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# Employees Sample Database

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## 1 Preface and Legal Notices

This document describes the `employees` sample database—its history, installation, structure and usage.

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## 2 Introduction

This document describes the Employees sample database.

The Employees sample database was developed by Patrick Crews and Giuseppe Maxia and provides a combination of a large base of data (approximately 160MB) spread over six separate tables and consisting of 4 million records in total. The structure is compatible with a wide range of storage engine types. Through an included data file, support for partitioned tables is also provided.

In addition to the base data, the Employees database also includes a suite of tests that can be executed across the test data to ensure the integrity of the data that you have loaded. This should help ensure the

quality of the data during initial load, and can be used after usage to ensure that no changes have been made to the database during testing.

## 3 Installation

The Employees database is available from [Employees DB on Launchpad](#). You can download a prepackaged archive of the data, or access the information through Bazaar.

To use the archive package, download the archive and unpack it:

```
shell> tar -xjf $HOME/Downloads/employees_db-full-1.0.6.tar.bz2
shell> cd employees_db/
```

The Employees database is compatible with several different storage engines, with the InnoDB engine enabled by default. Edit the `employee.sql` file and adjust the comments to choose a different storage engine:

```
set storage_engine = InnoDB;
-- set storage_engine = MyISAM;
-- set storage_engine = Falcon;
-- set storage_engine = PBXT;
-- set storage_engine = Maria;
```

To import the data into your MySQL instance, load the data through the `mysql` command-line tool:

```
shell> mysql -t < employees.sql
+-----+
| INFO |
+-----+
| CREATING DATABASE STRUCTURE |
+-----+
+-----+
| INFO |
+-----+
| storage engine: InnoDB |
+-----+
+-----+
| INFO |
+-----+
| LOADING departments |
+-----+
+-----+
| INFO |
+-----+
| LOADING employees |
+-----+
+-----+
| INFO |
+-----+
| LOADING dept_emp |
+-----+
+-----+
| INFO |
+-----+
| LOADING dept_manager |
+-----+
+-----+
| INFO |
+-----+
| LOADING titles |
+-----+
```

```
| INFO |
+-----+
| LOADING salaries |
+-----+
```

To test that the data you have loaded matches the expected results, run the test suite. For more information, see [Section 4, “Validating the Employee Data”](#).

