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# ROCKBUSTER STEALTH

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DATA DICTIONARY



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## Contents

1. Entity Relationship Diagram.....	2
2. rental .....	2
3. payment.....	4
4. store .....	5
5. film_actor .....	6
6. inventory.....	6
7. film_category .....	7
8. customer.....	8
9. staff.....	9
10. actor .....	10
11. film.....	11
12. category .....	12
13. address .....	13
14. language .....	14
15. city .....	15
16. country.....	16

## Legend

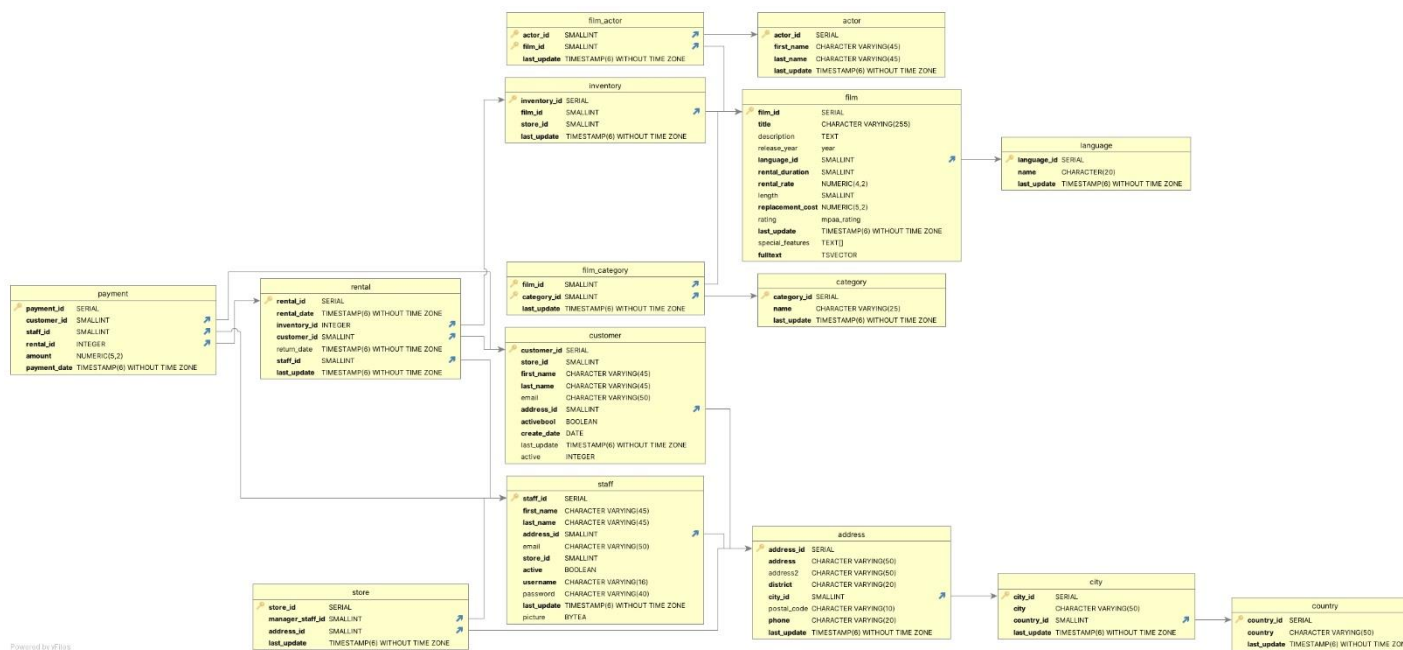


Primary Key



Foreign Key





# 1. Entity Relationship Diagram



This database has a snowflake schema. It starts with a detail table called 'Rental,' which is a fact table about rental instances. Then there are dimension tables and sub-dimension tables that branch off from it.

## Fact Table

### 2. rental

	Columns	Data Type	Description
	rental_id	SERIAL	Primary Key for each rental instance
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for date of rental
	inventory_id	INTEGER	Unique number identifying each rental unit in inventory
	customer_id	SMALLINT	Unique number identifying each customer
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for date of return
	staff_id	SMALLINT	Unique number identifying each staff member
	last_update	TIMESTAMP(6) WITHOUT TIMEZONE	Date and time of last update

### Links from

Table	Join	Description
<b>Payment</b>	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_fk ey Foreign key constraint
<b>Customer_id</b>	Rental_customer_id_fk ey Foreign key constraint
<b>Staff_id</b>	Rental_staff_id_key Foreign key constraint

## Dimension Table

### 3. payment

	Columns	Data Type	Description
	payment_id	SERIAL	Unique number identifying each payment transaction
	customer_id	SMALLINT	Unique number identifying each customer
	staff_id	SMALLINT	Unique number identifying each staff member
	rental_id	INTEGER	Unique ID number for each rental instance
	amount	NUMERIC(5,2)	Amount of payment in USD
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp of the exact date and time the payment was made

### 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

## Dimension Table

### 4. store

	Columns	Data Type	Description
	store_id	SERIAL	Unique ID number for each store location
	manager_staff_id	SMALLINT	Unique ID number for the manager of each store
	address_id	SMALLINT	Unique ID number for each address (including stores, staff, and customers. In this case it is the ID for the store address.)
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this table was last updated

### Links to



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

### Unique keys

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

## Dimension Table

### 5. film\_actor

	Columns	Data Type	Description
	actor_id	SMALLINT	Unique ID number given to each film actor
	film_id	SMALLINT	Unique ID number given to each film
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the date of time this table was last updated

