



Web API: Get Occupation Details

The 'Get Occupation Details' API enables developers to query and retrieve occupation details by O*NET code or exact O*NET occupation title.

About this data

The Web API gives occupation details by entering an exact ONET title or code. The search matches occupations in the Occupational Information Network (O*NET) taxonomy, created by the Department of Labor for cross-agency use by federal, state and local government entities. Our Occupation Profile tool [here](#) demonstrates the comprehensive use of this API. For more information about the data sources, please see the tool's [Help](#) page, and also help information provided within each card in Occupation Profile.

Response from this API includes extensive occupational data including:

- Occupational data from O*NET, including title, code, description, outlook, tasks, daily work activities, alternate titles, interests, related occupations, skills, knowledge, abilities, tools and technologies, and work values.
- Wages, at national, state, and local levels, from BLS OEWS
- Info about a corresponding career video from CareerOneStop.org
- Employment projections at federal and state levels
- Education and training data, and industry share of employment, from BLS Employment Projections program
- Corresponding code and title in the SOC taxonomy
- Link to corresponding page at BLS Occupational Outlook Handbook (OOH)
- Links to State offices providing Labor Market Information (LMI)
- Training programs

Resource URL

<https://api.careeronestop.org/v1/occupation/{userId}/{keyword}/{location}>

Try this Web API

Example Code

C#

Java

```
class Program
{
    static void Main(string[] args)
    {
        CreateRequest().Wait();
    }

    private static async Task CreateRequest()
    {

```

Request Parameters

Refer to the following table for a list of the required and optional request parameters. All parameter names and values are case sensitive. Important: You must provide all required parameters. Submitting an empty request does not return all possible results; an empty request returns an error.

Parameter Name	Value	Required?	Description
API Token	String	Yes	This value is the unique API Token provided to you during the CareerOneStop Web API registration process.
userId	String	Yes	This value is the unique UserID provided to you during the CareerOneStop Web API registration process.
keyword	String	Yes	This value is the O*NET code or exact O*NET occupation title.
location	String	Yes	This value accepts a city, state (Chicago, IL) or state (IL) or ZIP code (61299). For national data, use the numeral '0' or 'US'.
training	Boolean	No	This value will be true or false. If true, the response will include educational attainment, and typical education for this occupation.
interest	Boolean	No	This value will be true or false. If true, the response will include O*NET's interests about this occupation.
videos	Boolean	No	This value will be true or false. If true, the response will include a link to the COS video associated with this occupation.
tasks	Boolean	No	This value will be true or false. If true, the response will include O*NET tasks for this occupation.
dwas	Boolean	No	This value will be true or false. If true, the response will include detailed work activities of occupation.
wages	Boolean	No	This value will be true or false. If true, the response will include projected wages for this occupation.
alternateOnetTitles	Boolean	No	This value will be true or false. If true, the response will include four alternate titles for this occupation.
projectedEmployment	Boolean	No	This value will be true or false. If true, the response will include projected employment for this occupation.
ooh	Boolean	No	This value will be true or false. If true, the response will include a link to the BLS occupational outlook handbook for this occupation.
stateLMILinks	Boolean	No	This value will be true or false. If true, the response will include State Labor Market information links.
relatedOnetTitles	Boolean	No	This value will be true or false. If true, the response will include a list of related O*NET occupations.
skills	Boolean	No	This value will be true or false. If true, the response will include O*NET skills for this occupation.
knowledge	Boolean	No	This value will be true or false. If true, the response will include O*NET knowledge areas for this occupation.

Parameter Name	Value	Required?	Description
ability	Boolean	No	This value will be true or false. If true, the response will include O*NET abilities for this occupation.
trainingPrograms	Boolean	No	This value will be true or false. If true, the response will include programs of study associated with this occupation, through the SOC-CIP cross-walk.
industryEmpPattern	Boolean	No	This value will be true or false. If true, the response will include industry employment patterns, from DOL Employment Projections program, in other words, info about employment within industries. Default = false.
toolsAndTechnology	Boolean	No	This value will be true or false. If true, the response will include tools and technology data for this occupation, from O*NET. Default = false.
workValues	Boolean	No	This value will be true or false. If true, the response will include the top Work Value for this occupation from O*NET. Default = false.
enableMetaData	Boolean	No	Coming Soon: Use this parameter to determine whether to include MetaData in the response. True - Include metadata (default). False - exclude metadata.