## 4 Validating the Employee Data

You can validate the Employee data using two methods, `md5` and `sha`. Two SQL scripts are provided for this purpose, `test_employees_sha.sql` and `test_employees_md5.sql`. To run the tests, use `mysql`:

```
shell>time mysql -t < test_employees_sha.sql
+-----+
| INFO |
+-----+
| TESTING INSTALLATION |
+-----+

+-----+
| table_name | expected_records | expected_crc |
+-----+
| employees | 300024 | 4d4aa689914d8fd41db7e45c2168e7dcb9697359 |
| departments | 9 | 4b315afa0e35ca6649df897b958345bcb3d2b764 |
| dept_manager | 24 | 9687a7d6f93ca8847388a42a6d8d93982a841c6c |
| dept_emp | 331603 | f16f6ce609d032d6b1b34748421e9195c5083da8 |
| titles | 443308 | d12d5f746b88f07e69b9e36675b6067abb01b60e |
| salaries | 2844047 | b5a1785c27d75e33a4173aaa22ccf41ebd7d4a9f |
+-----+

+-----+
| table_name | found_records | found_crc |
+-----+
| employees | 300024 | 4d4aa689914d8fd41db7e45c2168e7dcb9697359 |
| departments | 9 | 4b315afa0e35ca6649df897b958345bcb3d2b764 |
| dept_manager | 24 | 9687a7d6f93ca8847388a42a6d8d93982a841c6c |
| dept_emp | 331603 | f16f6ce609d032d6b1b34748421e9195c5083da8 |
| titles | 443308 | d12d5f746b88f07e69b9e36675b6067abb01b60e |
| salaries | 2844047 | b5a1785c27d75e33a4173aaa22ccf41ebd7d4a9f |
+-----+

+-----+
| table_name | records_match | crc_match |
+-----+
| employees | OK | ok |
| departments | OK | ok |
| dept_manager | OK | ok |
| dept_emp | OK | ok |
| titles | OK | ok |
| salaries | OK | ok |
+-----+

real 0m37.067s
user 0m0.007s
sys 0m0.009s

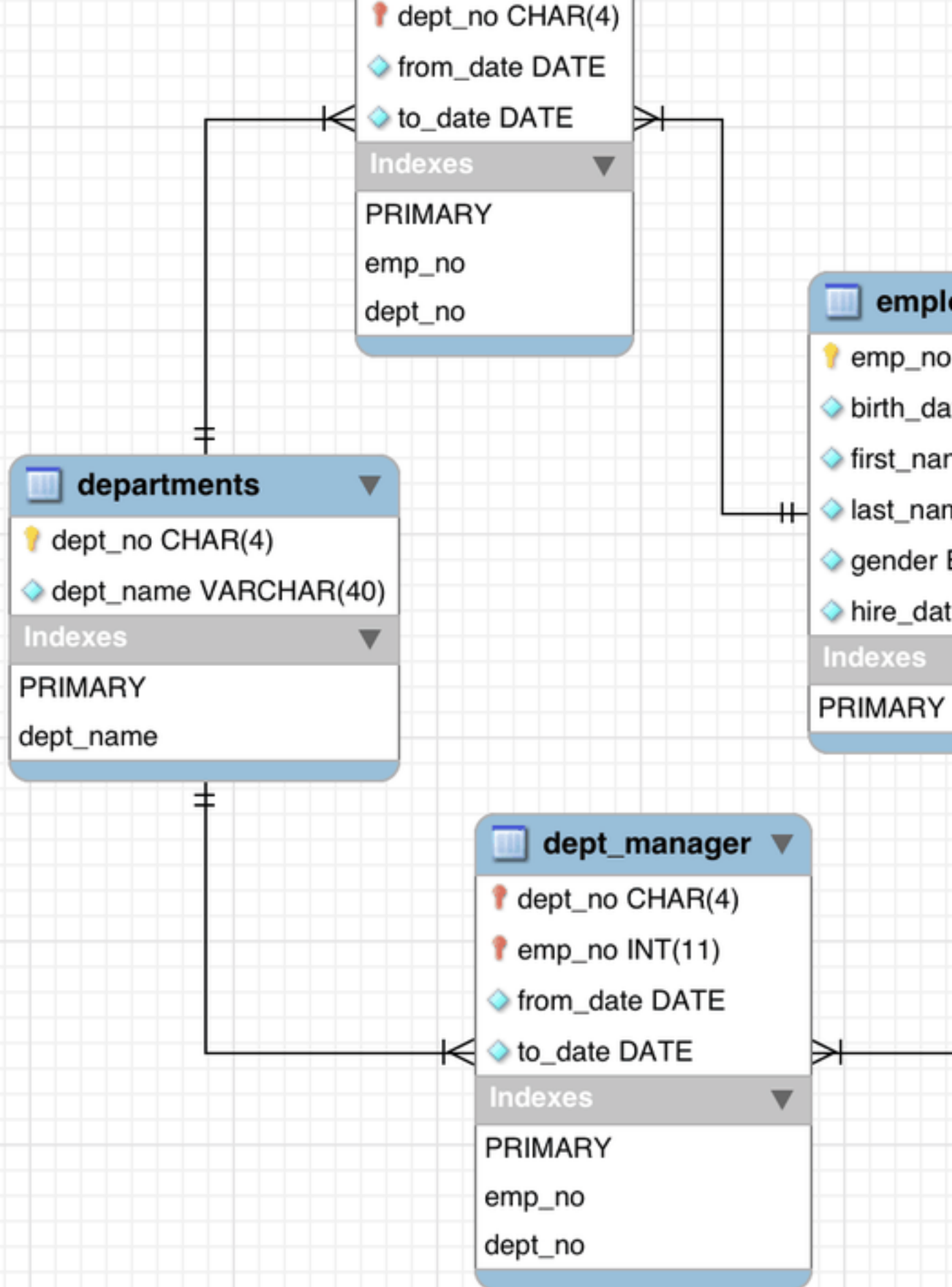
shell>time mysql -t < test_employees_md5.sql
+-----+
| INFO |
+-----+
| TESTING INSTALLATION |
+-----+

+-----+
| table_name | expected_records | expected_crc |
+-----+
```

employees	300024	4ec56ab5ba37218d187cf6ab09celaal
departments	9	d1af5e170d2d1591d776d5638d71fc5f
dept_manager	24	8720e2f0853ac9096b689c14664f847e
dept_emp	331603	c2c4fc7f0506e50959a6c67ad55cac31
titles	443308	bfa016c472df68e70a03facafalbc0a8
salaries	2844047	fd220654e95aea1b169624ffe3fca934
+-----+-----+-----+		
table_name	found_records	found_crc
+-----+-----+-----+		
employees	300024	4ec56ab5ba37218d187cf6ab09celaal
departments	9	d1af5e170d2d1591d776d5638d71fc5f
dept_manager	24	8720e2f0853ac9096b689c14664f847e
dept_emp	331603	c2c4fc7f0506e50959a6c67ad55cac31
titles	443308	bfa016c472df68e70a03facafalbc0a8
salaries	2844047	fd220654e95aea1b169624ffe3fca934
+-----+-----+-----+		
table_name	records_match	crc_match
+-----+-----+-----+		
employees	OK	ok
departments	OK	ok
dept_manager	OK	ok
dept_emp	OK	ok
titles	OK	ok
salaries	OK	ok
+-----+-----+-----+		
real 0m33.453s		
user 0m0.007s		
sys 0m0.009s		

## 5 Employees Structure

The following diagram provides an overview of the structure of the Employees sample database.



## 6 License for the Employees Database

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