

Answer to Cockroach Default Value Handling

Issue: <https://github.com/prisma/prisma/issues/11167>

This problem is visible in my testing. First of all, while introspecting the database, we get this weird default value of `@default(dbgenerated("'active':::STRING::VARCHAR))`. Functionally, it's a completely unnecessary cast.

First, we should test how it works locally. Creating the following DDL:

```
CREATE TABLE foo (  
  id INT PRIMARY KEY,  
  one VARCHAR(255) DEFAULT 'active',  
  two STRING DEFAULT 'active'  
)
```

This is correctly introspected to:

```
model foo {  
  id Int    @id  
  one String @default("active") @db.VarChar(255)  
  two String @default("active")  
}
```

The second thing to find out is what actually is written to the introspection CI DDL. We get the connection string from the introspection output. Using it to connect to the database, we'll see the schema with the following SQL:

```
SELECT * FROM information_schema.columns  
WHERE table_name = 'access_tokens'  
AND column_name = 'workflow_state';
```

Which returns:

```
-[ RECORD 1 ]-----+-----  
table_catalog      | canvas-lms  
table_schema       | public  
table_name         | access_tokens  
column_name        | workflow_state  
ordinal_position   | 14  
column_default     | 'active':::STRING::VARCHAR  
is_nullable        | NO  
data_type          | character varying
```

So the default is actually `'active':::STRING::VARCHAR` and the introspection does the right thing by rendering it as `dbgenerated` with all additional casts. If the user doesn't want this, they can change the it to `@default("active")` and create a migration to change this (when migrations work, naturally).

The last interesting thing to check out is how this column was created originally. We see the original DDL in our database schema repository. Here the interesting

part is:

```
workflow_state character varying DEFAULT 'active'::character varying NOT NULL
```

So, for whatever reason CockroachDB does a different cast when we set the default value.

Summary:

- If we migrate a default string value without a cast, it will introspect as a default string value without a cast.
- Our introspection Cockroach databases have some defaults with a cast
- The cast is different from what was given when we created the table in this case.

Not our bug this time.