Rockbuster Data Dictionary

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Contents

ERD

film_actor

Column	Type
actor_id	SMALLINT
film_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

actor

Column	Type
actor_id	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

inventory

Column	Type
inventory_id	SERIAL
film_id	SMALLINT
store_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film

Column	Type
film_id	SERIAL
title	CHARACTER VARYING(255)
description	TEXT
release_year	year
language_id	SMALLINT
rental_duration	SMALLINT
rental_rate	NUMERIC(4,2)
length	SMALLINT
replacement_cost	NUMERIC(5,2)
rating	mpaa_rating
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
special_features	TEXT[]
fulltext	TSVECTOR

language

Column	Type
language_id	SERIAL
name	CHARACTER(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

payment

Column	Type
payment_id	SERIAL
customer_id	SMALLINT
staff_id	SMALLINT
rental_id	INTEGER
amount	NUMERIC(5,2)
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE

rental

Column	Type
rental_id	SERIAL
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE
inventory_id	INTEGER
customer_id	SMALLINT
return_date	TIMESTAMP(6) WITHOUT TIME ZONE
staff_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film_category

Column	Type
film_id	SMALLINT
category_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

category

Column	Type
category_id	SERIAL
name	CHARACTER VARYING(25)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

customer

Column	Type
customer_id	SERIAL
store_id	SMALLINT
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
email	CHARACTER VARYING(50)
address_id	SMALLINT
activebool	BOOLEAN
create_date	DATE
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
active	INTEGER

staff

Column	Type
staff_id	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
address_id	SMALLINT
email	CHARACTER VARYING(50)
store_id	SMALLINT
active	BOOLEAN
username	CHARACTER VARYING(16)
password	CHARACTER VARYING(40)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
picture	BYTEA

store

Column	Type
store_id	SERIAL
manager_staff_id	SMALLINT
address_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

address

Column	Type
address_id	SERIAL
address	CHARACTER VARYING(50)
address2	CHARACTER VARYING(50)
district	CHARACTER VARYING(20)
city_id	SMALLINT
postal_code	CHARACTER VARYING(10)
phone	CHARACTER VARYING(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

city

Column	Type
city_id	SERIAL
city	CHARACTER VARYING(50)
country_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

country

Column	Type
country_id	SERIAL
country	CHARACTER VARYING(50)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

Fact tables

Payment

Columns	Data type	Description
payment_id	SERIAL	Surrogate primary key, identifies the payment
customer_id	SMALLINT	Foreign key, links to customer table, identifies customer
staff_id	SMALLINT	Foreign key, links to staff table, identifies staff member
rental_id	INTEGER	Foreign key, links to rental table, identifies rental transaction
amount	NUMERIC(5,2)	Amount of money recorded for each payment
payment_date	TIMESTAMP (6) WITHOUT TIME ZONE	Time at which the payment was executed: date (yyy-mm-dd) and time (hh:mm:ss)

Rental

Columns	Data type	Description
rental_id	SERIAL	Primary key, links to rental table, identifies rental transaction
rental_date	TIMESTAMP (6) WITHOUT TIME ZONE	Time at which the rental took place: date (yyy-mm-dd) and time (hh:mm:ss)
inventory_id	INTEGER	Foreign key, links to inventory table
customer_id	SMALLINT	Foreign key, links to customer table
return_date	TIMESTAMP (6) WITHOUT TIME ZONE	Time at which the movie was returned: date (yyy-mm-dd) and time (hh:mm:ss)
staff_id	SMALLINT	Foreign key, links to staff table, identifies staff member
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Time at which last update was written: date (yyy-mm-dd) and time (hh:mm:ss)

Dimensions tables

Inventory

Columns	Data type	Description
inventory_id	SERIAL	Primary key, larger integer, unique number used to identify a film or item to be rented by customers
film_id	SMALLINT	Foreign key, integer, unique number used to identify each film and connect to Film table
store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster classification
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Customer

Columns	Data type	Description
customer_id	SERIAL	Foreign key, links to customer table, identifies customer
store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster classification
first_name	CHARACTER VARYING(45)	Customer's first name, max 45 characters
last_name	CHARACTER VARYING(45)	Customer's last name, max 45 characters
email	CHARACTER VARYING(50)	Customer's email. Max 50 characters
address_id	SMALLINT	Foreign key, customer's address, linked to Address table
activebool	BOOLEAN	True or false statement to indicate the customer account status. Boolean data can hold three possible values: true, false or null.
create_date	DATE	The date when the customer account was created. Temporal date (yyyy-mm-dd)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
active	INTEGER	Integer, a number to indicate whether the customer account is active or not

