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Legend

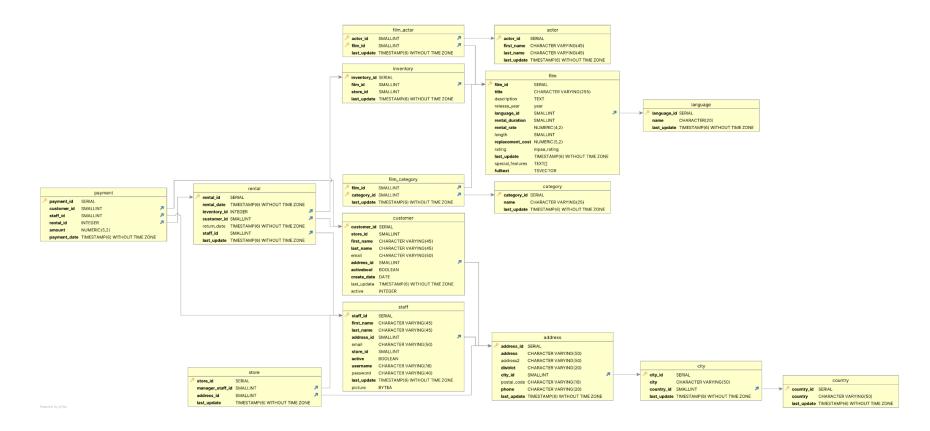


1. Rockbuster Stealth

Rockbuster Stealth LLC is a movie rental company that has stores around the world and is planning to launch an online video rental store.

The Rockbuster database has a Snowflake schema containing rental, payment, movies, stores and staff data.

2. Entity Relationship Diagram



Link to Entity Relationship Diagram

3. Fact tables

3.1. Rental

Rental data of movies rented.

Key	Columns	Date Type	Description
A.S.	customer_id	smallint	Foreign key linking to customer table. Customer they rented the film
**	inventory_id	integer	Foreign key linking to inventory table. Inventory of the film
	last_update	timestamp without time zone	Record last updated
	rental_date	timestamp without time zone	Date of rental
	rental_id	integer	Primary key
	return_date	timestamp without time zone	Date the film was returned
**	staff_id	smallint	Foreign key linking to staff table. Staff that processed the rental request

Linked to

Table	Join
customer	rental.customer_id = customer.customer_id
inventory	rental.inventory_id = inventory.inventory_id
staff	rental.staff_id = staff_staff_id

Table	Join
payment	payment.rental_id = rental.rental_id

3.2. Payment

Payment data of movies rented

Key	Columns	Date Type	Description
	amount	numeric	Payment amount
, S	customer_id	smallint	Foreign key linking to customer table. Customer that made the payment
	payment_date	timestamp without time zone	Date of payment
	payment_id	integer	Primary key
, S	rental_id	integer	Foreign key to rental table. Rental information the payment is for
, S	staff_id	smallint	Foreign key linking to staff table. Staff that processed the payment

Table	Join
customer	payment.customer_id = customer.customer_id
inventory	payment.rental_id = rental.rental_id
staff	payment.staff_id = staff_staff_id

4. Dimension Tables

4.1. Actor

Actor's data such as first and last name

Key	Columns	Date Type	Description
P	actor_id	integer	Primary key
	last_update	timestamp without time zone	Date the record was last update
	first_name	character varying (45)	First name of the actor
	last_name	character varying (45)	Last name of the actor

Linked from

Table	Join
film_actor	film_actor.actor_id = actor.actor_id

4.2. Address

Address and phone information of a person or store

Key	Columns	Date Type	Description
P	address_id	integer	Primary key
*B	city_id	smallint	Foreign key linking to city table
	district	character varying (20)	State or province of a country
	postal_code	character varying (10)	Postal code of the address
	address2	character varying (50)	2nd line of the address
	last_update	timestamp without time zone	Record last updated
	phone	character varying (20)	Phone number of the address

Key	Columns	Date Type	Description
	address	character varying (50)	First line of the such as street address

Linked to

Table	Join
city	city.city_id = address.city_id

Linked from

Table	Join
customer	customer.address_id = address.address_id
staff	staff.address_id = address.address_id
store	store.address_id = address.address_id

4.3. Category

Data of types of movie genres (categories)

Key	Columns	Date Type	Description
	category_id	integer	Primary key
	last_update	timestamp without time zone	Record last updated
	name	character varying (25)	Film genres

Table	Join
film_category	film_category.category_id = category.category_id

4.4. City

Data of city such as name and country

Key	Columns	Date Type	Description
	city	character varying (50)	City name
P	city_id	integer	Primary key
AND .	country_id	smallint	Foreign key linking to country table
	last_update	timestamp without time zone	Record last update

