

O\*NET 4.0 Database  
Data Dictionary  
Visual FoxPro Version



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# Data Dictionary O\*NET 4.0 Database Visual FoxPro Version

## Introduction

O\*NET, the Occupational Information Network, is a comprehensive database of worker attributes and job characteristics. As the replacement for the Dictionary of Occupational Titles (DOT), O\*NET will be the nation's primary source of occupational information.

Information from the O\*NET Database is available from the National O\*NET Consortium (<http://www.onetcenter.org>). The consortium utilizes two means of delivery: an on-line database viewer (<http://online.onetcenter.org/>) and a downloadable database consisting of a series of tab-delimited text files, along with related file documentation (<http://www.onetcenter.org/database.html>).

The National Crosswalk Service Center (NCSC), formerly the NOICC Crosswalk and Data Center, has distributed resources related to occupational classifications such as the DOT since 1983. The contents of the files described in this document were taken from the database downloaded from the third Internet page sited above. The tables are also available in a MS Access format. Contact the NCSC for more information.

The contents of the files in the database described in this document were adapted from the files downloaded from the consortium web site. Some fields were eliminated from these tables to eliminate redundancy and bring the database into a more normalized configuration.

## Database Changes

Users who have downloaded and used the NCSC Visual FoxPro version of the O\*NET 3.1 database will notice a number of changes included in the latest version. Generally speaking, many table and variable names have been shortened. These changes can, for the most part, be credited to the creation of an O\*NET 3.0 database for use in conjunction with the ALMIS Database which utilizes similar naming conventions. Much of the design of the ALMIS Database-friendly O\*NET database was done by Dana Placzek of the Connecticut Department of Labor. The NCSC adopted this database structure to avoid creating and supporting two Visual FoxPro versions of the O\*NET 4.0 database.

The content of the database has also changed significantly. The National Center for O\*NET Development no distributes two types of files: core files, the contents of which are described in the O\*NET content model; and supplementary file, usually crosswalks linking the O\*NET occupations to other classifications. Both sets of files are included in this database, so that the content of the database can reflect that used in the O\*NET Online application.

## HOW TO READ A TABLE DEFINITION

Each table definition contains complete information about the structure of a table. Each definition includes: the name of the table, a complete list of each column name and data type, complete constraint information, and short descriptions of the columns. The following illustration identifies each component of a table definition.

**Interest** -- Interest Descriptors and their ratings for each occupation

Column	Type	Constraint	Description
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
Scalid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
◆ 8,100 Records ◆ Source table: interest			

**Constraint:** Specifies whether this column is part of the Primary Key or participates in one or more Foreign Keys. Numbers in this column refer to Foreign Keys where more detailed information can be found in the **Constraints Information** section.

**Other Information:** Provides count of the number of records in the table and the table(s) in the source O\*NET database from which the contents were derived.

**Constraint Information:** Provides complete information on each Foreign Key used in the table. Each note indicates which table and columns are being referenced.

Short description of the data intended for this column.

## TABLE CONSTRAINTS

The Constraint section of each table definition identifies all Primary Keys and Foreign Keys for the table. The constraints for a table specify rules for data that will be stored in that table. These rules exist in the form of either Primary Keys or Foreign Keys. The definitions of these terms appear below:

**Primary Key:** The *Primary Key* is a column or group of columns that shall always be (1) non-null and (2) unique. Only one primary key exists for each table. A Primary Key constraint is enforced on a table so that each row in the table can be uniquely identified.

**Foreign Key:** A *Foreign Key* is a column or group of columns where each value or group of values exists as a Primary Key in another table. Foreign Key constraints are used so that data for a column or group of columns can be validated against another table containing a list of valid values for that column or group of columns.

## O\*NET 4.01 Data Dictionary – Core Table Formats

**Descriptive Tables:** These tables contain information describing the classifications and variables found in the O\*NET 4.0 database.