Response Structure

JSON

XML

```
{
  "OnetTitle": "Registered Nurses",
  "OnetCode": "29-1141.00",
  "OnetDescription": "Assess patient health problems and needs, develop and implement nursing c
  "Wages": {
    "NationalWagesList": [
      {
        "RateType": "Hourly",
        "Pct10": "30.64",
        "Pct25": "36.53",
        "Median": "41.38",
        "Pct75": "50.32",
        "Pct90": "63.79",
        "StFips": "00",
        "Area": "000000",
        "AreaName": "United States"
```

Response Parameters

Name	Description	Type	Parent
OccupationDetail	Occupation Detail	Object	
OnetTitle	O*Net Title	String	OccupationDetail
OnetCode	O*Net Code	String	OccupationDetail
OnetDescription	O*Net Description	String	OccupationDetail

Name	Description	Type	Parent
Wages	Wages, from BLS OEWS. Please note: When wage data is displayed, '100+' indicates the hourly wage is equal to or greater than \$115.00, while '239,200+' indicates an annual salary equal to or greater than \$239,200.	Object	OccupationDetail
NationalWagesList	National Wages List	Object	Wages
RateType	Hourly or Annual	String	NationalWagesList
Pct10	Wages at 10th percentile	String	NationalWagesList
Pct25	Wages at 25th percentile	String	NationalWagesList
Median	Median Wages	String	NationalWagesList
Pct75	Wages at 75th percentile	String	NationalWagesList
Pct90	Wages at 90th percentile	String	NationalWagesList
StFips	Code for the nation (always '00')	String	NationalWagesList
Area	BLS-defined area	String	NationalWagesList
AreaName	BLS-defined area name	String	NationalWagesList
StateWagesList	State Wages List	Object	Wages
RateType	Rate Type	String	StateWagesList
Pct10	Wages at 10th percentile	String	StateWagesList
Pct25	Wages at 25th percentile	String	StateWagesList
Median	Median Wages	String	StateWagesList
Pct75	Wages at 75th percentile	String	StateWagesList
Pct90	Wages at 90th percentile	String	StateWagesList
StFips	State Code	String	StateWagesList
Area	Area	String	StateWagesList
AreaName	Area Name	String	StateWagesList
BLSAreaWagesList	Bureau of Labor Statistics Area Wages List	Oject	Wages
RateType	Rate Type	String	BLSAreaWagesList

Name	Description	Type	Parent
Pct10	Wages at 10th percentile	String	BLSAreaWagesList
Pct25	Wages at 25th percentile	String	BLSAreaWagesList
Median	Median Wages	String	BLSAreaWagesList
Pct75	Wages at 75th percentile	String	BLSAreaWagesList
Pct90	Wages at 90th percentile	String	BLSAreaWagesList
StFips	Code for this area	String	BLSAreaWagesList
Area	Area	String	BLSAreaWagesList
AreaName	Area Name	String	BLSAreaWagesList
WageYear	Wage year	String	Wages
SocData	Values are Yes and No. Always 'yes' for now.	String	Wages
SocWageInfo	The occupation for the wage info provided. Wages are provided by OEWS, which provides wages for SOC occupations. If the occupation in the request was a detail level O*NET occupation, then the wages given might not exactly correspond to that O*NET occupation, but instead are for the SOC group as a whole. In a few cases, OEWS provides wages at one level less specific than SOC. See OEWS for details.	Object	OccupationDetail
SocCode	SOC Code (or OEWS code)	String	SocWageInfo
SocTitle	SOC Title (or OEWS title)	String	SocWageInfo
SocDescription	SOC Description; not currently populated	String	SocWageInfo
BrightOutlook	Data from O*NET	String	OccupationDetail
Green	No longer supported	String	OccupationDetail
COSVideoURL	URL for the best-matching career video on CareerOneStop	String	OccupationDetail
EducationTraining	Education Training from the United States Department of Labor, Bureau of Labor Statistics, Employment Projections Program. For more information, https://www.bls.gov/emp/documentation/education-training-system.htm . All the data in this object are for the relevant SOC-level occupation, not O*NET level.	Object	OccupationDetail
EducationType	Among incumbent workers in this (SOC) occupation, distribution of workers at various education levels. This data is "Educational attainment for workers 25 years and older by detailed occupation".	Object	EducationTraining

