

# **Rockbuster Stealth**

## Data Dictionary

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|  |          |
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# 1. Rockbuster Stealth

The Rockbuster database contains information about inventory, customers, transactions, and employees.

2 Fact Tables

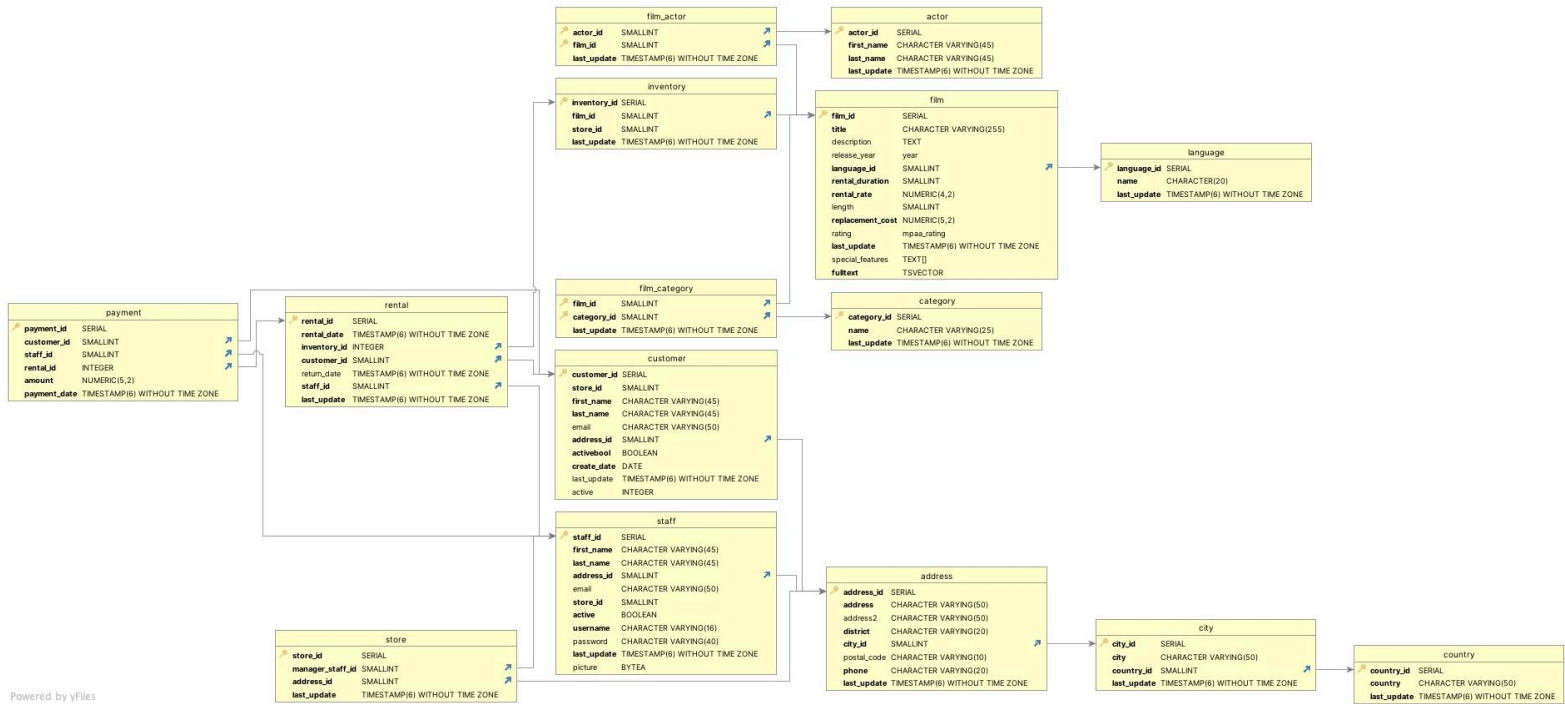
14 Dimension Tables

## 2. Legend

 Primary Key

 Foreign Key

### 3. Entity Relationship Diagram



## 4. Tables

### 4.1. Fact Tables





#### 4.1.1. Table: Payment

| COLUMNS     |              |  |                                |
|-------------|--------------|--|--------------------------------|
|             | Name         | Data Type  | Descriptions                   |
| 🔑           | payment_id   | SERIAL   | Primary key for payment record |
| ↗           | customer_id  | SMALLINT   | Unique customer ID number      |
| ↗           | staff_id     | SMALLINT   | Unique staff ID number         |
| ↗           | rental_id    | INTEGER  | Unique rental ID number        |
|             | amount       | NUMERIC(5,2)                                       | Price of payment               |
|             | payment_date | TIMESTAMP(6) WITHOUT TIME ZONE                     | Date and time of payment       |
| LINKS TO    |              |  |                                |
| Table Name  |              | Join   |                                |
| customer    |              | payment.customer_id = customer.customer_id         |                                |
| staff       |              | payment.staff_id = staff.staff_id                  |                                |
| rental      |              | payment.rental_id = rental.rental_id               |                                |
| UNIQUE KEYS |              |  |                                |
| Columns     |              | Name/Description                                   |                                |
| payment_id  |              | payment_pkey<br>Primary key constraint             |                                |
| customer_id |              | Payment_customer_id_fkey<br>Foreign key constraint |                                |
| rental_id   |              | Payment_rental_id_fkey<br>Foreign key constraint   |                                |
| staff_id    |              | Payment_staff_id_fkey<br>Foreign key constraint    |                                |

**Payment Table Snapshot**

|   | payment_id<br>[PK] integer | customer_id<br>smallint | staff_id<br>smallint | rental_id<br>integer | amount<br>numeric (5,2) | payment_date<br>timestamp without time zone |
|---|----------------------------|-------------------------|----------------------|----------------------|-------------------------|---|
| 1 | 17503                      | 341                     | 2                    | 1520                 | 7.99                    | 2007-02-15 22:25:46.996577                  |
| 2 | 17504                      | 341                     | 1                    | 1778                 | 1.99                    | 2007-02-16 17:23:14.996577                  |
| 3 | 17505                      | 341                     | 1                    | 1849                 | 7.99                    | 2007-02-16 22:41:45.996577                  |
| 4 | 17506                      | 341                     | 2                    | 2829                 | 2.99                    | 2007-02-19 19:39:56.996577                  |