<b>onetcode</b> -- This table contains one record for each O*NET-SOC Occupation			
Column	Type	Constraint	Description
onetcode	char(8)	Primary Key	Unique occupation code based on SOC code, modified for O*NET
onetttitle	char(105)		Occupation title
onetdesc	memo		Description of occupation
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 1,166 Records</li> <li>◆ O*NET source tables: onetsoc_data</li> </ul>			

<b>contmodl</b> -- O*NET content model reference			
Column	Type	Constraint	Description
Elementid	char(15)	Primary Key	Unique code for ratings Scale
Elemntname	char(140)		Descriptor Name
Elemntdesc	memo		Description of Descriptor
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 564 Records</li> <li>◆ Source table: onet_content_model_reference</li> </ul>			

<b>scaleref</b> – Provides a reference to the scale names and values			
Column	Type	Constraint	Description
scaleid	char(2)	Primary Key	Unique code for ratings Scale
scalename	char(35)		Name of Scale
scalemmin	number(3,0)		Minimum value the descriptor scale can take
scalemmax	number(3,0)		Maximum value the descriptor scale can take
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 62 Records</li> <li>◆ Source table: scales_reference</li> </ul>			

<b>Jobzone</b> -- This table contains descriptions of each of O*NET's job zones			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
jobzonecd	char(1)	Primary Key	Unique code for Job Zone
jobzone	char(50)		Name of Job Zone
experience	Memo		Experience required to be considered part of this job zone
education	Memo		Education required to be considered part of this job zone
training	Memo		Training required to be considered part of this job zone
examples	Memo		Examples of the types of jobs in this job zone
svprange	char(15)		
<b>Constraint Information</b>			
N/A			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 5 Records</li> <li>◆ Source table: job_zone_reference</li> </ul>			

**Data tables:** These tables contain the variables which define the characteristics of O\*NET occupations.

<b>skills -- Skills Descriptors and their ratings for each occupation</b>			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 63,000 Records</li> <li>◆ Source table: skills</li> </ul>			

<b>tasks -- Provides each O*NET-SOC code (occupation) mapping to several tasks associated with the occupation</b>			
<b>NOTE:</b> This table did not have a unique field as received from O*NET. The table was restructured to include a unique Primary Key by the addition of the Task Number field.			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique ONET-SOC Code
tasknumber	number(2,0)	Primary Key	Line number of each task within ONET-SOC Code
taskdesc	Memo		Tasks involved in occupation
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 10,266 Records</li> <li>◆ Source table: tasks</li> </ul>			

<b>knowledg -- Knowledge Descriptors and their ratings for each occupation</b>			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 59,400 Records</li> <li>◆ Source table: knowledge</li> </ul>			

<b>ability -- Ability Descriptors and their ratings for each occupation</b>			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 93,600 Records</li> <li>◆ Source table: ability</li> </ul>			

<b>interest -- Interest Descriptors and their ratings for each occupation</b>			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 8,100 Records</li> <li>◆ Source table: interest</li> </ul>			

<b>activity -- Work Activity Descriptors and their ratings for each occupation</b>			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 73,800 Records</li> <li>◆ Source table: WorkActivity</li> </ul>			

<b>context</b> -- Work Context Descriptors and their ratings for each occupation			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 34,200 Records</li> <li>◆ Source table: WorkContext</li> </ul>			

<b>workvalu</b> -- Work Value Descriptors and their ratings for each occupation			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
elementid	char(15)	Primary Key 2	Unique code for O*NET Content Model descriptors
scaleid	char(2)	Primary Key 3	Unique code for O*NET descriptors scale
datavalue	Number(6,2)		Value of descriptor rating
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: contmodel.elementid 3 Foreign Key references: scaleref.scaleid			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 24,300 Records</li> <li>◆ Source table: WorkValue</li> </ul>			

<b>onetzone</b> -- This table contains the Job Zone value for each O*NET-SOC Occupation			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique occupation code based on SOC code, modified for O*NET
jobzonecd	char(1)	2	Job Zone of the O*NET-SOC occupation
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: jobzone.jobzonecd			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 900 Records</li> <li>◆ O*NET source tables: onetsoc_job_zones</li> </ul>			

## O\*NET 4.01 Data Dictionary – Supplemental Table Formats

**Descriptive Tables:** These tables contain information describing the classifications and variables found in the O\*NET 4.0 database.