Linked to

Table	Join
country	country.country_id = city.country_id

Linked from

Table	Join
address	city.city_id = address.city_id

4.5. Country

Data of a country such as name

Key	Columns	Date Type	Description
	country	character varying (50)	Country name
P	country_id	integer	Primary key
	last_update	timestamp without time zone	Record last updated

Table	Join
city	city.country_id = country.country_id

4.6. Customer

Key	Columns	Date Type	Description
	active	integer	Active status of a customer. 0 = inactive, = active
	activebool	boolean	Active status of a customer in boolean (true / false)
*N	address_id	smallint	Foreign key linking to address table. Address of the customer
	create_date	date	Date the customer record was created
P	customer_id	integer	Primary key
	email	character varying (50)	Email address of the customer
	first_name	character varying (45)	First name of the customer
	last_name	character varying (45)	Last name of the customer
	last_update	timestamp without time zone	Record last updated
_k D	store_id	smallint	Foreign key to the store table. The store the customer is registered to

Table	Join
address	customer.address_id = address_address_id
store_id	Store.store_id = customer.store_id

Table	Join
payment	payment.customer_id = customer.customer_id
rental	rental.customer_id = customer.customer_id

4.7. Film

Key	Columns	Date Type	Description
	description	text	Firm description
P	film_id	integer	Primary key
	fulltext	tsvector	Keywords describing the film
,D	language_id	smallint	Foreign key linking to language table. Language of the film
	last_update	timestamp without time zone	Record last updated
	length	smallint	Length (duration) of the film
	rating	USER-DEFINED	Advisory categories for films eg: restricted for under 17
	release_year	integer	Year the film was released
	rental_duration	smallint	Max rental allowed
	rental_rate	numeric	Cost of renting
	replacement_cost	numeric	Cost of replacing the film if lost
	special_features	ARRAY	Additional features as part of the film eg: trailers, behind the scenes, deleted scenes etc
	title	character varying (255)	Title of the film

Table	Join
language	language.language_id = film.language_id

Table	Join
film_actor	film_actor.film_id = film.film_id
film_category	film_category.film_id = film.film_id
inventory	Inventory.film_id = film.film_id

4.8. Film_actor

Key	Columns	Date Type	Description
AND .	actor_id	smallint	Primary key
,s	film_id	smallint	Foreign key linking with film table. Actor starring in a film
	last_update	timestamp without time zone	Record last updated

Linked to

Table	Join
actor	actor.actor_id = film_actor.actor_id
film	film.film_id = film_actor.film_id

4.9. Film_category

Key	Columns	Date Type	Description
*D	category_id	smallint	Primary key
A.D.	film_id	smallint	Foreign key linking to the film table. Category / genre of the film
	last_update	timestamp without time zone	Record last updated

Linked to

Table	Join
category	category.category_id = film_categort.category_id
film	film.film_id = film_category.film_id

4.10. Inventory

Key	Columns	Date Type	Description
, S	film_id	Ismallint	Foreign key linking to film table. Film the inventory record is for
	inventory_id	integer	Primary key
	last_update	timestamp without time zone	Record last updated
, S	store_id	Ismallint	Foreign key linking to store table. Store the film inventory is for

Linked to

Table	Join
store	store.store_id= inventory.store_id
film	film.film_id = inventory.film_id

Table	Join
rental	rental.inventory_id = inventory.inventory_id

4.11. Language

Key	Columns	Date Type	Description
	language_id	integer	Primary key
	last_update	timestamp without time zone	Record last updated
	name	character	Language name

Linked from

Table	Join
film	language.language_id = film.language_id

4.12. Staff

Key	Columns	Date Type	Description
	active	boolean	Staff active with Rockbuster at stores (true /false)
[*] D	address_id	smallint	Foreign key linking to address table. Address of the staff
	email	character varying (50)	Email address of staff
	first_name	character varying (45)	First name of employee
	last_name	character varying (45)	Last name of employee
	last_update	timestamp without time zone	Record last updated
	password	character varying (40)	Password to log in to his account
	picture	bytea	Picture of staff member
P	staff_id	integer	Primary key
^k D	store_id	smallint	Foreign key linking to store table. Store the staff works at
	username	character varying (16)	Username of the staff

Linked to

Table	Join
address	staff.address_id = address.address_id
store	store.store_id= staff.store_id

Linked from

Table	Join
rental	rental.staff_id = staff.staff_id
payment	payment.staff_id = staff_staff_id

4.13. Store

Key	Columns	Date Type	Description
AND .	address_id	Ismallint	Foreign key linking to address. Address of the store
	last_update	timestamp without time zone	Record last updated
AND .	manager_staff_id	Ismallint	Foreign key to the staff table. Identifying the manage of the store
	store_id	integer	Primary key

Table	Join
address	Address.address_id = store.address_id
staff	store.manager_staff_id = staff_staff_id

Table	Join
staff	staff.store_id = store.store_id
customer	customer.store_id= store.store_id
inventory	Inventory.store_id = store.store_id