
Setting Up the world Database

Table of Contents

1 Preface and Legal Notices	1
2 Installation	3
3 History	4

This document describes `world` sample database installation, structure, usage, and history.

The sample data used in the `world` database is Copyright Statistics Finland, <http://www.stat.fi/worldinfigures>.

For legal information, see the [Legal Notices](#).

For help with using MySQL, please visit the [MySQL Forums](#), where you can discuss your issues with other MySQL users.

Document generated on: 2024-10-04 (revision: 79903)

1 Preface and Legal Notices

This document describes `world` sample database installation, structure, usage, and history.

Legal Notices

Copyright © 2005, 2024, Oracle and/or its affiliates.

License Restrictions

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

Warranty Disclaimer

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and

agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

Hazardous Applications Notice

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Trademark Notice

Oracle, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

Third-Party Content, Products, and Services Disclaimer

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Use of This Documentation

This documentation is NOT distributed under a GPL license. Use of this documentation is subject to the following terms:

You may create a printed copy of this documentation solely for your own personal use. Conversion to other formats is allowed as long as the actual content is not altered or edited in any way. You shall not publish or distribute this documentation in any form or on any media, except if you distribute the documentation in a manner similar to how Oracle disseminates it (that is, electronically for download on a Web site with the software) or on a CD-ROM or similar medium, provided however that the documentation is disseminated together with the software on the same medium. Any other use, such as any dissemination of printed copies or use of this documentation, in whole or in part, in another publication, requires the prior written consent from an authorized representative of Oracle. Oracle and/or its affiliates reserve any and all rights to this documentation not expressly granted above.

Access to Oracle Support for Accessibility

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

2 Installation

To enable MySQL users to perform manipulation of the `world` sample database using MySQL, the data set is available as a set of three tables:

- `country`: Information about countries of the world.
- `city`: Information about some of the cities in those countries.
- `countrylanguage`: Languages spoken in each country.

The `world.sql` file containing the `world` database is available for download at <https://dev.mysql.com/doc/index-other.html>. The file is provided as a compressed `tar` file or Zip archive.

To install the `world` sample database, follow these steps:

1. Download the installation archive to a temporary location such as `C:\temp\` or `/tmp/` and unpack it. Unpacking the archive results in a directory named `world-db` containing a single file named `world.sql`.
2. Connect to the MySQL server using the `mysql` command-line client with the following command:

```
$> mysql -u root -p
```

Enter your password when prompted. A non-`root` account can be used, provided that the account has privileges to create new databases.

3. Execute the `world.sql` script to create the database structure and insert the data using the following command:

```
mysql> SOURCE C:/temp/world.sql;
```

Replace the path to the `world.sql` file with the actual path on your system.

Note

On Windows, use slashes rather than backslashes when executing the `SOURCE` command.

4. To confirm that the sample `world` database is installed correctly, execute the following statements. You should see output similar to that shown here.

```
mysql> USE world;
Database changed

mysql> SHOW TABLES;
+-----+
| Tables_in_world |
+-----+
| city             |
| country          |
| countrylanguage |
+-----+
3 rows in set (0.00 sec)

mysql> SELECT COUNT(*) FROM city;
+-----+
| COUNT(*) |
```

```

+-----+
| 4079   |
+-----+
1 row in set (0.02 sec)

mysql> SELECT COUNT(*) FROM country;
+-----+
| COUNT(*) |
+-----+
| 239     |
+-----+
1 row in set (0.00 sec)

```

You now have the `world` sample database installed.

Another popular sample database is the Sakila database. For additional details, see <http://dev.mysql.com/doc/sakila/en/>.

3 History

September 2016

Prior releases used mixed-case table names. Because MySQL Shell is case-sensitive, table names are changed to lowercase.

December 2019

The `world.sql` file was changed to address several issues:

- The `world` database used `latin1`, but MySQL as of 8.0 uses a default character set of `utf8mb4`. Converting the database to use `utf8mb4` brings it up to date with MySQL 8.0, while retaining compatibility with older series.

Conversion of the database to `utf8mb4` was done as follows:

```

USE world;

-- turn off foreign key checking; otherwise, the ALTER TABLE
-- statements fail with incompatible foreign key errors.
SET SESSION foreign_key_checks=0;

-- convert database and tables to utf8mb4
ALTER DATABASE world CHARACTER SET utf8mb4;
ALTER TABLE city CONVERT TO CHARACTER SET utf8mb4;
ALTER TABLE country CONVERT TO CHARACTER SET utf8mb4;
ALTER TABLE countrylanguage CONVERT TO CHARACTER SET utf8mb4;

-- re-enable foreign key checking
SET SESSION foreign_key_checks=0;

```

- MySQL Shell requires a character set of `utf8mb4` for X Protocol connections. Using such a connection to load a `latin1`-encoded `world.sql` file produces errors.

Using `mysqldump` with options of `--default-character-set=utf8mb4` to set the character set and `--set-charset` so the dump includes `SET NAMES` for that character set writes a `utf8mb4`-encoded dump file. Changing the encoding of `world.sql` to `utf8mb4` permits it to be loaded without errors in MySQL Shell using X Protocol connections.

- MySQL 8.0.17 deprecates these features:
 - Number of digits in floating-point column definitions; for example, `FLOAT(10,2)`.

- Display width in integer column definitions; for example, `INT(10)`.

The `world.sql` file used both features, causing load warnings in MySQL 8.0.17 and higher.

To avoid number of digits in `FLOAT` columns, it is necessary to manually alter the relevant columns. That was done as follows, by altering `FLOAT(M,D)` to `DECIMAL(M,D)`:

```
USE world;

ALTER TABLE country
  MODIFY SurfaceArea DECIMAL(10,2) NOT NULL DEFAULT '0.00',
  MODIFY LifeExpectancy DECIMAL(3,1) DEFAULT NULL,
  MODIFY GNP DECIMAL(10,2) DEFAULT NULL,
  MODIFY GNPold DECIMAL(10,2) DEFAULT NULL;
ALTER TABLE countrylanguage
  MODIFY Percentage DECIMAL(4,1) NOT NULL DEFAULT '0.0';
```

To produce integer column definitions without display widths in the dump file, it suffices to use `mysqldump` from MySQL 8.0.19 or higher.

