

Using the Job API

AJL's Job API (Application Programming Interface) processes raw job posting data so that job postings do not have to be created manually using the AJL job posting builder. You can also use the Job API to edit or delete job postings. Typically, third-party recruiters or large employers with a great number of job postings use the Job API. You must develop, purchase, or use an open-source RESTful client to use the API. Using the Job API requires basic knowledge of software development and web services.

You (or the employer whose job postings you manage) must also have an approved employer account in each AJL website in which you want to post jobs. Once your employer account has been approved, you must generate a Job API token to use the API or to authorize a third-party to use the API on your behalf. If you are managing your company's job postings, you will use your unique token with your username to submit requests to the Job API. If you are a third party managing jobs for multiple employers, you will need the username and API token for each employer you serve.

If you have used the Job API in the past, we recommend updating to Version 2. This includes updated Headers and Body text, as described below. However, Version 1 is still supported.

Creating/Viewing an API Token

Do not create an API token unless you are ready to use the Job API yourself or if you plan to allow a third party to post your jobs.

1. Navigate to My Company Profile and click the **Job API** accordion. The Job API section expands.
2. Click **Display Token**. A confirmation message displays at the top of the page.
3. Click the **Job API** accordion. The Job API section expands.
4. Click **Display Token**. The token displays

How the Job API Works

To use the Job API, you need a RESTful client, which is a program that lets you build HTTP requests. To make a request, you need to include the URL, Header, Method, and Body. The body will vary depending on the method.

URL

An endpoint is a unique URL that makes up part of an API. For the Job API, each state using AJL has a unique endpoint. If you wish to post jobs across multiple states using AJL, you must use separate endpoints for each state:

- **Alabama:** <https://joblink.alabama.gov/api/jobs>
- **Arizona:** <https://www.azjobconnection.gov/api/jobs>
- **Arkansas:** <https://www.arjoblink.arkansas.gov/api/jobs>
- **Delaware:** <https://joblink.delaware.gov/api/jobs>
- **Idaho:** <https://idahoworks.gov/api/jobs>
- **Illinois:** <https://illinoisjoblink.illinois.gov/api/jobs>
- **Kansas:** <https://www.kansasworks.com/api/jobs>
- **Maine:** <https://joblink.maine.gov/api/jobs>
- **Oklahoma:** <https://okjobmatch.com/api/jobs>
- **Vermont:** <https://www.vermontjoblink.com/api/jobs>