| 5 | 17507                      | 341                     | 2                    | 3130                 | 7.99                    | 2007-02-20 17:31:48.996577                  |

**4.1.2. Table: Rental**

| COLUMNS   |              |  |   |
|---|--------------|--|---|
|   | Name         | Data Type                                    | Descriptions                              |
|    | rental_id    | SERIAL                                       | Primary key for payment record            |
|   | rental_date  | TIMESTAMP(6) WITHOUT TIME ZONE               | Date and time of rental                   |
|  | inventory_id | INTEGER                                      | Unique inventory ID number                |
|  | customer_id  | SMALLINT                                     | Unique customer ID number                 |
|   | return_date  | TIMESTAMP(6) WITHOUT TIME ZONE               | Date and time of return                   |
|  | staff_id     | SMALLINT                                     | Unique staff ID number                    |
|   | last_update  | TIMESTAMP(6) WITHOUT TIME ZONE               | Date and time of last rental table update |
| LINKS TO  |              |  |   |
| Table Name  |              | 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 Name  |              | Join   |   |

|                    |  |
|--------------------|--|
| payment            | rental.rental_id = payment.rental_id               |
| <b>UNIQUE KEYS</b> |  |
| <b>Columns</b>     | <b>Name/Description</b>                            |
| rental_id          | rental_pkey<br>Primary key constraint              |
| customer_id        | rental_customer_id_fkey<br>Foreign key constraint  |
| inventory_id       | inventory_rental_id_fkey<br>Foreign key constraint |
| staff_id           | Payment_staff_id_fkey<br>Foreign key constraint    |

### Rental Table Snapshot

|   | rental_id<br>[PK] integer ↗ | rental_date<br>timestamp without time zone ↗ | inventory_id<br>integer ↗ | customer_id<br>smallint ↗ | return_date<br>timestamp without time zone ↗ | staff_id<br>smallint ↗ | last_update<br>timestamp without time zone ↗ |
|---|-----------------------------|--|---------------------------|---------------------------|--|------------------------|--|
| 1 | 2                           | 2005-05-24 22:54:33                          | 1525                      | 459                       | 2005-05-28 19:40:33                          | 1                      | 2006-02-16 02:30:53                          |
| 2 | 3                           | 2005-05-24 23:03:39                          | 1711                      | 408                       | 2005-06-01 22:12:39                          | 1                      | 2006-02-16 02:30:53                          |
| 3 | 4                           | 2005-05-24 23:04:41                          | 2452                      | 333                       | 2005-06-03 01:43:41                          | 2                      | 2006-02-16 02:30:53                          |
| 4 | 5                           | 2005-05-24 23:05:21                          | 2079                      | 222                       | 2005-06-02 04:33:21                          | 1                      | 2006-02-16 02:30:53                          |
| 5 | 6                           | 2005-05-24 23:08:07                          | 2792                      | 549                       | 2005-05-27 01:32:07                          | 1                      | 2006-02-16 02:30:53                          |

