## **Employees Sample Database**

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#### 1 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.

#### 2 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:

```
$ tar -xjf $HOME/Downloads/employees_db-full-1.0.4.tar.bz2
$ cd employees_db/
```

The Employees database is compatible with all storage engines. You must edit the employee.sql and comment out the storage engine that you want to use:

```
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:

```
$ mysql -t < employees.sql</pre>
INFO
| CREATING DATABASE STRUCTURE |
| storage engine: MyISAM |
INFO
| LOADING departments |
 INFO
 LOADING employees
 TNFO
 LOADING dept_emp
 INFO
| LOADING dept_manager |
 INFO |
| 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 3, "Validating the Employee Data".

### 3 Validating the Employee Data

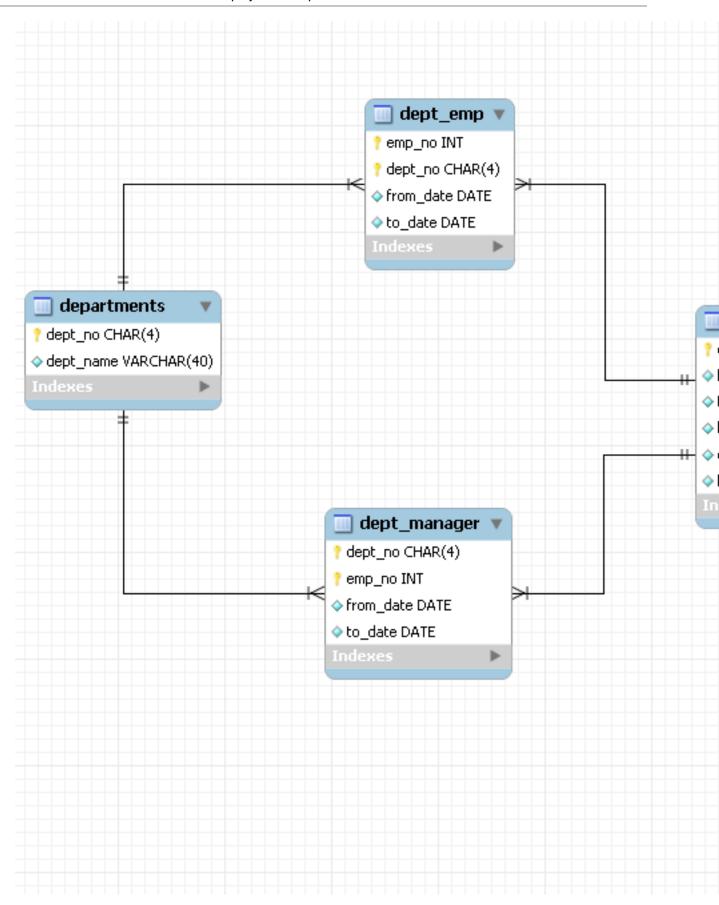
You can validate the Employee data using two methods, md5 and sha. Two SQL scripts are provided for this purpose,  $test\_employees\_sha.sql$  and  $test\_employees\_md5.sql$ . To run the tests, use mysql:

