

# Rockbuster Stealth: Data Dictionary

By

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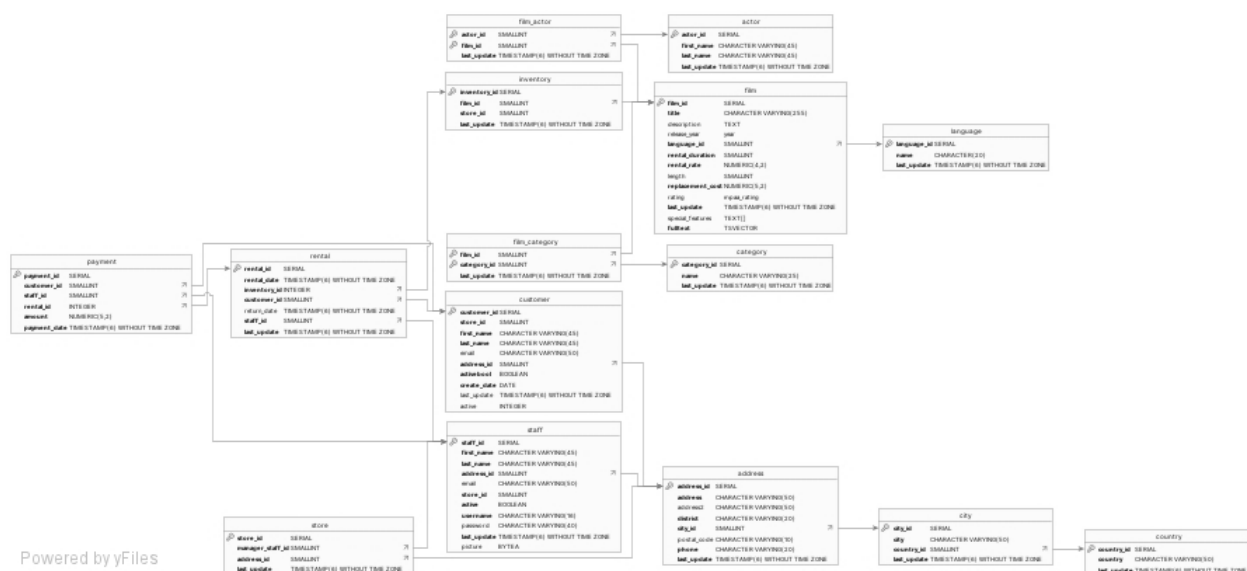
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# Introduction

Rockbuster Stealth LLC is a movie rental company that has stores around the world. Due to stiff competition from streaming services such as Netflix and Amazon Prime we are planning to use our movie licenses to launch an online video rental service in order to stay competitive.

Our goal is to thoroughly document our data sources to enable us to run data queries to assist us in finding a launch strategy for the new online video service. We will help other departments, from inventory to customer insights, with data-related queries.


# Entity Relationship Diagram (ERD)



**Schema:** This ERD is a snowflake schema. There are many tables that are not related directly to one center table.

# Fact Tables

## payment

Key Type	Column Name	Data Type	Description
 Primary	payment_id	SERIAL	Id for payment
Foreign	customer_id	SMALLINT	Customer making the payment, identified via unique id number
Foreign	staff_id	SMALLINT	Id for staff who managed payment
Foreign	rental_id	INTEGER	Id for rental
	amount	NUMERIC(5,2)	Amount customer paid
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Day of payment

## Links to


Table	Join
Inventory	payment.inventory_id = inventory.Inventory_id
Customer	payment.Customer_ID = customer.customer_ID
Staff	payment.staff_ID = staff.staff_ID

## Unique Keys

Columns	Description
Payment_id	PK
Payment_date	TIMESTAMP
Last_update	TIMESTAMP

## rental

Records each movie rental transaction

Key Type	Column Name	Data Type	Description
 Primary	rental_id	SERIAL	Id for rental
	Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of rental start
Foreign	inventory_id	INTEGER	Id of inventory
Foreign	Customer_id	SMALLINT	Id for customer renting the item
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date rental is due back
Foreign	Staff_id	SMALLINT	Staff who managed rental

	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last action on rental
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#### Links to

Table	Join
Inventory	rental.inventory_ID = inventory.Inventory_ID
Customer	rental.Customer_ID = customer.customer_ID
Staff	rental.staff_ID = staff.staff_ID