## 4.2. Dimensions Tables

### 4.2.1. Table: Inventory



| COLUMNS  |              |                                |   |
|----------|--------------|--------------------------------|---|
|          | Name         | Data Type                      | Descriptions                              |
| 🔑        | inventory_id | SERIAL                         | Primary key for inventory record          |
| ↗        | film_id      | SMALLINT                       | Unique film ID number                     |
|          | store_id     | SMALLINT                       | Unique store ID number                    |
|          | last_update  | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last rental table update |
| LINKS TO |              |                                |   |
|          | Table Name   | Join                           |   |

|                    |  |
|--------------------|--|
| film               | inventory.film_id = film.film_id                   |
| <b>LINKS FROM</b>  |  |
| <b>Table Name</b>  | <b>Join</b>  |
| rental             | rental.inventory_id = inventory.inventory_id       |
| <b>UNIQUE KEYS</b> |  |
| <b>Columns</b>     | <b>Name/Description</b>                            |
| inventory_id       | inventory_rental_id_fkey<br>Foreign key constraint |
| film_id            | inventory_film_id_fkey<br>Foreign key constraint   |

#### Inventory Table Snapshot

|   | inventory_id<br>[PK] integer  | film_id<br>smallint  | store_id<br>smallint  | last_update<br>timestamp without time zone  |
|---|--|---|--|--|
| 1 | 1  | 1   | 1  | 2006-02-15 10:09:17  |
| 2 | 2  | 1   | 1  | 2006-02-15 10:09:17  |
| 3 | 3  | 1   | 1  | 2006-02-15 10:09:17  |
| 4 | 4  | 1   | 1  | 2006-02-15 10:09:17  |
| 5 | 5  | 1   | 2  | 2006-02-15 10:09:17  |

#### 4.2.2. Table: Film

| <b>COLUMNS</b>  |              |                           |                             |
|---|--------------|---------------------------|-----------------------------|
|   | <b>Name</b>  | <b>Data Type</b>          | <b>Descriptions</b>         |
|  | film_id      | SERIAL                    | Primary key for film record |
|   | title        | CHARACTER<br>VARYING(255) | Film title                  |
|   | description  | TEXT                      | Film                        |
|   | release_year | year                      | Film release year           |
|  | language_id  | SMALLINT                  | Unique language ID number   |




|               |                  |   |   |
|---------------|------------------|---|---|
|               | rental_duration  | SMALLINT  | Film rental duration in days                                  |
|               | rental_rate      | NUMERIC(4,2)                                    | Film rental cost in USD                                       |
|               | length           | SMALLINT  | Film length in minutes  |
|               | replacement_cost | NUMERIC(5,2)                                    | Film replacement cost in USD                                  |
|               | rating           | mpaa_rating                                     | Film MPAA rating  |
|               | last_update      | TIMESTAMP(6) WITHOUT TIME ZONE                  | Date and time of last film table update                       |
|               | special_features | TEXT[]  | Film special features   |
|               | fulltext         | TSVECTOR  | Lexemes based on the film content supporting full text search |
| LINKS TO      |                  |   |   |
| Table Name    |                  | Join  |   |
| language      |                  | film.language_id = language.language_id         |   |
| LINKS FROM    |                  |   |   |
| Table Name    |                  | Join  |   |
| film_actor    |                  | rental.inventory_id = inventory.inventory_id    |   |
| inventory     |                  | inventory.film_id = film.film_id                |   |
| film_category |                  | film_category.film_id = film.film_id            |   |
| UNIQUE KEYS   |                  |   |   |
| Columns       |                  | Name/Description                                |   |
| film_id       |                  | film_pkey<br>Primary key constraint             |   |
| language_id   |                  | language_film_id_fkey<br>Foreign key constraint |   |