Method

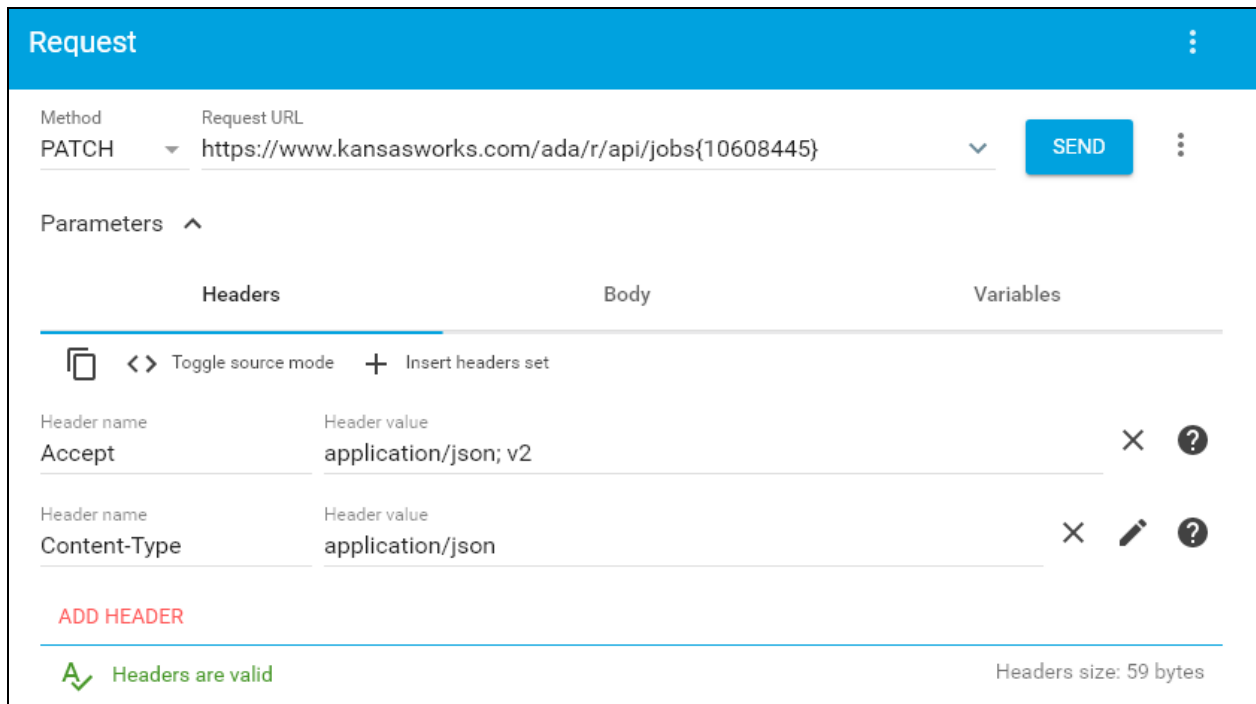
The request methods for the Job API are POST (create job posting[s]), PATCH (update an existing job posting), and DELETE (delete the job posting).

If you need to patch or delete a posting, select **PATCH** or **DELETE** and add the job posting ID to the endpoint (e.g., [Jobs API URL]/[Job ID]).

Example: <https://www.kansasworks.com/api/jobs/10608445>

Header

Headers provide meta information about the request. Add the following headers to your RESTful client:



The screenshot shows a REST client interface with the following details:

- Request** (Title)
- Method:** PATCH
- Request URL:** `https://www.kansasworks.com/ada/r/api/jobs{10608445}`
- Buttons:** SEND, and a vertical ellipsis menu.
- Parameters:** (Collapsed)
- Headers Tab:** Active, showing a table of headers.
- Body Tab:** Inactive.
- Variables Tab:** Inactive.
- Header Table:**

Header name	Header value		
Accept	application/json; v2	X	?
Content-Type	application/json	X	?
- Actions:** Toggle source mode, Insert headers set, ADD HEADER.
- Status:** Headers are valid (with a green checkmark icon).
- Footer:** Headers size: 59 bytes.

Job API Headers

Header Name	Header Value
Content-Type	vnd.joblink.v2+json
Accept	application/json; v2

Body

The request body contains the job posting data the client is sending to the AJL server.

Please note that if you were using Version 1 of the Job API, you can update the body text for additional fields.

POST/PATCH Body

```
{
  "username": "string",
  "api_token": "string",
  "number_of_positions_available": 0,
  "education_level_id": 0,
  "license_type_id": 0,
  "employment_type": "string",
  "position_type": "string",
  "alien_recruiting": "string",
  "made_public_on": "string",
  "absolute_expiration_on": "string",
  "is_day_shift": true,
  "is_evening_shift": true,
  "is_night_shift": true,
  "is_split_shift": true,
  "is_no_preference_shift": true,
  "is_rotating_shift": true,
  "wage_upper_bound": 0,
```

```
"wage_lower_bound": 0,  
"is_sent_to_jobcentral": true,  
"is_staff_assistance_requested": true,  
"applicant_reply_method": [  
  "string"  
],  
"application_description": "string",  
"driving_required": true,  
"is_wage_displayed": true,  
"wage_type": "string",  
"company_work_description": "string",  
"title": "string",  
"company_name": "string",  
"city": "string",  
"state": "string",  
"zip": "string",  
"address": "string",  
"email": "string",  
"phone": "string",  
"fax": "string",  
"url": "string",  
"description": "string",  
"average_hours": 0  
}
```

DELETE Body

```
{  
  "username": "string",  
  "api_token": "string"  
}
```

About Job API Data

The following table provides the keys and values accepted in the body of Job API requests. There are three types of data: string (group of characters and digits), integer (group of digits), and boolean (true or false). Accepted values are provided, as well as any constraints, such as character limits.