#### Links from

Table	Join
Payment	Payment.rental_id = rental.rental_id


#### Unique Keys

Columns	Description
Rental_id	PK
Rental_date	TIMESTAMP
Return_date	TIMESTAMP
Last_update	TIMESTAMP

# Dimension Tables

## actor

List of actors in Rockbusters' available films

Key Type	Column Name	Data Type	Description
 Primary	actor_id	SERIAL	Id for actor
	First_name	CHARACTER VARYING(45)	Actors first name
	Last_name	CHARACTER VARYING(45)	Actors last name
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last time update was made to actor

#### Links from


Table	Join
Film actor	film_actor.actor_ID = actor.actor_ID

#### Unique Keys

Columns	Description
actor_id	PK
First_name	CHARACTER
Last name	Character
Last_update	Timestamp

## address

Address for and contact information for brick-and-mortar locations

Key Type	Column Name	Data Type	Description
 Primary	address_id	SERIAL	Id for address
	Address	CHARACTER VARYING (50)	Address
	Address2	CHARACTER VARYING(50)	Additional space for address such as for apartment or suite numbers
	District	CHARACTER VARYING(20)	Address district if needed
Foreign	City_id	SMALLINT	Id to city
	Postal_code	CHARACTER VARYING(20)	Zip code
	Phone	CHARACTER VARYING(20)	Any contact number associated with address
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last time any update was made to address

### Links to

Table	Join
city	city.city_id = address.city_id

### Links from


Table	Join
Customer	customer.address_id = address.address_id
Staff	staff.address_id = address.address_id
Store	store.address_id = address.address_id

### Unique Keys

Columns	Description
address_id	PK
Last_update	Timestamp
Address	Character
Address2	Character
District	Character
Postal_code	Character
Phone	Character
Last_update	Timestamp

## category

List of film genres

Key Type	Column Name	Data Type	Description
 Primary	category_id	SERIAL	Id for film category
	Name	CHARACTER VARYING(25)	Name of category
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to category

Links from


Table	Join
Film_category	film_category.category_id = category.category_id

Unique Keys

Columns	Description
Category_id	PK
Last_update	Timestamp
Name	character

## city

Cities where rentals take place

Key Type	Column Name	Data Type	Description
 Primary	city_id	SERIAL	Unique Id for city
	City	CHARACTER VARYING(50)	City name
Foreign	Country_id	SMALLINT	Id for country that city is in
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to city

Links to

Table	Join
Country	Country.country_id = city.city_id

Links from


Table	Join
Customer	city.address_id = address.address_id

Unique Keys

Columns	Description
city_id	PK
Last_update	Timestamp
city	Character

## country

Countries where rentals take place.

Key Type	Column Name	Data Type	Description
 Primary	country_id	SERIAL	Id for country
	Country	CHARACTER VARYING(50)	Country name
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last time any update was made to country

Links from


Table	Join
City	city.city_id = country.city_id

Unique Keys

Columns	Description
country_id	PK
Last_update	Timestamp
Country	Character

## customer

Demographic information about customers.

Key Type	Column Name	Data Type	Description
 Primary	customer_id	SERIAL	Unique Id for customer
Foreign	Store_id	SMALLINT	Unique ID for store customer shopped at
	First_name	CHARACTER VARYING(45)	customer first name
	Last_name	CHARACTER VARYING(45)	customer last name
	Email	CHARACTER VARYING(45)	customer email
	Address_id	SMALLINT	Unique Id for customer address
	activebool	BOOLEAN	Currently a customer [TRUE/FALSE]
	Create_date	DATE	Date customer created an account
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to customer row
	Active	INTEGER	Whether customer is active or not



			[0 - Not active, 1 - Active]
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#### Links to

Table	Join
address	customer.address_ID = address.address_ID

#### Links from


Table	Join
payment	payment.customer_ID = customer.customer_ID

#### Unique Keys

Columns	Description
customer_id	PK
First_name	CHARACTER
Last_name	Character
Email	Character
Active	Smallint
Activebool	boolean
Create_date	Timestamp

### film

Information on films available for rent.