### Film Table Snapshot

|   | film_id<br>[PK] integer | title<br>character var | description<br>text | release_year<br>integer | language_id<br>smallint | rental_duration<br>smallint | rental_rate<br>numeric (4,2) | length<br>smallint | replacement_cost<br>numeric (5,2) | rating<br>mpaa_rating | last_update<br>timestamp wi | special_features<br>text[] | fulltext<br>tsvector |
|---|-------------------------|------------------------|---------------------|-------------------------|-------------------------|-----------------------------|------------------------------|--------------------|-----------------------------------|-----------------------|-----------------------------|----------------------------|----------------------|
| 1 | 133                     | Chamber ...            | A Fateful ...       | 2006                    | 1                       | 7                           | 4.99                         | 117                | 14.99                             | NC-17                 | 2013-05-...                 | {Trailers}                 | 'chamber'...         |
| 2 | 384                     | Grosse W...            | A Epic Dr...        | 2006                    | 1                       | 5                           | 4.99                         | 49                 | 19.99                             | R                     | 2013-05-...                 | {'Behind t...              | 'australia'...       |
| 3 | 8                       | Airport P...           | A Epic Tal...       | 2006                    | 1                       | 6                           | 4.99                         | 54                 | 15.99                             | R                     | 2013-05-...                 | {Trailers}                 | 'airport':1 ...      |
| 4 | 98                      | Bright En...           | A Fateful ...       | 2006                    | 1                       | 4                           | 4.99                         | 73                 | 12.99                             | PG-13                 | 2013-05-...                 | {Trailers}                 | 'boat':20 '...       |
| 5 | 1                       | Academy ...            | A Epic Dr...        | 2006                    | 1                       | 6                           | 0.99                         | 86                 | 20.99                             | PG                    | 2013-05-...                 | {'Deleted ...              | 'academi'...         |



### 4.2.3. Table: Language



| COLUMNS   |             |   |   |
|---|-------------|---|---|
|   | Name        | Data Type                               | Descriptions                                |
|  | language_id | SERIAL                                  | Primary key for language record             |
|   | name        | CHARACTER(20)                           | Language name                               |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE          | Date and time of last language table update |
| LINKS FROM  |             |   |   |
| Table Name  |             | Join                                    |   |
| film  |             | film.language_id = language.language_id |   |
| UNIQUE KEYS   |             |   |   |
| Columns   |             | Name/Description                        |   |
| language_id   |             | Language_pkey<br>Primary key constraint |   |

#### Language Table Snapshot




|   | language_id<br>[PK] integer  | name<br>character  | last_update<br>timestamp without time zone  |
|---|---|---|--|
| 1 | 1   | English   | 2006-02-15 10:02:19  |
| 2 | 2   | Italian   | 2006-02-15 10:02:19  |
| 3 | 3   | Japanese ...  | 2006-02-15 10:02:19  |
| 4 | 4   | Mandarin ...  | 2006-02-15 10:02:19  |
| 5 | 5   | French  | 2006-02-15 10:02:19  |

### 4.2.4. Table: Film Category


| COLUMNS  |         |           |  |
|--|---------|-----------|--|
|  | Name    | Data Type | Descriptions                           |
| <br> | film_id | SMALLINT  | Composite key for film_category record |

|  |             |  |   |
|--|-------------|--|---|
| <br> | category_id | SMALLINT   | Composite key for film_category record    |
|  | last_update | TIMESTAMP(6) WITHOUT TIME ZONE                           | Date and time of last rental table update |
| LINKS TO   |             |  |   |
| Table Name   |             | Join   |   |
| film   |             | film_category.film_id = film.film_id                     |   |
| category   |             | film_category.category_id = category.category_id         |   |
| UNIQUE KEYS  |             |  |   |
| Columns  |             | Name/Description   |   |
| Film_id & category_id  |             | Film_category_pkey<br>Primary key constraint             |   |
| film_id  |             | Film_category_film_id_fkey<br>Foreign key constraint     |   |
| category_id  |             | Film_category_category_id_fkey<br>Foreign key constraint |   |

#### Film Category Table Snapshot

|   | film_id<br>[PK] smallint  | category_id<br>[PK] smallint  | last_update<br>timestamp without time zone  |
|---|--|--|--|
| 1 | 1  | 6  | 2006-02-15 10:07:09  |
| 2 | 2  | 11   | 2006-02-15 10:07:09  |
| 3 | 3  | 6  | 2006-02-15 10:07:09  |
| 4 | 4  | 11   | 2006-02-15 10:07:09  |
| 5 | 6  | 9  | 2006-02-15 10:07:09  |

