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 GitHib. You can download a prepackaged archive of the data, or access the information through Git.

To use the Zip archive package, download the archive and unpack it using WinZip or another tool that can read .zip files, then change location into the unpacked package direcgtory. For example, using unzip, execute these commands:

shell> unzip test_db-master.zip

```
shell> cd test_db-master/
```

The Employees database is compatible with several different storage engines, with the InnoDB engine enabled by default. Edit the <code>employee.sql</code> 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:

```
| INFO |
| CREATING DATABASE STRUCTURE |
| INFO |
| storage engine: InnoDB |
| LOADING departments |
| LOADING dept_emp |
| LOADING dept_manager |
| LOADING titles |
| 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

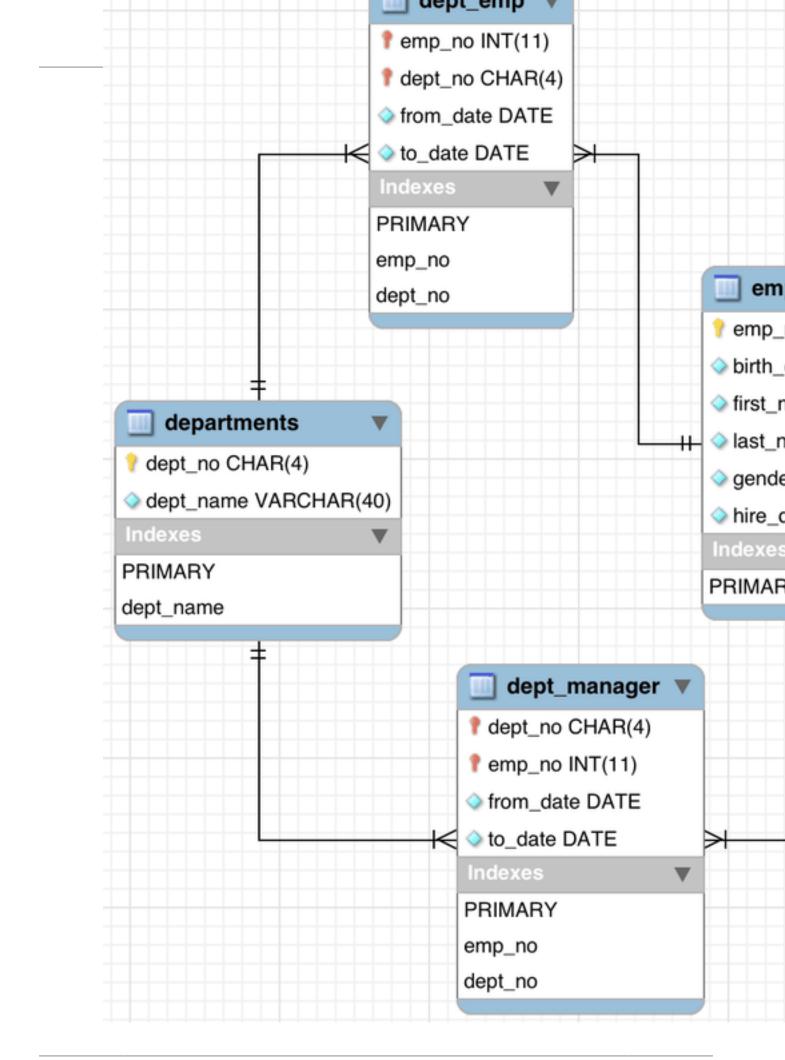
You can validate the Employee data using two methods, md5 and sha. Two SQL scripts are provided for this purpose, test_employees_sha.sql and test_employees_md5.sql. To run the tests, use mysql:

