

Rockbuster Stealth Data Dictionary

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Data Immersion Course-A3-EX3.9







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1. Rockbuster Stealth

This is a PostgreSQL sample database.

Rockbuster Stealth LLC is a movie rental company that used to have stores around the World and is planning to use its excising movie licenses to launch an online video rental service to stay competitive. The database contains informant about Rockbuster's film inventory, customers, and payments, among other things.

Download the dataset here: <u>Rockbuster-Dataset</u>



2. Entity Relationship Dictionary (ERD)

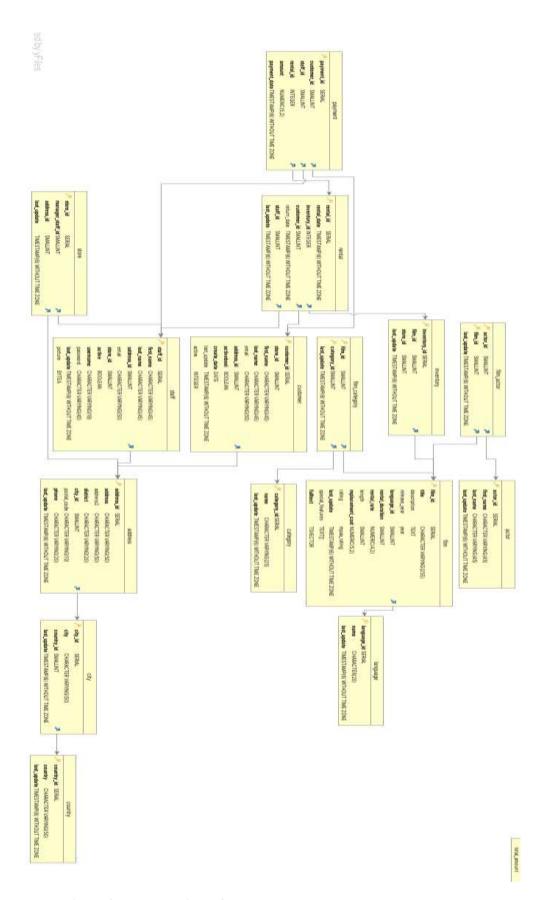


Figure 1: ERD (Snowflake Schema) The fact table is surrounded by many dimension tables.

3. Tables

Legend

Primary key

Unique key

⇒ Foreign key relation

3.1 Fact tables

3.1.1 Table: payment

Columns

	Name	Data Type	Description/Attributes
P	payment_id	SERIAL	Primary key; Unique identification number of the payment
	customer_id	SMALLINT	Unique identification number of the customer; Foreign key to customer table
	staff_id	SMALLINT	Unique identification number of the staff member; Foreign key to staff table
	rental_id	INTEGER	Unique identification number of the rental; Foreign key to rental table
	amount	NUMERIC(5,2)	Amount of payment
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp of payment

Links to

	Table	Join	Title/Name/Description
≒	customer	payment.payment_id = customer.customer_id	FK_payment_customer_customer_id; Foreign key constraint referencing customer.customer_id
⇆	staff	payment.staff_id = staff.staff_id	FK_payment_staff_staff_id; Foreign key constraint referencing staff.staff_id
≒	rental	payment.rental_id = rental.rental_id	FK_payment_rental_rental_id; Foreign key constraint referencing rental.rental_id

	Columns	Name/Description	
<i>,</i>	payment_id	PK_payment_payment_id; Primary key (clustered) constraint	
AS.	customer_id	K_payment_customer_id; Unique nonclustered index	
A.	staff_id	FK_payment_staff_id; Unique nonclustered index	
A.	rental_id	FK_payment_rental_id; Unique nonclustered index	

3.1.2 Table: rental

Columns

_			-
	Name	Data Type	Description/Attributes
	rental_id	SERIAL	Primary key; Unique identification number of the rental
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp of rental
	inventory_id	INTEGER	Unique identification number of the inventory item; Foreign key to inventory table
	customer_id	SMALLINT	Unique identification number of the customer; Foreign key to custome table
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp of return
	staff_id	SMALLINT	Unique identification number of the staff member; Foreign key to staff table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
≒	inventory	rental.inventory_id = inventory.inventory_id	FK_rental_inventory_inventory_id; Foreign key constraint referencing inventory.inventory_id
≒	customer	rental.customer_id = customer.customer_id	FK_rental_customer_customer_id; Foreign key constraint referencing customer.customer_id
⇆	staff	rental.staff_id = staff.staff_id	FK_rental_staff_id; Foreign key constraint referencing staff.staff_id

