

Rockbuster Stealth LLC

Around the block, are movies that ROCK

DATA DICTIONARY
APRIL 2024

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Legenc

- Primary Key
- 7 Foreign Key
- > Primary Key Relation
- Foreign Key Relation

1. Rockbuster Stealth LLC

This sample data dictionary is for the Rockbuster Stealth LLC PostgreSQL database.

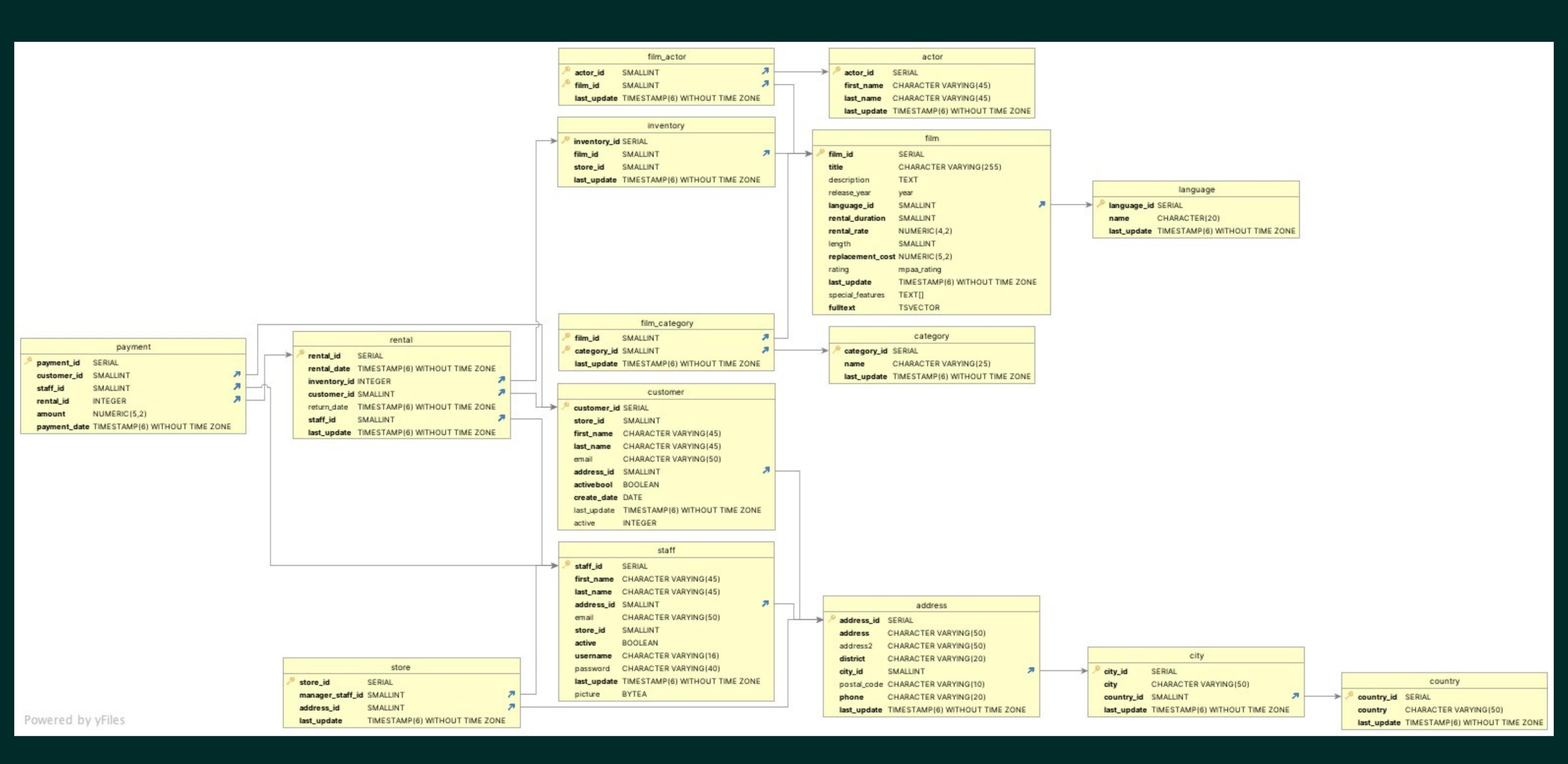
Rockbuster Stealth LLC is a fictitious global movie rental company, and this database represents all sales at their in-person stores. The data includes information on staff, customers, available films, and processed payments.