#### 4.2.5. Table: Category



| <b>COLUMNS</b>  |             |                       |                                 |
|---|-------------|-----------------------|---------------------------------|
|   | <b>Name</b> | <b>Data Type</b>      | <b>Descriptions</b>             |
|  | category_id | SERIAL                | Primary key for category record |
|   | name        | CHARACTER VARYING(25) | Name of category                |

|             |             |   |   |
|-------------|-------------|---|---|
|             | last_update | TIMESTAMP(6) WITHOUT TIME ZONE          | Date and time of last category table update |
| LINKS FROM  |             |   |   |
| Table Name  |             | Join                                    |   |
| film_actor  |             | film_actor.actor_id = actor.actor_id    |   |
| UNIQUE KEYS |             |   |   |
| Columns     |             | Name/Description                        |   |
| category_id |             | category_pkey<br>Primary key constraint |   |

### Category Table Snapshot




|   | category_id<br>[PK] integer | name<br>character varying (25) | last_update<br>timestamp without time zone |
|---|-----------------------------|--------------------------------|--|
| 1 | 1                           | Action                         | 2006-02-15 09:46:27                        |
| 2 | 2                           | Animation                      | 2006-02-15 09:46:27                        |
| 3 | 3                           | Children                       | 2006-02-15 09:46:27                        |
| 4 | 4                           | Classics                       | 2006-02-15 09:46:27                        |
| 5 | 5                           | Comedy                         | 2006-02-15 09:46:27                        |

### 4.2.6. Table: Film Actor


| <b>COLUMNS</b>   |             |                                   |   |
|--|-------------|-----------------------------------|---|
|  | Name        | Data Type                         | Descriptions                                  |
| <br>↗ | actor_id    | SMALLINT                          | Composite key for film_actor record           |
| <br>↗ | film_id     | SMALLINT                          | Composite key for film_actor record           |
|  | last_update | TIMESTAMP(6) WITHOUT TIME ZONE    | Date and time of last film_actor table update |
| <b>LINKS TO</b>  |             |                                   |   |
| <b>Table Name</b>  |             | <b>Join</b>                       |   |
| film   |             | film_actor.film_id = film.film_id |   |

|                               |  |
|-------------------------------|--|
| actor                         | film_actor.actor_id = actor.actor_id               |
| <b>UNIQUE KEYS</b>            |  |
| <b>Columns</b>                | <b>Name/Description</b>                            |
| <b>Film_id &amp; actor_id</b> | Film_actor_pkey<br>Primary key constraint          |
| <b>actor_id</b>               | Film_actor_actor_id_fkey<br>Foreign key constraint |
| <b>film_id</b>                | film_actor_film_id_fkey<br>Foreign key constraint  |

#### Film Actor Table Snapshot

|   | actor_id<br>[PK] smallint  | film_id<br>[PK] smallint  | last_update<br>timestamp without time zone  |
|---|---|--|--|
| 1 | 1   | 1  | 2006-02-15 10:05:03  |
| 2 | 1   | 23   | 2006-02-15 10:05:03  |
| 3 | 1   | 25   | 2006-02-15 10:05:03  |
| 4 | 1   | 106  | 2006-02-15 10:05:03  |
| 5 | 1   | 140  | 2006-02-15 10:05:03  |

#### 4.2.7. Table: Actor



| <b>COLUMNS</b>  |                   |                                      |  |
|---|-------------------|--------------------------------------|--|
|   | <b>Name</b>       | <b>Data Type</b>                     | <b>Descriptions</b>                      |
|  | actor_id          | SERIAL                               | Primary key for actor record             |
|   | first_name        | CHARACTER VARYING(45)                | Actor first name                         |
|   | last_name         | CHARACTER VARYING(45)                | Actor last name                          |
|   | last_update       | TIMESTAMP(6) WITHOUT TIME ZONE       | Date and time of last actor table update |
| <b>LINKS FROM</b>   |                   |                                      |  |
|   | <b>Table Name</b> | <b>Join</b>                          |  |
|   | film_actor        | film_actor.actor_id = actor.actor_id |  |

| UNIQUE KEYS |                                      |
|-------------|--------------------------------------|
| Columns     | Name/Description                     |
| actor_id    | Actor_pkey<br>Primary key constraint |

