

O*NET 18.1 Database (SQL Format)

March 2014

Introduction

This document provides notes specific to the SQL format release of the O*NET 18.1 database. For comprehensive information on the contents, structure, and relationship of the database files, and a history of changes in each database release, please consult the O*NET Data Dictionary 18.1, available at:

http://www.onetcenter.org/dl_files/DataDictionary18_1.pdf

New in 18.1

This release includes newly developed Detailed Work Activities (DWAs) data, along with broader Intermediate Work Activities (IWAs) and a separate set of Green DWAs. See the report “Work Activities Project Technical Report” for details:

http://www.onetcenter.org/reports/DWA_2014.html

The 18.1 release contains five new tables:

- iwa_reference
- dwa_reference
- tables_to_dwas
- green_dwa_reference
- tables_to_green_dwas

All other tables are unchanged from the 18.0 release.

New in 18.0

105 occupations were comprehensively updated, bringing the total to 921, in this fourteenth major update from the O*NET Data Collection Program. Highlights of this update include:

- Addition and update of Task Statement ratings (importance, relevance, and frequency) for 134 occupations
- Addition and update of Abilities, Skills, Work Activities, Knowledge, and Work Context data for 105 occupations
- Addition and update of Training and Work Experience and Education data for 105 occupations
- Addition and update of Work Styles data for 105 occupations
- Addition and update of Job Zones data for 105 occupations
- Addition and update of Interests data for 83 occupations

File Structure

The SQL format release represents the O*NET database as a set of 24 relational database tables. Each text file in the release contains SQL statements describing the structure and contents of a single table. For information on the purpose and structure of each table, consult the O*NET Data Dictionary 18.0. See also the section “Data Dictionary Supplemental Notes” below.

Primary and foreign keys are specified to reflect the relationships between O*NET database tables. Some database systems enforce these relationships, and require tables to be loaded in a particular order. Each SQL file is preceded by a number; to avoid errors, load each file in numeric order. Consult your database system documentation for more information on key constraints.

Loading SQL Files

Database 18.1 for Microsoft SQL Server: O*NET database files can be loaded using the **SQL Server Management Studio** utility. Open each SQL file in that utility, select the destination database in the SQL Editor toolbar, and click **Execute** in the SQL Editor toolbar.

Database 18.1 for MySQL: O*NET database files can be loaded using the **mysql** utility. Use the **source** command to import each file. For example, to load the Content Model Reference table, you might enter the command:

```
source C:\db_18_1_mysql\01_content_model_reference.sql
```

Database 18.1 for Oracle: O*NET database files can be loaded using the **SQL Plus** utility. Use the **@** command to import each file. For example, to load the Content Model Reference table, you might enter the command:

```
@C:\db_18_1_oracle\01_content_model_reference.sql
```

Compatibility

The SQL format release has been tested on the following database systems. The files may be compatible with other products or versions, but consult your database system documentation for further information.

Database 18.1 for Microsoft SQL Server:

- SQL Server 2008 R2

Database 18.1 for MySQL:

- MySQL 4.1.22, 5.1.51
- PostgreSQL 8.4.4
- SQLite 3.7.2
- Firebird 2.0.3

Database 18.1 for Oracle:

- Oracle 11g, version 11.2.0.1.0

Data Dictionary Supplemental Notes

Developers should keep the following SQL-specific items in mind when consulting the O*NET Data Dictionary:

- To conform to SQL standards, column and table names have been reformatted. For example, the column “O*NET-SOC Code” is formatted as “onetsoc_code” in the SQL files. The column “Date” has been renamed to “date_updated” to avoid conflict with a reserved SQL keyword.
- For maximum compatibility with different database systems, the DECIMAL data type has been used for all numeric columns. A column listed as “FLOAT(4,2)” in the Data Dictionary is represented as “DECIMAL(4,2)” in the SQL files. A column listed as “INTEGER(3)” is represented as “DECIMAL(3,0)” in the SQL files.
- Columns that represent dates are represented with the SQL DATE data type. While this data type specifies a year, month, and day, only the year and month are significant for O*NET metadata purposes.
- The Data Dictionary lists an “Element Name” column for most domain-specific tables. This column is redundant information, and excluded from the SQL format tables. SQL developers should instead use the “Element ID” foreign key to join to the Content Model Reference table, and retrieve the element names from there.