This database contains 15 tables: 2 Fact Tables, and 13 Dimension Tables.

You can download the Rockbuster Stealth LLC database here:

Download the Rockbuster data set

2. Rockbuster Stealth LLC Entity Relationship Diagram



Staff, customers, and stores have a common table for addresses. These tables all link to one table - payment. This table holds the IDs of the staff, customer, and rental associated with each payment.

3. Fact Tables

3.1. Payment

Columns

Keys	Columns	Data Type	Description
	payment_id	SERIAL	Primary Key for payment records Unique number to identify payment
1	customer_id	SMALLINT	Foreign Key from the customer table Unique number to identify the customer
1	staff_id	SMALLINT	Foreign Key from the staff table Unique number to identify the staff member
7	rental_id	INTEGER	Foreign Key from the rental table Unique number to identify the rental
	amount	NUMERIC(5,2)	Price of rental
	payment_date	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date that the payment was made

Links to

	Table	Join	Title/Name/Description
>	customer	payment.customer_id = customer_id	FK_customer_payment_customer_id Foreign Key referencing customer_id in the payment table
}	staff	<pre>payment.staff_id = staff.staff_id</pre>	FK_staff_payment_staff_id Foreign Key referencing staff_id in the payment table
-	rental	payment.rental_id = rental.rental_id	FK_payment_rental_rental_id Foreign Key referencing rental_id in the payment table

Unique Keys

Column	Name/Description
payment_id	PKpayment_payment_id Primary Key for payment records

3.2. Rental

Columns

Keys	Columns	Data Type	Description
	rental_id	SERIAL	Primary Key for rental records Unique number to identify the rental
	rental_date	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date the rental began
1	inventory_id	INTEGER	Foreign Key from the inventory table Unique number to identify the rented inventory
1	customer_id	SMALLINT	Foreign Key from the customer table Unique number to identify the customer
	return_date	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date the rental ended
1	staff_id	SMALLINT	Foreign Key from the staff table Unique number to identify the staff member
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
~		rental.rental_id =	FK_rental_payment_rental_id
	payment	payment.rental_id	Foreign Key referencing rental_id in the payment table

Links to

	Table	Join	Title/Name/Description
>	customer	rental.customer_id = customer_id	FK_customer_rental_customer_id Foreign Key referencing customer_id in the rental table
>	staff	rental.staff_id = staff.staff_id	FK_staff_rental_staff_id Foreign Key referencing staff_id in the rental table
>	inventory	rental.inventory_id = inventory.inventory_id	FK_inventory_rental_inventory_id Foreign Key referencing inventory_id in the rental table

3.2. Rental cont.

Unique Keys

Column	Name/Description
rental_id	PK_rental_rental_id Primary Key for rental records

4. Dimension Tables

4.1. Customer

Columns

Keys	Columns	Data Type	Description
	customer_id	SERIAL	Primary Key for customer records Unique number to identify the customer
1	store_id	SMALLINT	Foreign Key from the store table Unique number to identify 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 of the customer
1	address_id	SMALLINT	Foreign Key from the address table Unique number to identify the address
	activebool	BOOLEAN	True/False to indicate a customer's activity status
	create_date	DATE	Date of the record's creation
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update
	active	INTEGER	Number to indicate if a customer is active or not

