Rockbuster Stealth

Data Dictionary

1-11-2022

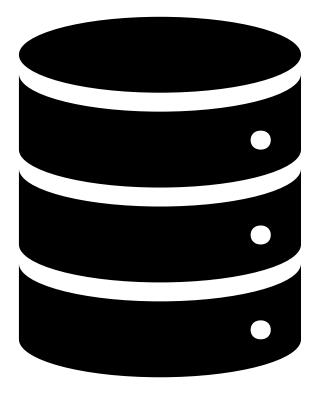
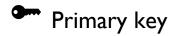


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Legend



© Foreign key

Primary key relation

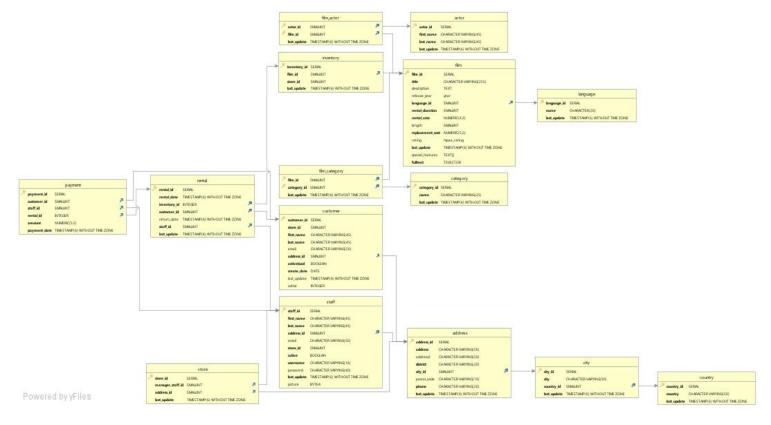
Foreign key relation

I. Purpose

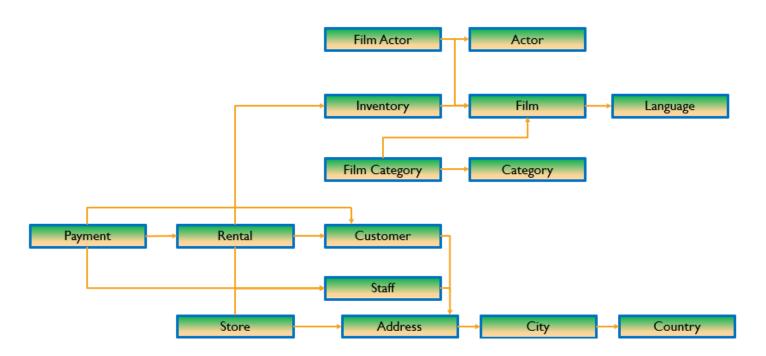
This Data Dictionary serves to describe the contents, format, and structure of the Rockbuster database. It shows the relationship between its elements which is used to control access and manipulate company information.

Currently there is only one database, but with expansion of the Data Department to include new databases, the Data Dictionary will expanded and updated accordingly.

2. Rockbuster ERD



Simplified Version:



2.1 Table: Payment

Point-of-sale information (fact)

Columns

| | Name | Data Type | Description |
|---|--------------|-----------|--|
| • | payment_id | serial | primary key for each payment |
| | customer_id | smallint | foreign key identifying the customer within a store |
| | staff_id | smallint | foreign key for employee involved in the transaction |
| | rental_id | serial | foreign key for each movie rental transaction |
| | amount | numeric | amount of the payment |
| | payment_date | date | time the payment was made |

Links to

| | Table | Join |
|----------|-------|------|
| → | None | |

Links from

| | Table | Join | |
|----------|----------|--|--|
| ~ | customer | payment.customer_id = customer.customer_id | |
| ~ | staff | payment.staff_id = staff.staff_id | |
| ~ | rental | payment.rental_id = rental.rental_id | |

| | Column | Name/Description | |
|---|-------------|---------------------------------|--|
| • | payment_id | payment.payment_id Primary key | |
| © | customer_id | payment.customer_id Foreign key | |
| © | staff_id | payment.staff_id Foreign key | |
| © | rental_id | payment.rental_id Foreign key | |