Film

Columns	Data type	Description
film_id	SERIAL	Primary key, unique number used to identify each film as a rental item
title	CHARACTER VARYING(255)	Film title, fixed-length character with max 255 characters, including spaces
description	TEXT	Film synopsis with unlimited length
release_year	year	Integer, the year the film was released
language_id	SMALLINT	Foreign key, unique number used to identify the language of film audio; linked to Language table
rental_duration	SMALLINT	Small integer, the number of days the item was rented for
rental_rate	NUMERIC(4,2)	Rating, number with max 4 digits, including and 2 digits in fraction part;
length	SMALLINT	Small integer, the length of film (minutes)
replacement_cost	NUMERIC(5,2)	The cost the customer can be charged in case of lost or damage of rental item. Monetary amount, number with max 5 digits, including and 2 digits in fraction part.
rating	mpaa_rating	Film rating introduced by Movie Picture Association
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
special_features	TEXT[[	Extra videos related to the film available for audience
fultext	TSVECTOR	Text-searchable data where we can use a word as an index

Language

Columns	Data type	Description
language_id	SERIAL	Primary key, unique number used to identify the language in this table
name	CHARACTER(20)	The name of the language of the film audio
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Film actor

Columns	Data type	Description
actor_id	SMALLINT	Composite key, unique number used to identify the actor in this database. Foreign key connecting linked to Actor table.
film_id	SMALLINT	Composite key, unique number used to identify the film in this database. Foreign key connecting linked to Film table.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Actor

Columns	Data type	Description
actor_id	SERIAL	Primary key, unique number used to identify the actor in this database.
first_name	CHARACTER VARYING(45)	Actor's first name, max 45 characters
last_name	CHARACTER VARYING(45)	Actor's last name, max 45 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Film category

Columns	Data type	Description
film_id	SMALLINT	Composite key, unique number used to identify the film in this database. Foreign key connecting linked to Film table.
category_id	SMALLINT	Composite key, unique number used to identify the film category in this database. Foreign key connecting linked to Category table.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Category

Columns	Data type	Description
category_id	SERIAL	Primary key, unique number used to identify the film category
name	CHARACTER VARYING(25)	The name of the film category, max 25 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Staff

Columns	Data type	Description
staff_id	SERIAL	Primary key, unique number used to identify the personnel member
first_name	CHARACTER VARYING(45)	Employee's first name, max 45 characters
last_name	CHARACTER VARYING(45)	Employee's last name, max 45 characters
address_id	SMALLINT	Foreign key, employee's address, linked to Address table
email	CHARACTER VARYING(50)	Employee's email. Max 50 characters
store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster classification
active	BOOLEAN	True or false statement to indicate the employee's status. Boolean data can hold three possible values: true, false or null.
username	CHARACTER VARYING(16)	Employee's username / log-in ID for internal account, max 16 characters
password	CHARACTER VARYING(40)	Employee's password used to log in to internal account, max 40 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
picture	BYTEA	Employee's picture. Bytea data type is used to store raw binary data, e.g. images.

Store

Columns	Data type	Description
store_id	SERIAL	Primary key, unique number used to identify the store in Rockbuster classification
manager_staff_id	SMALLINT	Foreign key, unique number used to identify the manager staff, linked to Staff table
address_id	SMALLINT	Foreign key, unique number used to identify the store address, linked to Address table
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Address

Columns	Data type	Description
adress_id	SERIAL	Primary key, unique number used to identify the address in this table
address	CHARACTER VARYING(50)	Any address in this database - line1 (street number and street name)
address2	CHARACTER VARYING(50)	Any address in this database - line2, it can be used as a secondary address designator such as apartment number or building name
district	CHARACTER VARYING(20)	Any address in this database - district / state / region name
city_id	SMALLINT	Foreign key, small integer, unique number used to identify the city in this database, linked to City table
postal_code	CHARACTER VARYING(10)	Any address in this database - postal code, max 10 characters
phone	CHARACTER VARYING(20)	Phone number related to the address in this database, max 20 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

City

Columns	Data type	Description
city_id	SERIAL	Primary key, unique number used to identify the city in this database
city	CHARACTER VARYING(50)	City name in the address in this database
country_id	SMALLINT	Foreign key, unique number used to identify the country in this database, linked to Country table
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

Country

Columns	Data type	Description
country_id	SERIAL	Primary key, unique number used to identify the city in this database
country	CHARACTER VARYING(50)	Country name in the address in this database
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)