#### Links to



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

## Dimension Table

### 6. inventory

	Columns	Data Type	Description
	inventory_id	SERIAL	Unique number identifying each rental unit in inventory
	film_id	SMALLINT	Unique ID number given to each film
	store_id	SMALLINT	Unique ID number for each store location
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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
<b>Inventory_id</b>	Inventory_pkey Primary key constraint
<b>Film_id</b>	Inventory_film_id_fkey Foreign key constraint

## Dimension Table

### 7. film\_category

	Columns	Data Type	Description
	film_id	SMALLINT	Unique ID number given to each film
	category_id	SMALLINT	Unique ID number given to each film category
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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
Film_id	Film_category_film_id_fkey Foreign key constraint
Category_id	Film_category_category_id_fkey Foreign key constraint
Film_id/category_id	Film_category_pkey Composite key acting as primary key constraint

## Dimension Table

### 8. customer

	Columns	Data Type	Description
	customer_id	SERIAL	Unique number identifying each customer
	store_id	SMALLINT	Unique ID number for each store location
	first_name	CHARACTER VARYING (45)	First name of customer
	last_name	CHARACTER VARYING (45)	Last name of customer
	email	CHARACTER VARYING (50)	Email address of customer
	address_id	SMALLINT	Unique ID number for each address (Including stores, staff, and customers. In this case it is the ID for the customer address.)
	activebool	BOOLEAN	True or False for if the customer is currently an active customer
	create_date	DATE	The date the customer's account was created
	last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Timestamp for the exact date and time this table was last updated
	active	INTEGER	A 0 or 1 indicating the customer's active status

## 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
<b>Rental</b>	Customer.customer_id = rental.customer_id	Rental_customer_id_fkey Foreign key constraint referencing customer.customer_id
<b>Payment</b>	Customer.customer_id = payment.customer_id	Payment_customer_id_fkey Foreign key constraint referencing customer.customer_id

## Unique keys

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

## Dimension Table

### 9. staff

	Columns	Data Type	Description
	staff_id	SERIAL	Unique number identifying each staff member
	first_name	CHARACTER VARYING(45)	First name of staff member
	last_name	CHARACTER VARYING(45)	Last name of staff member
	address_id	SMALLINT	Unique ID number for each address (including stores, staff, and customers. In this case it is the ID for the staff address.)
	email	CHARACTER VARYING(50)	Email address of staff member
	store_id	SMALLINT	Unique ID number for each store location
	active	BOOLEAN	True or False for if the staff member is currently an active staff member
	username	CHARACTER VARYING(16)	Staff member username
	password	CHARACTER VARYING(40)	Staff member password
	last_updated	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this table was last updated
	picture	BYTEA	Photo of staff member

### Links to

Table	Join	Description
<b>Address</b>	staff.address_id = address.address_id	Staff_address_id_fkey Foreign key constraint referencing address.address_id

### Links from


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

### Unique keys

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

### Dimension Table

#### 10. actor

	Columns	Data Type	Description
	actor_id	SERIAL	Unique ID number given to each actor
	first_name	CHARACTER VARYING(45)	First name of actor
	last_name	CHARACTER VARYING(45)	Last name of actor
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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

## Dimension Table

### 11. film

	Columns	Data Type	Description
	film_id	SERIAL	Unique ID number given to each film
	title	CHARACTER VARYING(255)	Title of film
	description	TEXT	Description of film in text
	release_year	year	The year the film was released
	language_id	SMALLINT	The language of the film
	rental_duration	SMALLINT	The length of the rental in days
	rental_rate	NUMERIC(4,2)	Price of rental in USD
	length	SMALLINT	Length of film in minutes
	replacement_cost	NUMERIC(5,2)	Cost of replacing each film unit lost in USD
	rating	mpaa_rating	Rating given to each film my the MPAA
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this table was last updated
	special_features	TEXT[]	Special features that accompany the film
	fulltext	TSVECTOR	Text search vectors for full film text searches

## Links to

Table	Join	Description
<b>Language</b>	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

**Dimension Table**

## 12. category

	Columns	Data Type	Description
	category_id	SERIAL	Unique ID number given to each film category
	name	CHARACTER VARYING(25)	Name of category
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this table was last updated

Links from



Table	Join	Description
<b>Film_category</b>	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

## Dimension Table

### 13. address

	Columns	Data Type	Description
	address_id	SERIAL	Unique ID number for each address (including stores, staff, and customers.)
	address	CHARACTER VARYING(50)	Street address
	address2	CHARACTER VARYING(50)	Second line of street address if needed for unit or apartment number, etc.
	district	CHARACTER VARYING(20)	State, province, or territory of address
	city_id	SMALLINT	Unique ID number given to each city
	postal_code	CHARACTER VARYING(10)	Postal code for each address
	phone	CHARACTER VARYING(20)	Phone number for each customer, store, or staff member whose address is in table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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

## Dimension Table

### 14. language

	Columns	Data Type	Description
	language_id	SERIAL	Unique ID number given to each language in which the films exist
	name	CHARACTER(20)	Language name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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

## Dimension Table

### 15. city

	Columns	Data Type	Description
	city_id	SERIAL	Unique ID number given to each city
	city	CHARACTER VARYING(50)	Name of city
	country_id	SMALLINT	Unique ID number given to each country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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



## Dimension Table

### 16. country

	Columns	Data Type	Description
	country_id	SERIAL	Unique ID number given to each country
	country	CHARACTER VARYING(50)	Name of country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp for the exact date and time this 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