2.2 Table: Rental

Film rental information (fact)

Columns

| | Name | Data Type | Description |
|---|--------------|-----------|--|
| • | rental_id | serial | primary key for each movie rental transaction |
| | customer_id | smallint | foreign key identifying the customer within a store |
| | staff_id | smallint | foreign key for employee involved in the transaction |
| | return_date | date | date and time the movie was returned |
| | inventory_id | integer | foreign key identifying the film within a store |
| | last_update | date | time the transaction was last updated |

Links to

| | Table | Join |
|----------|---------|--------------------------------------|
| → | payment | rental.rental_id = payment.rental_id |

Links from

| | Table | Join | |
|----------|-----------|--|--|
| ~ | customer | rental.customer_id = customer.customer_id | |
| ~ | inventory | rental.inventory_id = inventory.inventory_id | |
| ~ | staff | rental.staff_id = staff.staff_id | |

| | Column | Name/Description | |
|---|--------------|---------------------|--|
| | rental_id | rental.rental_id | |
| J | | Primary key | |
| | customer_id | rental.customer_id | |
| ⊙ ⇒ | | Foreign key | |
| | inventory_id | rental.inventory_id | |
| © ==== | | Foreign key | |
| | staff_id | rental.staff_id | |
| € ==================================== | | Foreign key | |

2.3 Table: Customer

Customer information (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|---|
| • | customer_id | serial | primary key identifying the customer within a store |
| | store_id | smallint | foreign key for the store rental was made at |
| | first_name | character varying 45 | first name of customer |
| | last_name | character varying 45 | last name of customer |
| | email | character varying 45 | the email address of the customer |
| | address_id | smallint | foreign key for customer's address |
| | activebool | Boolean | whether the customer's account is active |
| | create_date | Boolean | when the customer's account was created |
| | last_update | date | time the transaction was last updated |
| | active | integer | Unknown (ones and zeroes, relates to activebool) |

Links to

| | Table | Join |
|----------|---------|--|
| → | rental | rental.customer_id = customer.customer_id |
| → | payment | payment.customer_id = customer.customer_id |

Links from

| | Table | Join |
|----------|---------|--|
| ← | address | address.address_id = customer.address_id |

| | Column | Name/Description | |
|---------|-------------|----------------------------------|--|
| | customer_id | customer.customer_id Primary key | |
| © | store_id | .customer.store_id Foreign key | |
| © | address_id | customer.address_id Foreign key | |

2.4 Table: Staff

Staff information (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|--|
| • | staff_id | serial | primary key for employee involved in the transaction |
| | first_name | character varying 45 | first name of employee |
| | last_name | character varying 45 | last name of employee |
| | email | character varying 45 | the email address of the employee |
| | address_id | smallint | foreign key for employee's address |
| | active | Boolean | whether the employee is actively working or not |
| | store_id | smalling | foreign key for the store employee works at |
| | username | character varying 16 | employee's username |
| | password | character varying 40 | employee's password |
| | picture | BYTEA | a picture of the employee |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|---------|-----------------------------------|
| → | payment | payment.staff_id = staff.staff_id |

Links from

| | Table | Join |
|----------|---------|---------------------------------------|
| + | address | address.address_id = staff.address_id |
| \ | store | store.store_id = staff.store_id |

| | Column | Name/Description | |
|------------|------------|------------------|--|
| | staff_id | staff.staff_id | |
| 3 | | Primary key | |
| | store_id | staff.store_id | |
| © ==== | | Foreign key | |
| | address_id | staff.address_id | |
| ⊙ ⇒ | | Foreign key | |

2.5 Table: Store

Store information (dimension)

Columns

| | Name | Data Type | Description |
|---|------------------|-----------|--|
| • | store_id | serial | primary key for identifying each store |
| | manager_staff_id | smallint | foreign key for employee who is the manager of the store |
| | address_id | smallint | foreign key for employee's address |
| | last_update | date | time last updated |