Name	Description	Type	Parent
EducationLevel	Education Level	String	EducationType
Value	Percent of workers currently in this occupation who have attained this level of education.	String	EducationType
EducationCode	<p>For entry, how much education is required? Parameters "EducationCode" and "EducationTitle" answer this question. Values: 1- Doctoral or professional degree 2- Master's degree 3- Bachelor's degree 4- Associate's degree 5- Postsecondary non-degree award 6- Some college, no degree 7- High school diploma or equivalent 9- No formal education credential</p> <p>This data is "Education and training assignments by detailed occupation"</p>	String	EducationTraining
EducationTitle	For entry to this (SOC) occupation, how much education is required? See above.	String	EducationTraining
ExperienceCode	<p>For entry, how much experience is required? Parameters "ExperienceCode" and "ExperienceTitle" answer this question. Values: 1- 5 years or more 2-Less than 5 years 3- None</p> <p>This data is "Education and Training assignments by detailed occupation."</p>	String	EducationTraining
ExperienceTitle	For entry to this (SOC) occupation, how much experience is required? See ExperienceCode above.	String	EducationTraining
TrainingCode	<p>For entry, how much on-the-job training is required? Parameters "TrainingCode" and "TrainingTitle" answer this question. Values for 'TrainingCode', then corresponding 'TrainingTitle': 1- Internship/residency 2- Apprenticeship 3- Long-term on-the-job training / More than 1 year on-the-job training 4- Moderate-term on-the-job training / 1-12 months on-the-job training 5- Short-term on-the-job training / Less than 1 month on-the-job training 6- None / No on-the-job training</p> <p>This data is "Education and training assignments by detailed occupation".</p>	String	EducationTraining
TrainingTitle	For entry to this (SOC) occupation, how much training is required? See TrainingCode above.	String	EducationTraining
OccupationTitle	Title for the corresponding occupation in the BLS EMP taxonomy.	String	EducationTraining

Name	Description	Type	Parent
MatOccupation	Occupation for this education and training data, from the BLS Employment Projections program. In some years, the "matrix" (occupation taxonomy) used for this data is sometimes slightly different from SOC. For more info, see the "occupational employment directory" here. (https://www.bls.gov/emp/documentation/crosswalks.htm)	Object	EducationTraining
MatOccCode	Occupation code for the corresponding occupation	String	MatOccupation
MatOccTitle	Title for the corresponding occupation	String	MatOccupation
BrightOutlookCategory	Bright Outlook Category	String	OccupationDetail
Tasks	O*NET data	Object	OccupationDetail
TaskDescription	Task Description	String	Tasks
TaskId	Task Id	String	Tasks
DataValue	Data Value	String	Tasks
DWAs	Daily Work Activities from O*NET	Object	OccupationDetail
DWATitle	Daily Work Activities Title	String	DWAs
DWAId	Daily Work Activities ID	String	DWAs
DataValue	Daily work Activities Value	String	DWAs
TaskId	Task Id	String	DWAs
AlternateTitles	Four common alternate occupation titles from O*NET	List of strings	OccupationDetail
StFips	Two digit number representing the state, territory, etc, using the FIPS system	String	OccupationDetail
Location	Location in the request	String	OccupationDetail
Video	This object has information about the best video for this occupation, among the videos available. There is not a one-to-one correspondence between O*NET occupations and corresponding videos.	List	OccupationDetail
VideoCode	Video Code	String	Video
VideoTitle	Video Title	String	Video
VideoTyp	Video Type	String	Video
InterestDataList	O*NET scores and data around Holland codes (RIASEC system) for this occupation	Object	OccupationDetail

Name	Description	Type	Parent
ElementID	Element ID	String	InterestDataList
ElementName	Element Name	String	InterestDataList
Element Description	Element Description	String	InterestDataList
DataValue	Data Value	String	InterestData List
Importance	Importance	String	InterestDataList
SocInfo	SOC info, corresponding to this O*NET occupation	Object	Occupation Detail
SocCode	SOC Code	String	SocInfo
SocTitle	SOC Title	String	SocInfo
Soc Description	SOC Description	String	SocInfo
Projections	Employment level projections	Object	OccupationDetail
EstimatedYear	Estimated year for national projections	String	Projections
ProjectedYear	Projected year for national projections	String	Projections
OccupationTitle	National employment projections are provided for SOC occupations, not O*NET. However, in some years, the occupation taxonomy used for projections is slightly different from SOC. For more info, see the "Occupational employment directory" here. (https://www.bls.gov/emp/documentation/crosswalks.htm)	String	Projections
Projections	Projections	List	Projections
StateName	State Name	String	Projections.projections
StFips	State FIPS Code	String	Projections.projections
Estimated Employment	Estimated Employment	String	Projections.projections
Projected Employment	Projected Employment	String	Projections.projections
PerCentChange	Percent Change	String	Projections.projections
ProjectedAnnual JobOpening	Projected Annual Job Opening	String	Projections.projections
EstimatedYear	Estimated year for the projections in this object; sometimes state projections cover a different 10-year period than national projections	String	Projections.projections
ProjectedYear	Projected Year for the projections in this object; sometimes state projections cover a different 10-year	String	Projections.projections