Linked from

	Table	Join	Title/Name/Description
⇆	payment	rental.rental_id = payment.rental_id	FK_payment_rental_rental_id; Foreign key constraint referencing rental.rental_id

	Columns	Name/Description	
P	rental_id	PK_rental_rental_id; Primary key (clustered) constraint	
N.	inventory_id	FK_rental_inventory_id; Unique nonclustered index	
N.	customer_id	FK_rental_customer_id; Unique nonclustered index	
A.S.	staff_id	FK_rental_staff_id; Unique nonclustered index	

3.2 Dimension tables

3.2.1 Table: store

Columns

	Name	Data Type	Description/Attributes
P	store_id	SERIAL	Primary key. Unique identification number of the store
	manager_staff_id	SMALLINT	Unique identification number of the staff member; Foreign key to staff table
	address_id	SMALLINT	Unique identification number of the address; Foreign key to address table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
≒	staff	store.manager_staff_id = staff.staff_id	FK_store_staff_manager_staff_id; Foreign key constraint referencing staff.staff_id
≒	address	store.address_id = address.address_id	FK_store_address_address_id; Foreign key constraint referencing address.address_id

Unique keys

	Columns	Name/Description
<i>_</i>	store_id	PK_store_store_id; Primary key (clustered) constraint
P	manager_staff_id	FK_store_manager_staff_id; Unique nonclustered index
P	address_id	FK_store_address_id; Unique nonclustered index

3.2.2 Table: film_actor

Columns

	Name	Data Type	Description/Attributes
P	actor_id	SMALLINT	Primary key. Unique identification number of the actor
JE.	film_id	SMALLINT	Primary key. Unique identification number of the film; Foreign key to film table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
=	actor	film_actor.actor_id = actor.actor_id	FK_film_actor_actor_id; Foreign key constraint referencing actor.actor_id
=	film	film_actor.film_id = film.film_id	FK_film_actor_film_film_id; Foreign key constraint referencing film.film_id

Unique keys

Columns Name/Description		Name/Description
P	actor_id	PK_film_actor_actor_id; Primary key (clustered) constraint
P	film_id	PK_film_actor_film_id; Primary key (clustered) constraint

3.2.3 Table: inventory

Columns

Name	Data Type	Description/Attributes
inventory_id	SERIAL	Primary key. Unique identification number of the inventory item
film_id	SMALLINT	Unique identification number of the film; Foreign key to film table
store_id	SMALLINT	Unique identification number of the store
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
5	→ film	inventory.film_id = film.film_id	FK_inventory_film_film_id; Foreign key constraint referencing film.film_id

Linked from

	Table	Join	Title/Name/Description
=	rental	inventory.rental_id = rental.rental_id	FK_rental_inventory_rental_id; Foreign key constraint referencing rental.rental_id

Unique keys

	Columns	Name/Description
عر	inventory_id	PK_inventory_inventory_id; Primary key (clustered) constraint
a	film_id	FK_inventory_film_id; Unique nonclustered index
a	store_id	FK_inventory_store_id; Unique nonclustered index

3.2.4 Table: film_category

	Name	Data Type	Description/Attributes
عر	film_id	SMALLINT	Primary key. Unique identification number of the film; Foreign key to film table
عر	category_id	SMALLINT	Primary key. Unique identification number of the category; Foreign key to category table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
≒	film	film_category.film_id = film.film_id	FK_film_category_film_film_id; Foreign key constraint referencing film.film_id
≒	category	film_category.category_id = category.category_id	FK_film_category_category_id; Foreign key constraint referencing category_id

Unique keys

	Columns	Name/Description	
P	film_id	PK_film_category_film_id; Primary key (clustered) constraint	
<i>,</i>	category_id	PK_film_category_category_id; Primary key (clustered) constraint	