### Actor Table Snapshot

|   | actor_id<br>[PK] integer | first_name<br>character varying (45) | last_name<br>character varying (45) | last_update<br>timestamp without time zone |
|---|--------------------------|--------------------------------------|-------------------------------------|--|
| 1 | 1                        | Penelope                             | Guiness                             | 2013-05-26 14:47:57.62                     |
| 2 | 2                        | Nick                                 | Wahlberg                            | 2013-05-26 14:47:57.62                     |
| 3 | 3                        | Ed                                   | Chase                               | 2013-05-26 14:47:57.62                     |
| 4 | 4                        | Jennifer                             | Davis                               | 2013-05-26 14:47:57.62                     |
| 5 | 5                        | Johnny                               | Lollobrigida                        | 2013-05-26 14:47:57.62                     |

### 4.2.8. Table: Customer



| COLUMNS   |             |                                |   |
|---|-------------|--------------------------------|---|
|   | Name        | Data Type                      | Descriptions                                |
|  | customer_id | SERIAL                         | Primary key for customer record             |
|   | store_id    | SMALLINT                       | Unique store ID number                      |
|   | first_name  | CHARACTER VARYING(45)          | Customer first name                         |
|   | last_name   | CHARACTER VARYING(45)          | Customer last name                          |
|   | email       | CHARACTER VARYING(50)          | Customer email                              |
|  | address_id  | SMALLINT                       | Unique address ID number                    |
|   | activebool  | BOOLEAN                        | True or false active customer               |
|   | create_date | DATE                           | Date of customer account creation           |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE | Date and time of last customer table update |
|   | active      | INTEGER                        | 1 or 0 indicating active customer           |
| LINKS TO  |             |                                |   |

| Table Name         | Join   |
|--------------------|--|
| address            | customer.address_id = address.address_id           |
| <b>LINKS FROM</b>  |  |
| Table Name         | Join   |
| rental             | rental.customer_id = customer.customer_id          |
| payment            | payment.customer_id = customer.customer_id         |
| <b>UNIQUE KEYS</b> |  |
| Columns            | Name/Description                                   |
| customer_id        | customer_pkey<br>Primary key constraint            |
| address_id         | customer_address_id_fkey<br>Foreign key constraint |

### Customer Table Snapshot

|   | customer_id<br>[PK] integer | store_id<br>smallint | first_name<br>character varying (45) | last_name<br>character varying (45) | email<br>character varying (50)     | address_id<br>smallint | activebool<br>boolean | create_date<br>date | last_update<br>timestamp without time zone | active<br>integer |
|---|-----------------------------|----------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------|-----------------------|---------------------|--|-------------------|
| 1 | 524                         | 1                    | Jared                                | Ely                                 | jared.ely@sakilacustomer.org        | 530                    | true                  | 2006-02-14          | 2013-05-26 14:49:45.738                    | 1                 |
| 2 | 1                           | 1                    | Mary                                 | Smith                               | mary.smith@sakilacustomer.org       | 5                      | true                  | 2006-02-14          | 2013-05-26 14:49:45.738                    | 1                 |
| 3 | 2                           | 1                    | Patricia                             | Johnson                             | patricia.johnson@sakilacustomer.org | 6                      | true                  | 2006-02-14          | 2013-05-26 14:49:45.738                    | 1                 |
| 4 | 3                           | 1                    | Linda                                | Williams                            | linda.williams@sakilacustomer.org   | 7                      | true                  | 2006-02-14          | 2013-05-26 14:49:45.738                    | 1                 |
| 5 | 4                           | 2                    | Barbara                              | Jones                               | barbara.jones@sakilacustomer.org    | 8                      | true                  | 2006-02-14          | 2013-05-26 14:49:45.738                    | 1                 |

### 4.2.9. Table: Address


| <b>COLUMNS</b>  |             |                       |                                |
|---|-------------|-----------------------|--------------------------------|
|   | Name        | Data Type             | Descriptions                   |
|  | address_id  | SERIAL                | Primary key for address record |
|   | address     | CHARACTER VARYING(50) | Street address                 |
|   | address2    | CHARACTER VARYING(50) | Street address 2nd line        |
|   | district    | CHARACTER VARYING(20) | District of address            |
|  | city_id     | SMALLINT              | Unique city ID number          |
|   | postal_code | CHARACTER VARYING(10) | Address postal code            |

|             |             |   |   |
|-------------|-------------|---|---|
|             | phone       | CHARACTER VARYING(20)                     | Phone number                                |
|             | last_update | TIMESTAMP(6) WITHOUT TIME ZONE            | Date and time of last address table update  |
|             | last_update | TIMESTAMP(6) WITHOUT TIME ZONE            | Date and time of last customer table update |
| LINKS TO    |             |   |   |
| Table Name  |             | Join                                      |   |
| city        |             | address.city_id = city.city_id            |   |
| LINKS FROM  |             |   |   |
| Table Name  |             | 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     |             | Name/Description                          |   |
| address_id  |             | address_pkey<br>Primary key constraint    |   |
| city_id     |             | fk_address_city<br>Foreign key constraint |   |