Job API Data

Job API Data				
Key	Data Type	Value	Constraints	Required
username	string	Employer's AJL username	6-20 characters	Yes
api_token	string	Employer's AJL Job API token	35 characters	Yes
number_of_positions_available	integer	How many positions are available?	1-2 digits (a 422 error will occur if blank or if more than 2 digits)	Yes

Key	Data Type	Value	Constraints	Required
education_level_id	integer	What education level is required for this position? <ul style="list-style-type: none"> • 3 = Some high school or less • 4 = High school diploma or equivalent • 5 = Vocational certificate or credential • 6 = Some college • 7 = Associate's degree • 8 = Bachelor's degree • 9 = Masters degree • 10 = PhD • 11 = MD, OD or related • 12 = DDS, DMD or related • 13 = JD • 14 = Other Professional Degree 	1-2 digits (a 422 error will occur if the value is outside the defined range with the message "value is not a valid id")	Yes

Key	Data Type	Value	Constraints	Required
license_type_id	integer	<p>If a driver's license is required, what class should it be:</p> <ul style="list-style-type: none"> • 1 = Class A • 2 = Class B • 3 = Class C • 4 = Non-commercial driver's license • 5 = Class G • 6 = Class L • 7 = Class M • 8 = Class V 	1 digit (a 422 error will occur if the value is outside the defined range with the message "value is not a valid id")	Yes
employment_type	string	<p>Is this job full time, part time, or both?</p> <ul style="list-style-type: none"> • F = full time • P = part time • N = full or part time • 3 = see job description 	1 character (if the value is outside of the defined range, the job will still be created and this key will be saved with a value of 3 by default)	Yes

Key	Data Type	Value	Constraints	Required
position_type	string	<p>Is this job temporary, permanent, or both?</p> <ul style="list-style-type: none"> • P = permanent • T = temporary • B = both • 3 = see job description 	1 character (if the value is outside of the defined range, the job will still be created and this key will be saved with a value of 3 by default)	Yes
alien_recruiting	string	<p>Is this job supporting an H-1B, H-2A, or H-2B recruitment activity?</p> <ul style="list-style-type: none"> • 1 = H-1B • 2 = H-2A • 3 = H-2B • 0 = No 	1 character (a 422 error will occur if the value is outside the defined range with the message "value is not a valid recruitment_type")	Yes

Key	Data Type	Value	Constraints	Required
clearance_cds	integer array	Select the clearance level of this job posting: <ul style="list-style-type: none"> • 0 = Local • 1 = Intrastate • 2 = Interstate 	Must be an array containing 0, 1, and/or 2. Single and multiple values are accepted (a 422 error will occur if not in an array format for if the values are outside the defined range). Example: [0, 1, 2]	Yes, if "alien_recruiting" is set to 2 or 3
date_change_of_clearance_level	string	Date of clearance level change	YYYY/MM/DD (a 422 error will occur if the format is incorrect)	Yes
made_public_on	string	What date do you want this job made public?	YYYY/MM/DD (an error will occur if the date is in the past)	Yes

Key	Data Type	Value	Constraints	Required
absolute_expiration_on	string	What is the expiration date of this job?	YYYY/MM/DD (an error will occur if the date is in the past. This date must also be later than the start date in order for the job to be visible to the public)	Yes
is_day_shift	boolean	Is this a day shift? • 0 = No • 1 = Yes	1 character	No
is_evening_shift	boolean	Is this an evening shift? • 0 = No • 1 = Yes	1 character	No
is_night_shift	boolean	Is this a night shift? • 0 = No • 1 = Yes	1 character	No