Key Type	Column Name	Data Type	Description
 Primary	film_id	SERIAL	Id for film
	Title	CHARACTER VARYING(45)	Name of film
	Description	TEXT	Film synopsis
	Release_year	Year	Year film was released
Foreign	Language_id	SMALLINT	Language that the film was made in
	Rental_duration	SMALLINT	Allowed time for rental
	Rental_rate	NUMERIC(4,2)	Cost to rent this film
	Length	SMALLINT	Length of film
	Replacement_cost	NUMERIC(5,2)	Cost to charge customers if film needs to be replaced
	Rating	Mpaa_rating	Rating of film from mpaa
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update was made to film

	Special_features	TEXT[]	Description of any features added to the film
	Fulltext	TSVECTOR	Text of film for subtitles

#### Links to

Table	Join
Language	language.language_id = film.language_id

#### Links from



Table	Join
Inventory	film.film_id = inventory.film_id

#### Unique Keys

Columns	Description
film_id	PK
Last_update	Timestamp
Title	Character
Description	Text
Release_year	Year
Rental_duration	Smallint
Rental_rate	Numeric(4,2)
Length	Smallint
Replacement_cost	Numeric(4,2)
Rating	Mpaa_rating
Special_features	Text
Fulltext	TSVector

### film\_actor

List actors in a film

Key Type	Column Name	Data Type	Description
 Primary	actor_id	SMALLINT	Unique Id for actor
 Primary	film_id	SMALLINT	Unique ID for Film that actor was in
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update was made to row

#### Links to



Table	Join
Actor	film_actor.actor_ID = actor.actor_ID
Film	film_actor.film_id = film.film_id

#### Unique Keys

Columns	Description
Last_update	Timestamp

## film category

Assigns genre to a film

Key Type	Column Name	Data Type	Description
 Primary	film_id	SMALLINT	Id for film
 Primary	category_id	SMALLINT	Film category
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update was made to film

Links to


Table	Join
film	film.category.film_id = film.film_id
Category	film.category_id = category.category_id

Unique Keys

Columns	Description
Last_update	Timestamp

## inventory

Tracks films in stock at Rockbuster brick-and-mortar locations

Key Type			Column Name	Data Type	Description
 Primary			inventory_id	SERIAL	Id for inventory
Foreign			film_id	SMALLINT	Id for film
Foreign			Store_id	SMALLINT	Id for store
			Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to staff

Links to

Table	Join
film	inventory.film_id = film.film_id

Links from

Table	Join
Rental	rental.inventory_id = inventory.inventory_id

Unique Keys

Columns	Description
Inventory_id	PK
Last_update	Timestamp

## language

Languages available for films

Key Type	Column Name	Data Type	Description
 Primary	language_id	SERIAL	Id for language

	Name	CHARACTER(20)	Language name
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to language

**Links from**


Table	Join
Film	film.language_id = language.language_id

**Unique Keys**

Columns	Description
language_id	PK
Last_update	Timestamp
Name	Character

## **staff**

Demographic information about store staff

Key Type	Column Name	Data Type	Description
 Primary	staff_id	SERIAL	Unique Id for staff member
	First_name	CHARACTER VARYING(45)	Staff first name
	Last_name	CHARACTER VARYING(45)	Staff last name
Foreign	Address_id	SMALLINT	Id for staff home address
	Email	CHARACTER VARYING(45)	Staff email address
Foreign	Store_id	SMALLINT	Id of store that staff member works at
	Active	BOOLEAN	Currently employed
	Username	CHARACTER VARYING(45)	Username for staff to get into system
	Password	CHARACTER VARYING(45)	System access phrase for staff
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update made to staff members row
	Picture	BYTEA	Staff id image

**Links to**

Table	Join
address	staff.address_ID = address.address_ID

**Links from**


Table	Join
store	store.manager_staff_ID = staff.staff_ID

## Unique Keys

Columns	Description
staff_id	PK
First_name	CHARACTER
Last_name	Character
Email	Character
Active	Boolean
Username	Character
Password	Character
Last_update	Timestamp
Picture	bytea

## store

Brick-and-mortar location information

Key Type	Column Name	Data Type	Description
 Primary	store_id	SERIAL	Id for store
	Manager_staff_id	SMALLINT	Manager of store
Foreign	Address_id	SMALLINT	Id for store address
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last day of event at store

## Links to

Table	Join
staff	store.manager_staff_ID = staff.staff_ID
Customer	staff.Address_ID = address.address_ID

## Unique Keys

Columns	Description
store_id	PK
Last_update	TIMESTAMP