3.2.5 Table: customer

Columns

	CONTRACTOR		
	Name	Data Type	Description/Attributes
عر	customer_id	SERIAL	Primary key. Unique identification number of the customer
	store_id	SMALLINT	Unique identification number of the store
	first_name	CHARACTER VARYING(45)	First name of the customer
	last_name	CHARACTER VARYING(45)	Last name of the customer
	email	CHARACTER VARYING(50)	Email address of the customer
	address_id	SMALLINT	Unique identification number of the address; Foreign key to address table
	activebool	BOOLEAN	Boolean value indicating whether customer is active or inactive
	create_date	DATE	Date when the customer account was created
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated
	active	INTEGER	Binary value indicating whether customer is active or inactive

Links to

Ta	able	Join	Title/Name/Description
≒ ac	ddress	customer.address_id =	FK_customer_address_address_id; Foreign key constraint referencing
		address_id	address.address_id

Linked from

	Table	Join	Title/Name/Description
=	payment	customer.payment_id = payment.payment_id	FK_payment_customer_payment_id; Foreign key constraint referencing payment_payment_id
	rental	customer.rental_id = rental.rental_id	FK_rental_customer_rental_id; Foreign key constraint referencing rental.rental_id

Unique keys

	Columns	Name/Description
p	customer_id	PK_customer_customer_id; Primary key (clustered) constraint
a.	store_id	FK_customer_store_id; Unique nonclustered index
_E D	address_id	FK_customer_address_id; Unique nonclustered index

3.2.6 Table: staff

Columns

	Name	Data Type	Description/Attributes
P	staff_id	SERIAL	Primary key. Unique identification number of the staff member
	first_name	CHARACTER VARYING(45)	First name of the staff member
	last_name	CHARACTER VARYING(45)	Last name of the staff member
	address_id	SMALLINT	Unique identification number of the address; Foreign key to address table
	email	CHARACTER VARYING(50)	Email address of the staff member
	store_id	SMALLINT	Unique identification number of the store
	active	BOOLEAN	Boolean value indicating whether staff is active or inactive
	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	Timestamp when the record was last updated
	picture	вутеа	Picture of the staff member

Links to

Table	Join	Title/Name/Description
≒ address	staff.address_id = address.address_id	FK_staff_address_address_id; Foreign key constraint referencing address.address_id

Linked from

	Table	Join	Title/Name/Description
=	payment	staff.staff_id = payment.staff_id	FK_payment_staff_staff_id; Foreign key constraint referencing staff.staff_id
=	rental	staff.rental_id = rental.rental_id	FK_rental_staff_rental_id; Foreign key constraint referencing rental.rental_id
5	store	staff.store_id = store.store_id	FK_store_staff_store_id; Foreign key constraint referencing store.store_id

Unique keys

	Columns	Name/Description
عر	staff_id PK_staff_staff_id; Primary key (clustered) constraint	
A	address_id	FK_staff_address_id; Unique nonclustered index
B	store_id	FK_staff_store_id; Unique nonclustered index

3.2.7 Table: actor

Columns

	Name	Data Type	Description/Attributes
0	actor_id	SERIAL	Primary key. Unique identification number of the actor
	first_name	CHARACTER VARYING(45)	First name of the actor
	last_name	CHARACTER VARYING(45)	Last name of the actor
	last update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Linked from

	Table	Join	Title/Name/Description
=	film_actor	actor.actor_id = film_actor.actor_id	FK_film_actor_actor_actor_id; Foreign key constraint referencing actor.actor_id

Unique keys

	Columns	Name/Description
P	actor_id	PK_actor_actor_id; Primary key (clustered) constraint

3.2.8 Table: film

	Control of the Control		
	Name	Data Type	Description/Attributes
0	film_id	SERIAL	Primary key. Unique identification number of the film
	title	CHARACTER VARYING(255)	Title of the film
	description	TEXT	Description/Attributes of the film
	release_year	year	Year in which the film was released
	language_id	SMALLINT	Unique identification number of the language; Foreign key to language table
	rental_duration	SMALLINT	Duration of the rental
	rental_rate	NUMERIC(4,2)	Price at which the film is rented
	length	SMALLINT	Length of the film (in minutes)
	replacement_cost	NUMERIC(5,2)	Price at which the film is replaced

rating	mpaa_rating	MPAA rating of the film
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated
special_features	TEXT[]	Features of the film
fulltext	TSVECTOR	List of lexemes to support full text search

