

The following sections describe the tables that make up the Sakila database, in alphabetic order.

5.1.1 The actor Table

The actor table lists information for all actors.

The actor table is joined to the film table by means of the film_actor table.

Columns

- actor_id: A surrogate primary key used to uniquely identify each actor in the table.
- first_name: The actor first name.
- last_name: The actor last name.
- last_update: When the row was created or most recently updated.

5.1.2 The address Table

The address table contains address information for customers, staff, and stores.

The address table primary key appears as a foreign key in the customer, staff, and store tables.

Columns

- address_id: A surrogate primary key used to uniquely identify each address in the table.
- address: The first line of an address.
- address2: An optional second line of an address.
- district: The region of an address, this may be a state, province, prefecture, etc.
- city_id: A foreign key pointing to the city table.
- postal_code: The postal code or ZIP code of the address (where applicable).
- phone: The telephone number for the address.
- last_update: When the row was created or most recently updated.
- location: A Geometry column with a spatial index on it.

Note (might ignore this note)

The spatial location column is supported as of MySQL 5.7.5. This column is added only when executing the Sakila SQL files against MySQL server 5.7.5 and

higher. Additionally, SPATIAL KEY idx_location is also added.

5.1.3 The category Table

The category table lists the categories that can be assigned to a film.

The category table is joined to the film table by means of the film_category table.

Columns

- category_id: A surrogate primary key used to uniquely identify each category in the table.
- name: The name of the category.
- last_update: When the row was created or most recently updated.

5.1.4 The city Table

The city table contains a list of cities.

The city table is referred to by a foreign key in the address table and refers to the country table using

a foreign key.

Columns

- city_id: A surrogate primary key used to uniquely identify each city in the table.
- city: The name of the city.
- country_id: A foreign key identifying the country that the city belongs to.
- last_update: When the row was created or most recently updated.

5.1.5 The country Table

The country table contains a list of countries.

The country table is referred to by a foreign key in the city table.

Columns

- country_id: A surrogate primary key used to uniquely identify each country in the table.
- country: The name of the country.
- last_update: When the row was created or most recently updated.

5.1.6 The customer Table

The customer table contains a list of all customers.

The customer table is referred to in the payment and rental tables and refers to the address and

store tables using foreign keys.

Columns

- **customer_id**: A surrogate primary key used to uniquely identify each customer in the table.
- **store_id**: A foreign key identifying the customer “home store.” Customers are not limited to renting only from this store, but this is the store at which they generally shop.
- **first_name**: The customer first name.
- **last_name**: The customer last name.
- **email**: The customer email address.
- **address_id**: A foreign key identifying the customer address in the address table.
- **active**: Indicates whether the customer is an active customer. Setting this to FALSE serves as an alternative to deleting a customer outright. Most queries should have a WHERE active = TRUE clause.
- **create_date**: The date the customer was added to the system. This date is automatically set using a trigger during an INSERT.
- **last_update**: When the row was created or most recently updated.

5.1.7 The film Table

The film table is a list of all films potentially in stock in the stores. The actual in-stock copies of each film

are represented in the inventory table.

The film table refers to the language table and is referred to by the film_category, film_actor,

and inventory tables.

Columns

- **film_id**: A surrogate primary key used to uniquely identify each film in the table.
- **title**: The title of the film.
- **description**: A short description or plot summary of the film.
- **release_year**: The year in which the movie was released.
- **language_id**: A foreign key pointing at the language table; identifies the language of the film.
- **original_language_id**: A foreign key pointing at the language table; identifies the original language of the film. Used when a film has been dubbed into a new language.
- **rental_duration**: The length of the rental period, in days.
- **rental_rate**: The cost to rent the film for the period specified in the rental_duration column.
- **length**: The duration of the film, in minutes.
- **replacement_cost**: The amount charged to the customer if the film is not returned or is returned in a damaged state.
- **rating**: The rating assigned to the film. Can be one of: G, PG, PG-13, R, or NC-17.
- **special_features**: Lists which common special features are included on the DVD. Can be zero or more of: Trailers, Commentaries, Deleted Scenes, Behind the Scenes.
- **last_update**: When the row was created or most recently updated.

5.1.8 The film_actor Table

The film_actor table is used to support a many-to-many relationship between films and actors. For each

actor in a given film, there will be one row in the film_actor table listing the actor and film.

