext		TSVECTOR	A list of distinct lexemes of the film description

Links to

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

Linked from

Table	Join	Description
film_actor	film.film_id = film_actor.film_id	Foreign key constraint referencing film.film_id
inventory	film.film_id = inventory_id	Foreign key constraint referencing film.film_id
film_category	film.film_id = film_category.film_id	Foreign key constraint referencing film.film_id

3.11. Table: category

Category: Dimension Table

Description: Movie category names

Columns

Column	Key	Data Type	Description
category_id	Primary	SERIAL	A unique identifier assigned to a film category
name		CHARACTER VARYING(25)	Category name
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Linked from

Table	Join	Description
film_category	category.category_id = film.category.category_id	Foreign key constraint referencing category.category_id

3.12. Table: address

Category: Dimension Table

Description: Street address information for customers, staffs, and stores.

Columns

Column	Key	Data Type	Description
address_id	Primary	SERIAL	A unique identifier assigned to an address
address		CHARACTER VARYING(50)	First line of the street address
address2		CHARACTER VARYING(50)	Second line of the address (APT, STE #'s)
district		CHARACTER VARYING(20)	State or province name
city_id	Foreign	SMALLINT	A unique identifier assigned to a city
postal_code		CHARACTER VARYING(10)	Postal code
phone		CHARACTER VARYING(20)	Phone number associated with the address
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

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

Linked from

Table	Join	Description
customer	address.address_id = customer.address_id	Foreign key constraint referencing address.address_id
staff	address.address_id = staff.staff_id	Foreign key constraint referencing address.address_id

Table	Join	Description
store	address.address_id = store.address_id	Foreign key constraint referencing address.address_id

3.13. Table: language

Category: Dimension Table

Description: Language names

Columns

Column	Key	Data Type	Description
language_id	Primary	SERIAL	A unique identifier assigned to a language
name		CHARACTER VARYING(20)	Language name
last_update		TIMESTAMP(6) WITHOU TIME ZONE	Date and time when the record (row) within the table was last updated

Linked from

Table	Join	Description
film	language.language_id = film.language_id	Foreign key constraint language.language_id

3.14. Table: city

Category: Dimension Table

Description: City names and their associated countries

Columns

Column	Key	Data Type	Description
city_id	Primary	SERIAL	A unique identifier assigned to a city
city		CHARACTER VARYING(50)	City name
country_id	Foreign	SMALLINT	A unique identifier assigned to a country
last_update		TIMESTAMP(6) WITHOU TIME ZONE	Date and time when the record (row) within the table was last updated

Links to

Table	Join	Description
country	city.country_id = country.country_id	Foreign key constraint country.country_id

Linked from

Table	Join	Description
address	city.city_id = address.city_id	Foreign key constraint city.city_id

3.15. Table: country

Category: Dimension Table

Description: Country names

Columns

Column	Key	Data Type	Description
country_id	Primary	SERIAL	A unique identifier assigned to a country
country		CHARACTER VARYING(50)	Country name
last_update		TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the record (row) within the table was last updated

Linked from

Table	Join	Description
city	country.country_id = city.country_id	Foreign key constraint country.country_id