<b>socode</b> -- This table contains one record for each occupation in the 1998 Standard Occupational Classification			
Column	Type	Constraint	Description
socode	char(6)	Primary Key	Standard Occupational Classification code
soctitle	char(105)		SOC Occupation title
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 846 Records</li> <li>◆ O*NET source table: soc_classification</li> </ul>			

<b>dotcode</b> -- This table provides a listing of titles for all DOT codes found in the DOTXONET crosswalk table			
Column	Type	Constraint	Description
dotcode	char(9)	Primary Key	Dictionary of Occupational Titles code
dottitle	char(70)		DOT Occupation title
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 12,814 Records</li> <li>◆ Source table: dot_to_onetsoc_crosswalk</li> </ul>			

<b>oucode</b> -- This table provides a listing of titles for all Occupational Unit (OU) codes from the O*NET 98 classification found in the ONETXOU crosswalk table			
Column	Type	Constraint	Description
oucode	char(6)	Primary Key	Occupational Unit code, from O*NET98
outitle	char(95)		OU Occupation title
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 854 Records</li> <li>◆ Source table: soc_ou_onetsoc_crosswalk</li> </ul>			

<b>raiscode</b> -- This table provides a listing of titles for all Registered Apprenticeship Information System codes.			
Column	Type	Constraint	Description
raiscode	char(4)	Primary Key	RAIS code
raistitle	char(89)		RAIS title
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 856 Records</li> <li>◆ Source table: RAIS-O*NET crosswalk table</li> </ul>			

<b>moccode</b> -- This table provides a listing of titles for all Military Occupations used in O*NET Online			
Column	Type	Constraint	Description
Mocsvc	char(1)	Primary Key	Military service of the occupation (see below)
moceo	char(1)	Primary Key	Officer/enlisted indicator (see below)
Moctype	Char(2)	Primary Key	Military occupation type (see below)
Moccode	Char(10)	Primary Key	Military occupation code
payrange	char(4)	Primary Key	Pay grade range
moctitle	char(185)		Military occupation title
Constraint Information			
N/A			
Other Information			
<ul style="list-style-type: none"> <li>◆ 5,503 Records</li> <li>◆ Source table: moc-onet review.mdb</li> </ul>			

variable	Description
Mocsvc	Service Branch: A=Army C=Coast Guard F=Air Force M=Marine Corps N=Navy
Moceo	Military Personnel Category E=Enlisted O=Commissioned or Warrant Officer W=Warrant Officer only
Moctype	MOC Type: AA=Army Commissioned Officer Area of Concentration (AOC) AS=Army Commissioned Officer Skill Code (SI) AJ=Army Warrant Officer Additional Skill Identifier (ASI) AR= Army Warrant Officer Special Qualification Identifier (SQI) AW= Army Warrant Officer Military Occupational Specialty (MOS) AI =Army Enlisted Additional Skill Identifier (ASI) AM= Army Enlisted Military Occupational Specialty (MOS) AQ= Army Enlisted Special Qualification Identifier (SQI)  CN=Coast Guard Commissioned Officer Occupational Field (OCC FLD) CW=Coast Guard Warrant Officer Specialty CR=Coast Guard Enlisted Rating  FA=Air Force Specialty Code (AFSC) Commissioned Officer FA=Air Force Specialty Code (AFSC) Enlisted  MM=Marine Corps Commissioned Officer Military Occupational Specialty (MOS) MM=Marine Corps Warrant Officer MOS MM=Marine Corps Enlisted MOS  NB=Navy Officer Billet Code (NOBC) NR=Navy Enlisted Rating NE=Navy Enlisted Classification (NEC)
Moccode	Military Occupational Code
Moctitle	Military Occupational Title
Payrange	Pay Grade Range

**Crosswalk tables:** These tables incorporate the relationships among the various classifications found in the O\*NET 4.0 database.