Links from

	Table	Join	Title/Name/Description
~	payment	customer.customer_id = payment.customer_id	FK_customer_payment_customer_id Foreign Key referencing customer_id in the payment table
~	rental	customer.customer_id = rental.customer_id	FK_customer_rental_customer_id Foreign Key referencing customer_id in the rental table

Links to

	Table	Join	Title/Name/Description
-	store	customer.store_id = store.store_id	FK_store_customer_store_id Foreign Key referencing store_id in the customer table
}	address	customer.address_id = address.address_id	FK_address_customer_address_id Foreign Key referencing address_id in the customer table

Column	Name/Description
customer_id	PK_customer_customer_id Primary Key for customer records
address_id	AK_customer_address_id Alternative key to uniquely identify customers
email	AK_customer_email Alternative key to uniquely identify customers
first_name, last_name	IX_customer_first_name_last_name Customers cannot share the same full name

4.2. Staff

Columns

Keys	Columns	Data Type	Description
	staff_id	SERIAL	Primary Key for staff records Unique number to identify 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
1	address_id	SMALLINT	Foreign Key from the address table Unique number to identify the address
	email	CHARACTER VARYING(50)	Email of the staff member
1	store_id	SMALLINT	Foreign Key from the store table Unique number to identify the store
	active	BOOLEAN	True/False to indicate a staff member is active or not
	username	CHARACTER VARYING(16)	Username of the staff member
	password	CHARACTER VARYING(40)	Password of the staff member
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update
	picture	BYTEA	Picture of the staff member

Links from

	Table	Join	Title/Name/Description
←	payment	staff.staff_id = payment.staff_id	FK_staff_payment_staff_id Foreign Key referencing staff_id in the payment table
←	rental	staff.staff_id = rental.staff_id	FK_staff_rental_staff_id Foreign Key referencing staff_id in the rental table

Links to

	Table	Join	Title/Name/Description
>	store	staff.store_id = store.store_id	FK_store_staff_store_id Foreign Key referencing store_id in the staff table
>	address	staff.address_id = address.address_id	FK_address_staff_address_id Foreign Key referencing address_id in the staff table

Column	Name/Description
staff_id	PK_staff_staff_id Primary Key for staff records
address_id	AK_staff_address_id Alternative key to uniquely identify staff; staff cannot live at the same address
email	AK_staff_email Alternative key to uniquely identify staff; staff cannot use the same email
username	AK_staff_username Alternative key to uniquely identify staff; staff cannot use the same username
picture	AK_staff_picture Alternative key to uniquely identify staff; staff cannot use the same picture
first_name, last_name	IX_staff_first_name_last_name Staff cannot share the same full name

4.3. Store Columns

TV.					
Keys	Columns	Data Type	Description		
	store_id	SERIAL	Primary Key for store records Unique number to identify the store		
7	manager_staff_id	SMALLINT	Foreign Key from the staff table Unique number to identify the manager of the store		
1	address_id	SMALLINT	Foreign Key from the address table Unique number to identify the address		
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update		

Links from

	Table	Join	Title/Name/Description
<	customer	store.store_id = customer.store_id	FK_store_customer_store_id Foreign Key referencing store_id in the customer table
←	staff	store.store_id = staff.store_id	FK_store_staff_store_id Foreign Key referencing store_id in the staff table
-	inventory	store.store_id = inventory.store_id	FK_store_inventory_store_id Foreign Key referencing store_id in the inventory table

Links to

	Table	Join	Title/Name/Description
>	staff	store.manager_staff_id = staff.staff_id	FK_staff_store_manager_staff_id Foreign Key referencing manager_staff_id in the store table
>	address	store.address_id = address.address_id	FK_address_store_address_id Foreign Key referencing address_id in the store table

Column	Name/Description
store_id	PK_store_store_id Primary Key for store records
manager_staff_id	AK_store_manager_staff_id Alternative key to uniquely identify store; stores cannot have the same manager
address_id	AK_store_address_id Alternative key to uniquely identify store; stores cannot have the same address