Links to

Table	Join	Title/Name/Description
	film.language_id = language_id	FK_film_language_language_id; Foreign key constraint referencing language.language_id

Linked from

	Table	Join	Title/Name/Description
=	film_actor	film.film_id = film_actor.film_id	FK_film_actor_film_film_id; Foreign key constraint referencing film.film_id
=	inventory	film.film_id = inventory.film_id	FK_inventory_film_film_id; Foreign key constraint referencing film.film_id
=	film_category	film.film_id = film_category.film_id	FK_film_category_film_film_id; Foreign key constraint referencing film.film_id

Unique keys

	Columns	Name/Description
P	film_id	PK_film_film_id; Primary key (clustered) constraint
language_id FK_film_language_id; Unique nonclustered index		FK_film_language_id; Unique nonclustered index

3.2.9 Table: category

Columns

	Name	Data Type	Description/Attributes
P	category_id	SERIAL	Primary key. Unique identification number of the film category
	name	CHARACTER VARYING(25)	Name of the film category
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Linked from

Table	Join	Title/Name/Description
	category.category_id = film_category.category_id	FK_film_category_category_id; Foreign key constraint referencing category.category_id

	Columns	Name/Description
P	category_id	PK_category_category_id; Primary key (clustered) constraint

3.2.10 Table: address

Columns

	Name	Data Type	Description/Attributes
æ	address_id	SERIAL	Primary key. Unique identification number of the address
	address	CHARACTER VARYING(50)	First street address line
	address 2	CHARACTER VARYING(50)	Second street address line
	district	CHARACTER VARYING(50)	Name of the district
	city_id	SMALLINT	Unique identification number of the city; Foreign key to city table
	postal_code	CHARACTER VARYING(10)	Postal code for the street address
	phone	CHARACTER VARYING(20)	Telephone identification number
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
⇆	city	address.city_id = city.city_id	FK_address_city_city_id; Foreign key constraint referencing city.city_id

Linked from

	Table	Join	Title/Name/Description
-	customer	address.address_id = customer.address_id	FK_customer_address_address_id; Foreign key constraint referencing address.address_id
=	staff	address.address_id = staff.address_id	FK_staff_address_address_id; Foreign key constraint referencing address.address_id
5	store	address_id = store.address_id	FK_store_address_address_id; Foreign key constraint referencing address.address_id

Unique keys

	Columns	Name/Description
٩	address_id	PK_address_address_id; Primary key (clustered) constraint
B	city_id	FK_address_city_id; Unique nonclustered index

3.2.11 Table: language

	1	Ú.	1
	Name	Data Type	Description/Attributes
ø	language_id	SERIAL	Primary key. Unique identification number of the language
	name	CHARACTER(20)	Name of the language
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Linked from

Table	Join	Title/Name/Description
≒ film	language.language_id = film.language_id	FK_film_language_language_id; Foreign key constraint referencing language.language_id

Unique keys

	Columns	Name/Description
1	language_id	PK_address_address_id; Primary key (clustered) constraint

3.2.12 Table: city

Columns

	Name	Data Type	Description/Attributes
P	city_id	SERIAL	Primary key. Unique identification number of the language
	city	CHARACTER VARYING(50)	Name of the city
	country_id	SMALLINT	Unique identification number of the country; Foreign key to country table
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Links to

	Table	Join	Title/Name/Description
=	country	city.country_id = country.country_id	FK_city_country_country_id; Foreign key constraint referencing country.country_id

Linked from

	Table	Join	Title/Name/Description
=	address	city.city_id = address.city_id	FK_address.city_id; Foreign key constraint referencing city.city_id

Unique keys

	Columns	Name/Description
P	city_id	PK_city_city_id; Primary key (clustered) constraint
a,	country_id	FK_city_country_id; Unique nonclustered index

3.2.13 Table: country

	Name	Data Type	Description/Attributes
P	country_id	SERIAL	Primary key. Unique identification number of the country
	country	CHARACTER VARYING(50)	Name of the country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Timestamp when the record was last updated

Linked from

	Table	Join	Title/Name/Description
=	city	country.country_id = city.country_id	FK_city_country_country_id; Foreign key constraint referencing country_country_id

-	Columns	Name/Description
عر	country_id	PK_country_country_id; Primary key (clustered) constraint