Links to

| Table | Join |
|-------|------|
| none | |

Links from

| | Table | Join |
|----------|---------|---|
| ~ | address | address.address_id = store.address_id |
| ~ | staff | staff.staff_id = store.manager_staff_id |

| | Column | Name/Description | |
|---|------------------|------------------------|--|
| 3 | store_id | store.store_id | |
| | | Primary key | |
| ©,=== | manager_staff_id | store.manager_staff_id | |
| | | Foreign key | |
| | address_id | staff.address_id | |
| € ==================================== | | Foreign key | |

2.6 Table: Address

Physical address information for stores, employees, and customers (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|-------------------------------------|
| • | address_id | serial | primary key for identifying address |
| | address | character varying 50 | address |
| | address2 | character varying 50 | address extra space |
| | district | character varying 20 | district |
| | city_id | smallint | foreign key identifying city |
| | postal_code | character varying 10 | postal code |
| | phone | character varying 20 | phone number of address |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|-------|--------------------------------------|
| → | city | city.address_id = address.address_id |

Links from

| | Table | Join |
|----------|----------|--|
| ~ | customer | customer.address_id = address.address_id |
| ~ | staff | staff.address_id = address.address_id |
| ~ | store | store.address_id = address.address_id |

| | Column | Name/Description | |
|---|------------|--------------------------------|--|
| • | address_id | address.address_id Primary key | |
| © | city_id | address.city_id Foreign key | |

2.7 Table: City

City information for stores, employees, and customers (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|----------------------------------|
| • | city_id | serial | primary key for identifying city |
| | city | character varying 50 | name of city |
| | country_id | smallint | foreign key identifying country |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|---------|--------------------------------|
| → | country | country.city_id = city.city_id |

Links from

| | Table | Join |
|----------|---------|--------------------------------|
| ~ | address | address.city_id = city.city_id |

| | Column | Name/Description | |
|---|------------|-----------------------------|--|
| • | city_id | city.city_id Primary key | |
| © | country_id | city.country_id Foreign key | |

2.8 Table: Country

Country information for stores, employees, and customers (dimension)

Columns

| | Name | Data Type | Description |
|----------|-------------|----------------------|-------------------------------------|
| 3 | country_id | serial | primary key for identifying country |
| | country | character varying 50 | name of country |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|-------|------|
| → | none | |

Links from

| | Table | Join |
|----------|-------|--------------------------------------|
| ~ | city | city.country_id = country.country_id |

| | Column | Name/Description |
|---------|------------|--------------------------------|
| | country_id | country.country_id Primary key |

2.9 Table: Inventory

Inventory information for films and rentals (dimension)

Columns

| | Name | Data Type | Description |
|----------|--------------|-----------|--|
| 3 | inventory_id | serial | primary key for identifying the inventory record |
| | film_id | smallint | foreign key for identifying film |
| | store_id | smallint | foreign key for identifying the store where the copy resides |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|--------|--|
| → | rental | rental.inventory_id = inventory.inventory_id |

Links from

| | Table | Join |
|----------|-------|----------------------------------|
| ~ | film | film.film_id = inventory.film_id |

| | Column | Name/Description | |
|------------|--------------|------------------------|--|
| | inventory_id | inventory.inventory_id | |
| 5 | | Primary key | |
| | film_id | inventory.film_id | |
| € | | Foreign key | |
| | store_id | inventory.store_id | |
| € ™ | | Foreign key | |

2.10 Table: Film

Film information (dimension)

Columns

| | Name | Data Type | Description |
|---|------------------|--------------------------|--------------------------------------|
| • | film_id | serial | primary key for identifying film |
| | title | character varying 255 | title of film |
| | description | text | a short description of film |
| | language_id | smallint | foreign key for identifying language |
| | release_year | year | year film was released |
| | rental_duration | smallint | how long the film can be rented for |
| | rental_rate | numeric | cost to rent the film |
| | length | smallint | the length of the film in minutes |
| | replacement_cost | numeric | how much the film costs to replace |
| | rating | mpaa_rating | the rating of the film |
| | last_update | date | time last updated |
| | special_features | text | summary of special features |
| | fulltext | TSVECTOR | Unknown, seems to be keywords |