4.4. Address

Keys	Columns	Data Type	Description	
	address_id	SERIAL	Primary Key for address records Unique number to identify the address	
	address	CHARACTER VARYING(50)	First line of the street address	
	address2	CHARACTER VARYING(50)	Second line of the street address	
	district	CHARACTER VARYING(20)	Name of the district	
1	city_id	SMALLINT	Foreign Key from the city table Unique number to identify the city	
	postal_code	CHARACTER VARYING(10)	Postal code of the street address	
	phone	CHARACTER VARYING(20)	Phone number	
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update	

Links from

	Table	Join	Title/Name/Description
-	customer		FK_address_customer_address_id Foreign Key referencing address_id in the customer table
-	staff	address.address_id = staff.address_id	FK_address_staff_address_id Foreign Key referencing address_id in the staff table
-	store		FK_address_store_address_id Foreign Key referencing address_id in the store table

	Table	Join	Title/Name/Description
}	city	address.city_id = city.city_id	FK_city_address_city_id Foreign Key referencing city_id in the address table

Unique Keys

Column	Name/Description
address_id	PK_address_address_id Primary Key for address records
address, address2, district, city_id, postal_code	IX_address_address2_district_city_id_postal_ code Alternative key to uniquely identify address; street addresses cannot be the same

4.5. City Columns

Keys	Columns	Data Type	Description
	city_id	SERIAL	Primary Key for city records Unique number to identify the city
	city	CHARACTER VARYING(50)	Name of the city
7	country_id	SMALLINT	Foreign Key from the country table Unique number to identify the country
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	address	city.city_id = address.city_id	FK_city_address_city_id Foreign Key referencing city_id in the address table

Links to

	Table	Join	Title/Name/Description
}	country	city.country_id = country.country_id	FK_country_city_country_id Foreign Key referencing country_id in the city table

<u> </u>	
Column	Name/Description
city_id	PK_city_city_id Primary Key for city records

4.6. Country

Columns

Keys	Columns	Data Type	Description
	country_id	SERIAL	Primary Key for country records Unique number to identify the country
	country	CHARACTER VARYING(50)	Name of the country
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
-	city		FK_country_city_country_id Foreign Key referencing country_id in the city table

Unique Keys

Column	Name/Description
country_id	PK_country_country_id Primary Key for country records
country	AK_country_country Alternative Key for country records; countries cannot share the same name

4.7. Inventory

Columns

Keys	Columns	Data Type	Description
	inventory_id	SERIAL	Primary Key for inventory records Unique number to identify the inventory
1	film_id	SMALLINT	Foreign Key from the film table Unique number to identify the film
7	store_id	SMALLINT	Foreign Key from the store table Unique number to identify the store
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	rental		FK_inventory_rental_inventory_id Foreign Key referencing inventory_id in the rental table

Links to

	Table	Join	Title/Name/Description
>	store	inventory.store_id = store.store_id	FK_store_inventory_store_id Foreign Key referencing store_id in the inventory table
>	film	inventory.film_id = film.film_id	FK_film_inventory_film_id Foreign Key referencing film_id in the inventory table

Column	Name/Description
inventory_id	PK_inventory_inventory_id Primary Key for inventory records

4.8. Film

Columns

Keys	Columns	Data Type	Description
	film_id	SERIAL	Primary Key for film records Unique number to identify the film
	title	CHARACTER VARYING(255)	Title of the film
	description	TEXT	Description of the film
	release_year	year	Year of the film's release
1	language_id	SMALLINT	Foreign Key from the language table Unique number to identify the language
	rental_duration	SMALLINT	Rental duration allowed for this film
	rental_rate	NUMERIC(4,2)	Cost to rent this film
	length	SMALLINT	Length of the film
	replacement_cost	NUMERIC(5,2)	Cost needed to replace the film
	rating	mpaa_rating	MPAA Rating of the film
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update
	special_features	TEXT[]	Special features of the film available to renters
	fulltext	TVSECTOR	Keywords associated with the film to allow for renters to search