```
shell>time mysql -t < test_employees_sha.sql
+-----+
```

INFO				
	 +			
TESTING INSTA	LLATION			
	+ +	-+		
table_name	expected_record	expected_c	ere 	
employees	30002	4d4aa6899	14d8fd41db7e45c2168e7dcb	9697359
departments	j	4b315afa0	e35ca6649df897b958345bck	3d2b764
dept_manager	2		93ca8847388a42a6d8d93982	
dept_emp titles	33160		9d032d6b1b34748421e9195c 588f07e69b9e36675b6067ab	
salaries	44330 284404		7d75e33a4173aaa22ccf41eb	
	+	-+		
table_name	found_records	found_crc		
employees	30002	4d4aa6899	 14d8fd41db7e45c2168e7dcb	9697359
departments	İ	4b315afa0	e35ca6649df897b958345bck	3d2b764
dept_manager	2	9687a7d6f	93ca8847388a42a6d8d93982	2a841c6c
dept_emp			9d032d6b1b34748421e9195c	
titles			088f07e69b9e36675b6067ab	
salaries	284404 +	D5a1785C2	7d75e33a4173aaa22ccf41eb 	00/04a9i
	++	+		
table_name	records_match	erc_matcn		
employees	OK	ok		
departments	OK	ok		
dept_manager	OK	ok		
dept_emp	OK	ok		
titles salaries	OK	ok ok		
eal 0m37.067s		+		
er 0m0.007s		+		
er 0m0.007s vs 0m0.009s		+		
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er 0m0.007s	l -t < test_emplo + +	ees_md5.sql		
er 0m0.007s s 0m0.009s sell>time mysq	 	ees_md5.sql		
eer 0m0.007s s 0m0.009s mell>time mysq	 	-+	erc	+
er 0m0.007s s 0m0.009s mell>time mysq INFO TESTING INSTA	+ + LLATION + expected_record	-+		+
er 0m0.007s s 0m0.009s mell>time mysq INFO TESTING INSTA	+ + LLATION +	-+	a37218d187cf6ab09ce1aa1	+ +
er 0m0.007s s 0m0.009s ell>time mysq INFO TESTING INSTA table_name employees	+ + LLATION + expected_record +	-+	a37218d187cf6ab09ce1aa1	+ +
er 0m0.007s s 0m0.009s ell>time mysq INFO TESTING INSTA table_name employees departments dept_manager dept_emp	+ + LLATION + expected_record 30002 2	-+	a37218d187cf6ab09ce1aa1 d2d1591d776d5638d71fc5f 53ac9096b689c14664f847e 506e50959a6c67ad55cac31	+
er 0m0.007s s 0m0.009s ell>time mysq INFO TESTING INSTA table_name employees departments dept_manager dept_emp titles	+ + LLATION + expected_record + 30002 2 33160 44330	-+	a37218d187cf6ab09ce1aa1 d2d1591d776d5638d71fc5f 53ac9096b689c14664f847e 506e50959a6c67ad55cac31 2df68e70a03facafa1bc0a8	+ -
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er 0m0.007s s 0m0.009s ell>time mysq INFO TESTING INSTA table_name employees departments dept_manager dept_emp titles salaries	LLATION + expected_record 30002 2 33160 44330 284404	-+	a37218d187cf6ab09ce1aa1 d2d1591d776d5638d71fc5f 53ac9096b689c14664f847e 506e50959a6c67ad55cac31 2df68e70a03facafa1bc0a8	+ - - - - - - - - -
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er 0m0.007s s 0m0.009s ell>time mysq INFO TESTING INSTA table_name employees departments dept_emp titles salaries table_name employees departments	LLATION + expected_record + 30002 22 33160 44330 284404 + found_records	expected_o 4ec56ab5b d1af5e1700 8720e2f08 c2c4fc7f0 bfa016c47 fd220654e	a37218d187cf6ab09ce1aa1 d2d1591d776d5638d71fc5f 53ac9096b689c14664f847e 506e50959a6c67ad55cac31 2df68e70a03facafa1bc0a8 95aea1b169624ffe3fca934	+ + + + +
ser 0m0.007s rs 0m0.009s nell>time mysq INFO TESTING INSTA table_name employees departments dept_emp titles salaries table_name employees departments dept_manager dept_emp	Carte Cart	expected_o 4ec56ab5b dlaf5e1700 8720e2f08 c2c4fc7f0 bfa016c47 fd220654e found_crc 4ec56ab5b dlaf5e1700 8720e2f08	a37218d187cf6ab09celaa1 d2d1591d776d5638d71fc5f 53ac9096b689c14664f847e 506e50959a6c67ad55cac31 2df68e70a03facafa1bc0a8 95aea1b169624ffe3fca934 	+ + + +
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5 Employees Structure

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



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