The film_actor table refers to the film and actor tables using foreign keys.

Columns:

- actor_id: A foreign key identifying the actor.
- film_id: A foreign key identifying the film.
- last_update: When the row was created or most recently updated.

5.1.9 The film_category Table

The film_category table is used to support a many-to-many relationship between films and categories.

For each category applied to a film, there will be one row in the film_category table listing the category

and film.

The film_category table refers to the film and category tables using foreign keys.

Columns:

- film_id: A foreign key identifying the film.
- category_id: A foreign key identifying the category.
- last_update: When the row was created or most recently updated.

5.1.10 The film_text Table (not required to use)

The film_text table contains the film_id, title and description columns of the film table, with the contents of the table kept in synchrony with the film table by means of triggers on film table

INSERT, UPDATE and DELETE operations.

Columns

- film_id: A surrogate primary key used to uniquely identify each film in the table.
- title: The title of the film.
- description: A short description or plot summary of the film.

The contents of the film_text table should never be modified directly. All changes should be made to

the film table instead.

5.1.11 The inventory Table

The inventory table contains one row for each copy of a given film in a given store.

The inventory table refers to the film and store tables using foreign keys and is referred to by the

rental table.

Columns

- `inventory_id`: A surrogate primary key used to uniquely identify each item in inventory.
- `film_id`: A foreign key pointing to the film this item represents.
- `store_id`: A foreign key pointing to the store stocking this item.
- `last_update`: When the row was created or most recently updated.

5.1.12 The language Table

The language table is a lookup table listing the possible languages that films can have for their language

and original language values.

The language table is referred to by the film table.

Columns

- `language_id`: A surrogate primary key used to uniquely identify each language.
- `name`: The English name of the language.
- `last_update`: When the row was created or most recently updated.

5.1.13 The payment Table

The payment table records each payment made by a customer, with information such as the amount and

the rental being paid for (when applicable).

The payment table refers to the customer, rental, and staff tables.

Columns

- `payment_id`: A surrogate primary key used to uniquely identify each payment.

customer_id: The customer whose balance the payment is being applied to. This is a foreign key

reference to the customer table.

- staff_id: The staff member who processed the payment. This is a foreign key reference to the staff

table.

- rental_id: The rental that the payment is being applied to. This is optional because some payments

are for outstanding fees and may not be directly related to a rental.

- amount: The amount of the payment.

- payment_date: The date the payment was processed.

- last_update: When the row was created or most recently updated.

5.1.14 The rental Table

The rental table contains one row for each rental of each inventory item with information about who

rented what item, when it was rented, and when it was returned.

The rental table refers to the inventory, customer, and staff tables and is referred to by the payment table.

Columns

- rental_id: A surrogate primary key that uniquely identifies the rental.

- rental_date: The date and time that the item was rented.

- inventory_id: The item being rented.

- customer_id: The customer renting the item.

- return_date: The date and time the item was returned.

- staff_id: The staff member who processed the rental.

- last_update: When the row was created or most recently updated.

5.1.15 The staff Table

The staff table lists all staff members, including information for email address, login information, and picture.

The staff table refers to the store and address tables using foreign keys, and is referred to by the rental, payment, and store tables.

Columns

- **staff_id:** A surrogate primary key that uniquely identifies the staff member.
- **first_name:** The first name of the staff member.
- **last_name:** The last name of the staff member.
- **address_id:** A foreign key to the staff member address in the address table.
- **picture:** A BLOB containing a photograph of the employee.
- **email:** The staff member email address.
- **store_id:** The staff member “home store.” The employee can work at other stores but is generally assigned to the store listed.
- **active:** Whether this is an active employee. If employees leave, their rows are not deleted from this table; instead, this column is set to FALSE.
- **username:** The user name used by the staff member to access the rental system.
- **password:** The password used by the staff member to access the rental system. The password should be stored as a hash using the SHA2() function.
- **last_update:** When the row was created or most recently updated.

5.1.16 The store Table

The store table lists all stores in the system. All inventory is assigned to specific stores, and staff and customers are assigned a “home store”.

The store table refers to the staff and address tables using foreign keys and is referred to by the

staff, customer, and inventory tables.

Columns

- store_id: A surrogate primary key that uniquely identifies the store.
- manager_staff_id: A foreign key identifying the manager of this store.
- address_id: A foreign key identifying the address of this store.
- last_update: When the row was created or most recently updated.