Links from

	Table	Join	Title/Name/Description
-<	film_actor	film.film_id = film_actor.film_id	FK_film_film_actor_film_id Foreign Key referencing film_id in the film_actor table
-	film_category	film.film_id = film_category.film_id	PK_film_film_category_film_id Primary Key referencing film_id in the film_category table
-	inventory	film.film_id = inventory.film_id	FK_film_inventory_film_id Foreign Key referencing film_id in the inventory table

Links to

	Table	Join	Title/Name/Description
\rightarrow	language		FK_language_film_language_id Foreign Key referencing language_id in the film table

Unique Keys

	Column	Name/Description
	film_id	PK_film_film_id Primary Key for film records
	title	AK_film_title Alternative Key for film records; films cannot share the same title
description		AK_film_description Alternative Key for film records; films cannot share the same description
fulltext		AK_film_fulltext Alternative Key for film records; films cannot share the same keywords

4.9. Film Category

Columns

Keys	Columns	Data Type	Description		
	film_id	SMALLINT	Composite Primary Key for film category records Unique number to identify the film		
	category_id	SMALLINT	Composite Primary Key for film category records Unique number to identify the category		
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update		

Links from

	Table	Join	Title/Name/Description
←	film	film_category.film_id = film.film_id	CK_film_film_category_film_id Composite Key referencing film_id in the film table
←	category	film_category.category_id = category.category_id	CK_category_film_category_category_id Composite Key referencing category_id in the category table

4.9. Film Category cont.

Unique Keys

Column	Name/Description
film_id	CK_film_category_film_id Composite Key for film records; this table uses a composite key, however, the film_id column is already unique

4.10. Category

Columns

Keys	Columns	Data Type	Description
	category_id	SERIAL	Primary Key for category records Unique number to identify the category
	category	SMALLINT	Name of the category
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	film_category		PK_category_film_category_category_id Primary Key referencing category_id in the film_category table

Unique Keys

Column	Name/Description
category_id	PK_category_category_id Primary Key for category records
category	AK_category_category Alternative Key for category records; categories cannot share the same name

4.11. Language

Columns

Keys	Columns	Data Type	Description
	language_id	SERIAL	Primary Key for language records Unique number to identify the language
	language	CHARACTER(20)	Name of the language
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	film	language.language_id = film.language_id	FK_language_film_language_id Foreign Key referencing language_id in the film table

Column	Name/Description
language_id	PK_language_language_id Primary Key for language records
language	AK_language_language Alternative Key for language records; languages cannot share the same name

4.12. Film Actor

Columns

Keys	Columns	Data Type	Description
	film_id	SMALLINT	Composite Primary Key for film_actor records Unique number to identify the film
	actor_id	SMALLINT	Composite Primary Key for film_actor records Unique number to identify the actor
	last_update	TIMESTAMP(6) WITHOUT THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	film	film_actor.film_id = film.film_id	PK_film_film_actor_film_id Primary Key referencing film_id in the film table
←	actor	film_actor.actor_id = actor.actor_id	PK_actor_film_actor_actor_id Primary Key referencing actor_id in the actor table

Unique Keys

Column	Name/Description
film_id	CK_film_actor_film_id Composite Key for film records; this table uses a composite key, however, the film_id column is already unique

4.13. Actor

Columns

Keys	Columns	Data Type	Description
	actor_id	SERIAL	Primary Key for actor records Unique number to identify 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 THE TIME ZONE	Date of the record's last update

Links from

	Table	Join	Title/Name/Description
←	film_actor	actor.actor_id = film_actor.actor_id	PK_actor_film_actor_actor_id Primary Key referencing actor_id in the film_actor table

Column	Name/Description
actor_id	PK_actor_actor_id Primary Key for category records
first_name, last_name	IX_actor_first_name_last_name The full name of the actor cannot be the same