Links to

| | Table | Join | |
|----------|---------------|--------------------------------------|--|
| → | inventory | inventory.film_id = film.film_id | |
| → | film_category | film_category.film_id = film.film_id | |
| → | film_actor | film_actor.film_id = film.film_id | |

Links from

| | Table | Join |
|----------|----------|---------------------------------|
| * | language | language.film_id = film.film_id |

| | Column | Name/Description | |
|---|-------------|------------------------------|--|
| • | film_id | film.film_id Primary key | |
| © | language_id | film.language_id Foreign key | |

2.11 Table: Language

Language information (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|--------------------------------------|
| • | language_id | serial | primary key for identifying language |
| | name | character varying 25 | name of language |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|-------|---|
| → | film | film.language_id = language.language_id |

Links from

| | Table | Join |
|----------|-------|------|
| ~ | None | |

| | Column | Name/Description | |
|---|-------------|----------------------------------|--|
| • | language_id | language.language_id Primary key | |

2.12 Table: Film Category

Connects film and category tables (dimension)

Columns

| Name | Data Type | Description |
|-------------|-----------|--------------------------------------|
| film_id | smalling | foreign key for identifying film |
| category_id | smallint | foreign key for identifying category |
| last_update | date | time last updated |

Links to

| | Table | Join |
|----------|-------|------|
| → | none | |

Links from

| | Table | Join |
|----------|----------|--|
| ~ | film | film.film_id = film_category.film_id |
| ~ | category | category.category_id = film_category.category_id |

| | Column | Name/Description | |
|---|-------------|---------------------------------------|--|
| © | film_id | film_category.film_id Foreign key | |
| © | category_id | film_category.category_id Foreign key | |

2.13 Table: Category

Category information for films (dimension)

Columns

| | Name | Data Type | Description |
|---|-------------|-------------------------|--------------------------------------|
| • | category_id | serial | Primary key for identifying category |
| | name | character varying 25 | name of category |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|---------------|--|
| → | film_category | film_category.category_id = category.category_id |

Links from

| | Table | Join |
|---------|-------|------|
| | None | |

| | Column | Name/Description |
|---|-------------|----------------------------------|
| • | category_id | category.category_id Primary key |

2.14 Table: Film actor

Connects actor name to film (dimension)

Columns

| Name | Data Type | Description |
|-------------|-----------|-----------------------------------|
| actor_id | smallint | Foreign key for identifying actor |
| film_id | smallint | Foreign key for identifying film |
| last_update | date | time last updated |

Links to

| | Table | Join |
|----------|-------|------|
| → | none | |

Links from

| | Table | Join |
|----------|-------|--------------------------------------|
| ~ | actor | actor.actor_id = film_actor.actor_id |
| ~ | film | film.film_id = film_actor.film_id |

| | Column | Name/Description | |
|-----|----------|---------------------------------|--|
| © | actor_id | film_actor.actor_id Foreign key | |
| ©== | film_id | film_actor.film_id | |

2.15 Table: Actor

Actor information (dimension)

Columns

| | Name | Data Type | Description |
|---------|-------------|-------------------------|-----------------------------------|
| | actor_id | serial | Primary key for identifying actor |
| | first_name | character varying 45 | actor's first name |
| | last_name | character varying 45 | actor's last name |
| | last_update | date | time last updated |

Links to

| | Table | Join |
|----------|------------|--------------------------------------|
| → | film_actor | film_actor.actor_id = actor.actor_id |

Links from

| | Table | Join |
|----------|-------|------|
| ~ | None | |

| | Column | Name/Description |
|---------|----------|----------------------------|
| | actor_id | actor.actor_id Primary key |