<b>relococs</b> -- Occupations related to each O*NET-SOC occupation			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
Onetcode	Char(8)	Primary Key 1	Unique ONET-SOC Code
Relonetcd	Char(8)	Primary Key 2	Unique ONET-SOC Code of related occupation
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode			
2 Foreign Key references: onetcode.onetcode			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 6,397 Records</li> <li>◆ Source table: related_occupation_data (replaced 15301100 with 152091)</li> </ul>			

<b>onetxsoc</b> -- Crosswalk between the O*NET-SOC occupations and the SOC.			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique ONET-SOC Code
soccode	char(6)	Primary Key 2	Unique SOC Code
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode			
2 Foreign Key references: onetcode.onetcode			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 1,166 Records</li> <li>◆ Source table: soc_ou_onetsoc_crosswalk</li> </ul>			

<b>onetxou</b> -- Crosswalk between the O*NET-SOC occupations and the O*NET98 occupation unit codes.			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
onetcode	char(8)	Primary Key 1	Unique ONET-SOC Code
oucode	char(6)	Primary Key	Unique SOC Code
<b>Constraint Information</b>			
1 Foreign Key references: onetcode.onetcode			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 900 Records</li> <li>◆ Source table: soc_ou_onetsoc_crosswalk</li> </ul>			

<b>dotxonet</b> -- Crosswalk between DOT and O*NET-SOC codes (has 12,814 DOT occupations)			
<b>Column</b>	<b>Type</b>	<b>Constraint</b>	<b>Description</b>
dotcode	char(9)	Primary Key 1	Dictionary of Occupation Titles' Code
onetcode	char(8)	Primary Key 2	Unique ONET-SOC Code
<b>Constraint Information</b>			
1 Foreign Key references: dotcode.dotcode			
2 Foreign Key references: onetcode.onetcode			
<b>Other Information</b>			
<ul style="list-style-type: none"> <li>◆ 12,945 Records</li> <li>◆ Source table: dot_to_onetsoc_crosswalk</li> </ul>			

<b>mocxonet</b> – Crosswalk between O*NET-SOC and military occupations			
Column	Type	Constraint	Description
Onetcode	Char(8)	Primary Key 1	Unique O*NET-SOC Code
Mocsvc	char(1)	Primary Key 2	Military service of the occupation (see below)
moceo	char(1)	Primary Key 2	Officer/enlisted indicator (see below)
Moctype	Char(2)	Primary Key 2	Military occupation type (see below)
payrange	char(4)	Primary Key 2	Pay grade range
Moccode	Char(10)	Primary Key 2	Military occupation code
Constraint Information			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: moccode.mocsvc,moccode.mocsvc, moccode.moceo, moccode.moctype, moccode.payrange, moccode.moccode			
Other Information			
<ul style="list-style-type: none"> <li>◆ 5,503 Records</li> <li>◆ Source table: moc-onet review.mdb</li> </ul>			

<b>raisonet</b> – Crosswalk between O*NET-SOC and Registered Apprenticeship Information System codes.			
Column	Type	Constraint	Description
raiscode	char(4)	Primary Key 1	RAIS code
onetcode	char(8)	Primary Key 2	Unique O*NET-SOC Code
Constraint Information			
1 Foreign Key references: onetcode.onetcode 2 Foreign Key references: raiscode.raiscode			
Other Information			
<ul style="list-style-type: none"> <li>◆ 856 Records</li> <li>◆ Source table: RAIS-O*NET crosswalk table</li> </ul>			