### Address Table Snapshot

|   | address_id<br>[PK] integer ↗ | address<br>character varying (50) ↗ | address2<br>character varying (50) ↗ | district<br>character varying (20) ↗ | city_id<br>smallint ↗ | postal_code<br>character varying (10) ↗ | phone<br>character varying (20) ↗ | last_update<br>timestamp without time zone ↗ |
|---|------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|-----------------------|---|-----------------------------------|--|
| 1 | 1                            | 47 MySakila Drive                   | [null]                               | Alberta                              | 300                   |   |                                   | 2006-02-15 09:45:30                          |
| 2 | 2                            | 28 MySQL Boulevard                  | [null]                               | QLD                                  | 576                   |   |                                   | 2006-02-15 09:45:30                          |
| 3 | 3                            | 23 Workhaven Lane                   | [null]                               | Alberta                              | 300                   |   | 14033335568                       | 2006-02-15 09:45:30                          |
| 4 | 4                            | 1411 Lillydale Drive                | [null]                               | QLD                                  | 576                   |   | 6172235589                        | 2006-02-15 09:45:30                          |
| 5 | 5                            | 1913 Hanoi Way                      |                                      | Nagasaki                             | 463                   | 35200                                   | 28303384290                       | 2006-02-15 09:45:30                          |





### 4.2.10. Table: City

| <b>COLUMNS</b>  |             |                  |                             |
|---|-------------|------------------|-----------------------------|
|   | <b>Name</b> | <b>Data Type</b> | <b>Descriptions</b>         |
|  | city_id     | SERIAL           | Primary key for city record |




|             |             |                                      |   |
|-------------|-------------|--------------------------------------|---|
|             | city        | CHARACTER VARYING(50)                | City name                               |
| ↗           | country_id  | SMALLINT                             | Unique country ID number                |
|             | last_update | TIMESTAMP(6) WITHOUT TIME ZONE       | Date and time of last city table update |
| LINKS TO    |             |                                      |   |
| Table Name  |             | Join                                 |   |
| country     |             | city.country_id = country.country_id |   |
| LINKS FROM  |             |                                      |   |
| Table Name  |             | Join                                 |   |
| address     |             | address.city_id = city.city_id       |   |
| UNIQUE KEYS |             |                                      |   |
| Columns     |             | Name/Description                     |   |
| city_id     |             | city_pkey<br>Foreign key constraint  |   |
| country_id  |             | fk_city<br>Foreign key constraint    |   |

#### Address Table Snapshot




|   | city_id<br>[PK] integer  | city<br>character varying (50)  | country_id<br>smallint  | last_update<br>timestamp without time zone  |
|---|---|--|--|--|
| 1 | 1   | A Corua (La Corua)   | 87   | 2006-02-15 09:45:25  |
| 2 | 2   | Abha   | 82   | 2006-02-15 09:45:25  |
| 3 | 3   | Abu Dhabi  | 101  | 2006-02-15 09:45:25  |
| 4 | 4   | Acua   | 60   | 2006-02-15 09:45:25  |
| 5 | 5   | Adana  | 97   | 2006-02-15 09:45:25  |

#### 4.2.11. Table: Country



| <b>COLUMNS</b> |             |                  |                     |
|----------------|-------------|------------------|---------------------|
|                | <b>Name</b> | <b>Data Type</b> | <b>Descriptions</b> |

|   |             |  |  |
|---|-------------|--|--|
|  | country_id  | SERIAL                                 | Primary key for country record             |
|   | country     | CHARACTER VARYING(50)                  | Country name                               |
|   | last_update | TIMESTAMP(6) WITHOUT TIME ZONE         | Date and time of last country table update |
| LINKS FROM  |             |  |  |
| Table Name  |             | Join                                   |  |
| city  |             | city.country_id = country.country_id   |  |
| UNIQUE KEYS   |             |  |  |
| Columns   |             | Name/Description                       |  |
| country_id  |             | country_pkey<br>Primary key constraint |  |