Key	Data Type	Value	Constraints	Required
is_split_shift	boolean	Is this a split shift? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	No
is_no_preference_shift	boolean	Is this an undefined shift? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	No
is_rotating_shift	boolean	Is this a rotating shift? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	No
wage_upper_bound	integer	What is the maximum starting wage or salary?	Decimals and digits (e.g., 12.50 or 30000)	Yes
wage_lower_bound	integer	What is the minimum starting wage or salary?	Decimals and digits	Yes

Key	Data Type	Value	Constraints	Required
is_sent_to_jobcentral	boolean	Should this job be posted on US.jobs by Direct Employer? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	No
is_staff_assistance_requested	boolean	Is staff assistance requested for managing this posting? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	No

Key	Data Type	Value	Constraints	Required
applicant_reply_method	string array	<p>How should the applicant respond to this posting?</p> <ul style="list-style-type: none"> • A = American Job Center • C = phone • E = email • F = fax • M = mail • P = in person • R = through recruiter • W = website 	<p>An error will occur if the value of this key is:</p> <ul style="list-style-type: none"> • not a string array or a single character string • not a valid string • null or blank 	Yes
application_description	string	Describe any additional materials or information the applicant should provide.	16 characters	No

Key	Data Type	Value	Constraints	Required
driving_required	boolean	Is driving an essential function of this job? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character	Yes
is_wage_displayed	boolean	Should the wage be displayed for this position? <ul style="list-style-type: none"> • 0 = No • 1 = Yes 	1 character An error will occur if the value of this key is: <ul style="list-style-type: none"> • not 0 or 1 • null or blank 	Yes
wage_type	string	How are wages paid for this position? <ul style="list-style-type: none"> • A = annual • H = hourly • O = other 	1 character	Yes
company_work_description	string	What is the company description?	3000 characters	No

Key	Data Type	Value	Constraints	Required
title	string	What is the title of the position?	150 characters	Yes
company_name	string	What is the name of the company?	150 characters (an error will occur if the value is over 150 characters)	No
city	string	What city is the position located in?	25 characters	Yes
state	string	What state is the position located in?	2 characters	Yes
zip	string	What is the ZIP code of the position location?	9 characters	Yes
address	string	What is the street address of the position location?	50 characters	Yes

Key	Data Type	Value	Constraints	Required
email	string	What is the company's email address?	100 characters (must have @ symbol, an error will occur if an invalid email address is used)	No
phone	string	What is the company's phone number?	10 characters (an error will occur if the value is more than 10 digits, with or without dashes)	No
fax	string	What is the company's fax number?	10 characters (an error will occur if the value is more than 10 digits, with our without dashes)	No
url	string	What is the URL of the job posting, if available on an external website?	5000 characters (an error will occur if the value is not a valid URL)	No

Key	Data Type	Value	Constraints	Required
description	string	What is the job description?	12000 characters	No
average_hours	integer	How many hours are in the average work week? (1-99)	2 characters	Yes

Submitting a Successful API Request

Using your RESTful client, send a request to the Job API endpoint(s). All requests must include a valid employer username and API token; if this information is not valid, the request will not be successful. To be successful, POST requests must also include accepted values for all of the required fields in the AJL job posting builder as shown in the table above. The API processes successful requests immediately.

Once the job posting is created in AJL, both self-service employers and staff can view, edit, and delete the job posting like any other job. Job seekers can also search for and view the job posting like any other job, depending on the value submitted for “What date do you want this job made public?” and veterans’ preference settings in the state.

Status Codes

After submitting a request, a status code will display indicating the success of the request.

- **200:** The request has been fulfilled, resulting in the creation of a new resource.
- **401:** The request contained an unauthorized token, and access is denied.
- **422:** The request instance was invalid and validation messages are provided.
- **500:** An error indicating a general problem on our server during specific steps in processing.