Name	Description	Type	Parent
	period than national projections		
IndustryOcc Emplt			Projections
Industry	Industry (from BLS Employment Projections program)	String	IndustryOcc Emplt
Pctestocc	Percent of this occupation working in this industry	String	IndustryOcc Emplt
MatInCode	Code for the industry from BLS Employment Projections program	String	IndustryOcc Emplt
PercentChange	Percent change	String	IndustryOcc Emplt
Estimated Employment	Estimated employment (number of people estimated to be employed)	String	IndustryOcc Emplt
IagCode	Code for the corresponding industry available at BLS' Industries at a Glance, https://www.bls.gov/iag	String	IndustryOcc Emplt
NumberChanged	Number changed	String	IndustryOcc Emplt
Project Employment	Projected employment (number of people employed)	String	IndustryOcc Emplt
OOHs	Links to relevant BLS Occupational Outlook Handbooks	String	Occupation Detail
Title	Title	String	OOHs
OOHUrl	Occupation Outlook Handbook URL	String	OOHs
StateResources Links	Links to websites within the state where labor market information may be available	Object	Occupation Detail
StateWeb Resource	State Web Resource	List	StateResources Links
Title	Title	String	StateWeb Resource
Url	State Labor Market Information URL	String	StateWeb Resource
Type	Type	String	StateWeb Resource
StateName	State Name	String	StateWebResource
RelatedOnet Titles	O*NET data	Object	Occupation Detail
Key	Key	String	RelatedOnet Titles
Value	Value	String	RelatedOnet Titles
SkillsDataList	O*NET data	Object	Occupation Detail

Name	Description	Type	Parent
ElementID	Element ID	String	SkillsData List
ElementName	Element Name	String	SkillsData List
Element Description	Element Description	String	SkillsDataList
DataValue	Data Value	String	SkillsDataList
Importance	Importanc	String	SkillsDataList
Knowledge DataList	O*NET data	Object	OccupationDetail
ElementID	Element ID	String	KnowledgeData List
ElementName	Element Name	String	KnowledgeData List
Element Description	Element Description	String	KnowledgeData List
DataValue	Data Value	String	KnowledgeData List
Importance	Importance	String	KnowledgeData List
AbilityDataList	O*NET data	String	Occupation Detail
ElementID	Element ID	String	AbilityData List
ElementName	Element Name	String	AbilityData List
Element Description	Element Description	String	AbilityDataList
DataValue	Data Value	String	AbilityData List
Importance	Importance	String	AbilityData List
TrainingPrograms	Training programs that prepare a student for this occupation, using the "CIP" taxonomy	List of strings	Occupation Detail
ToolsandTech OccupationDetails	Tools and Technology from O*NET for this occupation	List	Occupation Detail
OnetCode	O*NET Code	String	ToolsAndTechnology Details
OnetTitle	O*NET Title	String	ToolsAnd TechnologyDetails
Tools	List of tools	List	ToolsAnd TechnologyDetails
Categories	Categories	List	Tools

Name	Description	Type	Parent
Title	Title	String	Categories
Examples	Examples	String	Categories
Name	Name	String	Examples
Technology	List of technologies	String	ToolsAnd TechnologyDetails
CategoryList	CategoryList	String	Technology
Title	Title	String	CategoryList
Examples	Examples	String	CetegoryList
Name	Name	String	Examples
WorkValues OccupationDetails	Top work value from O*NET for this occupation (just one)	String	OccupationDetail
Workvalue	Work value (text)	String	Workvalues OccupationDetails
Characteristics	Characteristics	String	Workvalues OccupationDetails
RecordCount	Record Count	Integer	
DidYouMean	Did You Mean	String	
AutoCorrection	Auto Correction	String	
MetaData	Information about the source of the API	Object	
Publisher	Publisher of the API	String	MetaData
Sponsor	Sponsor of the API	String	MetaData
LastAccessDate	When the API was run, using UTC (ISO 8601) format	String	MetaData
CitationSuggested	If you use this data, CareerOneStop suggests you use this citation.	String	MetaData
DataSource	The data source object(s)	List of Objects	MetaData
DataName	Name of data	String	DataSource
DataSourceName	Name of data source	String	DataSource
DataSourceUrl	URL of data source	String	DataSource

Name	Description	Type	Parent
DataLastUpdate	Data when CareerOneStop last updated this data	String	DataSource
DataVintageOrVersion	Version or vintage of the data	String	DataSource
DataDescription	Description of the data	String	DataSource
DataSourceCitation	Suggested citation for this data source	String	DataSource

Errors

Error/Status Code	Description
200	OK / Success. The request went through successfully and there is a response body.
400	Bad Request (Request was invalid or missing parameters)
401	Unauthorized. This error occurs specifically when authentication is required and has failed or has not yet been provided correctly. (ex: Invalid API Token)
404	This error will be shown in two scenarios 1) Not found - (An error occurred) and 2) Not found - (No data available)
500	Internal Server Error. This error will occur when there is something critically wrong in the API call.

For information about jobs, training, career resources, or unemployment benefits call:

1-877-US2-JOBS (1-877-872-5627) or TTY 1-877-889-5627

For help using the CareerOneStop website:

info@careeronestop.org

CareerOneStop is sponsored by the U.S. Department of Labor, Employment and Training Administration

Copyright © 2025 State of Minnesota