#### Country Table Snapshot

|   | country_id<br>[PK] integer  | country<br>character varying (50)  | last_update<br>timestamp without time zone  |
|---|---|--|---|
| 1 | 1   | Afghanistan  | 2006-02-15 09:44:00   |
| 2 | 2   | Algeria  | 2006-02-15 09:44:00   |
| 3 | 3   | American Samoa   | 2006-02-15 09:44:00   |
| 4 | 4   | Angola   | 2006-02-15 09:44:00   |
| 5 | 5   | Anguilla   | 2006-02-15 09:44:00   |

#### 4.2.12. Table: Staff

| <b>COLUMNS</b>  |             |                       |                              |
|---|-------------|-----------------------|------------------------------|
|   | <b>Name</b> | <b>Data Type</b>      | <b>Descriptions</b>          |
|  | staff_id    | SERIAL                | Primary key for staff record |
|   | first_name  | CHARACTER VARYING(45) | Staff first name             |
|   | last_name   | CHARACTER VARYING(45) | Staff last name              |
|  | address_id  | SMALLINT              | Unique address ID number     |

|             |             |   |   |
|-------------|-------------|---|---|
|             | store_id    | SMALLINT  | Unique store ID number                    |
|             | active      | BOOLEAN   | True or false active staff                |
|             | username    | CHARACTER VARYING(16)                           | Staff username                            |
|             | password    | CHARACTER VARYING(40)                           | Staff password                            |
|             | last_update | TIMESTAMP(6) WITHOUT TIME ZONE                  | Date and time of last staff record update |
|             | picture     | BYTEA   | Binary string of staff image              |
| LINKS TO    |             |   |   |
| Table Name  |             | Join  |   |
| address     |             | staff.address_id = address.address_id           |   |
| LINKS FROM  |             |   |   |
| Table Name  |             | Join  |   |
| payment     |             | payment.staff_id = staff.staff_id               |   |
| rental      |             | rental.staff_id = staff.staff_id                |   |
| store       |             | store.manager_staff_id = staff.staff_id         |   |
| UNIQUE KEYS |             |   |   |
| Columns     |             | Name/Description                                |   |
| staff_id    |             | staff_pkey<br>Primary key constraint            |   |
| address_id  |             | staff_address_id_fkey<br>Foreign key constraint |   |

### Staff Table Snapshot




|   | staff_id<br>[PK] integer | first_name<br>character var | last_name<br>character var | address_id<br>smallint | email<br>character var | store_id<br>smallint | active<br>boolean | username<br>character var | password<br>character varying (40) | last_update<br>timestamp without time zone | picture<br>bytea |
|---|--------------------------|-----------------------------|----------------------------|------------------------|------------------------|----------------------|-------------------|---------------------------|------------------------------------|--|------------------|
| 1 | 1                        | Mike                        | Hillyer                    | 3                      | Mike.Hilly...          | 1                    | true              | Mike                      | 8cb2237d0679ca88db6464eac...       | 2006-05-16 16:13...                        | [binary dat...   |
| 2 | 2                        | Jon                         | Stephens                   | 4                      | Jon.Steph...           | 2                    | true              | Jon                       | 8cb2237d0679ca88db6464eac...       | 2006-05-16 16:13...                        | [null]           |

### 4.2.13. Table: Store

#### COLUMNS

|                  | Name             | Data Type   | Descriptions                                  |
|------------------|------------------|---|---|
| 🔑                | store_id         | SERIAL  | Primary key for store record                  |
|                  | manager_staff_id | SMALLINT  | Unique manager ID number                      |
| ↗                | address_id       | SMALLINT  | Unique address ID number                      |
|                  | last_update      | TIMESTAMP(6) WITHOUT TIME ZONE                        | Date and time of last film_actor table update |
| LINKS TO         |                  |   |   |
| Table Name       |                  | Join  |   |
| address          |                  | store.address_id = address.address_id                 |   |
| staff            |                  | store.manager_staff_id = staff.staff_id               |   |
| UNIQUE KEYS      |                  |   |   |
| Columns          |                  | Name/Description                                      |   |
| store_id         |                  | store_pkey<br>Primary key constraint                  |   |
| address_id       |                  | store_address_id_fkey<br>Foreign key constraint       |   |
| manager_staff_id |                  | store_manager_staff_id_fkey<br>Foreign key constraint |   |

**Store Table Snapshot**

|   | store_id<br>[PK] integer  | manager_staff_id<br>smallint  | address_id<br>smallint  | last_update<br>timestamp without time zone  |
|---|--|--|--|--|
| 1 | 1  | 1  | 1  | 2006-02-15 09:57:12  |
| 2 | 2  | 2  | 2  | 2006-02-15 09:57:12  |