employees departments   dept_manager   dept_emp   titles	30002		
dept_manager   dept_emp			4d4aa689914d8fd41db7e45c2168e7dcb9697359
dept_emp		9	4b315afa0e35ca6649df897b958345bcb3d2b764
!		24	9687a7d6f93ca8847388a42a6d8d93982a841c6c
titles	33160		f16f6ce609d032d6b1b34748421e9195c5083da8
- · i	44330		d12d5f746b88f07e69b9e36675b6067abb01b60e
salaries   	284404 	±7   +	b5a1785c27d75e33a4173aaa22ccf41ebd7d4a9f
+-		+	·+
table_name	found_records		found_crc
employees	30002	24	4d4aa689914d8fd41db7e45c2168e7dcb9697359
departments		9	4b315afa0e35ca6649df897b958345bcb3d2b764
dept_manager		24	9687a7d6f93ca8847388a42a6d8d93982a841c6c
dept_emp	33160		f16f6ce609d032d6b1b34748421e9195c5083da8
titles   salaries	44330 284404		d12d5f746b88f07e69b9e36675b6067abb01b60e   b5a1785c27d75e33a4173aaa22ccf41ebd7d4a9f
+-	204404	± /   +	D5d1/65C2/d/5e55d41/5ddd22CC141eDd/d4d91
+-		+	+
table_name	records_match +	cr	cc_match   +
employees	OK	ok	
departments	OK	ok	
dept_manager	OK	ok	
dept_emp	OK	ok	
titles	OK	ok	
salaries	OK	ok	
TESTING INSTALI	LATION		
	expected_record	+ ds	expected_crc
		+	
employees	30002	<del>+</del> 24	4ec56ab5ba37218d187cf6ab09ce1aa1
employees   departments	30002	24   9	4ec56ab5ba37218d187cf6ab09ce1aa1   dlaf5e170d2d1591d776d5638d71fc5f
employees	30002	24   9   24	4ec56ab5ba37218d187cf6ab09ce1aa1
employees   departments   dept_manager	30002	24   9   24   03	4ec56ab5ba37218d187cf6ab09ce1aa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e
employees   departments   dept_manager   dept_emp	30002 2 33160	9   24   9   24   03	4ec56ab5ba37218d187cf6ab09ce1aa1   d1af5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31
employees   departments   dept_manager   dept_emp   titles	30002 2 33160 44330	9   24   9   24   03	4ec56ab5ba37218d187cf6ab09ce1aa1   d1af5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8
employees   departments   dept_manager   dept_emp   titles   salaries	30002 2 33160 44330	9   24   9   24   03	4ec56ab5ba37218d187cf6ab09ce1aa1   d1af5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8
employees   departments   dept_manager   dept_emp   titles   salaries	30002 2 33160 44330 284404	9   9   24   03   08   17   +	4ec56ab5ba37218d187cf6ab09ce1aa1   d1af5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name	30002 2 33160 44330 284404 	9   9   24   03   08   17   +	4ec56ab5ba37218d187cf6ab09ce1aa1   d1af5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name	30002 2 33160 44330 284404 	9   9   24   03   08   17   + 	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries	30002 33160 44330 284404 found_records 30002	9   24   33   34   35   35   35   35   35   3	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   employees   departments   dept_manager   dept_emp   titles	30002  33160 44330 284404  found_records  30002  233160 44330	9   9   9   124	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries	30002 33160 44330 284404 found_records 30002	9   9   9   124	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   dept_manager   dept_manager   dept_emp   titles   salaries   dept_emp   titles   salaries	30002  233160 44330 284404  found_records 30002  233160 44330 284404	+ 24   9     9     908     117     117     9     908     117     908     117     11	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   dept_manager   dept_manager   dept_emp   titles   salaries   dept_emp   titles   salaries	30002  33160 44330 284404  found_records  30002  233160 44330	+ 24   9     9     908     117     117     9     908     117     908     117     11	4ec56ab5ba37218d187cf6ab09celaa1   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafa1bc0a8   fd220654e95aea1b169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   departments   departments   dept_emp   titles   salaries   table_name   titles   salaries   table_name   dept_emp   titles   salaries   table_name   dept_ename   dept_	30002  233160 44330 284404  found_records 30002  233160 44330 284404	+ 24   9     9     908     117     117     9     908     117     908     117     11	4ec56ab5ba37218d187cf6ab09celaal   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafalbc0a8   fd220654e95aealb169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   dept_manager   dept_emp   titles   salaries   table_name   dept_emp   titles   salaries   table_name   dept_emp   titles   salaries   table_name   dept_emp   titles   salaries   table_name   dept_emp   titles   table_name   table_nam	30002  33160 44330 284404  found_records  30002  233160 44330 284404	24   9   9   24   17   17   17   17   17   17   17   1	4ec56ab5ba37218d187cf6ab09celaal   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafalbc0a8   fd220654e95aealb169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   dept_manager   dept_emp   titles   salaries   table_name   dept_emp   titles   salaries   table_name   dept_manager   dept_emp   titles   salaries   table_name   dept_manager	30002  33160 44330 284404  found_records  30002  233160 44330 284404  records_match	24   9   24   9   9   9   9   9   9   9   9   9	4ec56ab5ba37218d187cf6ab09celaal   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafalbc0a8   fd220654e95aealb169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries   table_name   departments   departments   dept_emp   titles   salaries   table_name   dept_emp   titles   salaries   dept_emp   dept_emp   dept_emp   dept_emp   dept_emp   dept_emp   dept_emp   departments   dep	30002  233160 44330 284404  found_records  30002  233160 44330 284404  records_match    OK   OK	24   9   24   9   24   9   24   9   9   9   9   9   9   9   9   9	4ec56ab5ba37218d187cf6ab09celaal   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafalbc0a8   fd220654e95aealb169624ffe3fca934
employees   departments   dept_manager   dept_emp   titles   salaries    table_name    employees   departments   dept_emp   titles   salaries    table_name    employees   departments   dept_emp   titles   salaries	30002  33160 44330 284404  found_records  30002  233160 44330 284404  records_match    OK   OK   OK   OK	24   9   24   33   30   31   31   31   31   31   31	4ec56ab5ba37218d187cf6ab09celaal   dlaf5e170d2d1591d776d5638d71fc5f   8720e2f0853ac9096b689c14664f847e   c2c4fc7f0506e50959a6c67ad55cac31   bfa016c472df68e70a03facafalbc0a8   fd220654e95aealb169624ffe3fca934

```
+-----+
real 0m33.453s
user 0m0.007s
sys 0m0.009s
```

# **4 Employees Structure**

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



## **5 License for the Employees Database**

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