Chapter 4

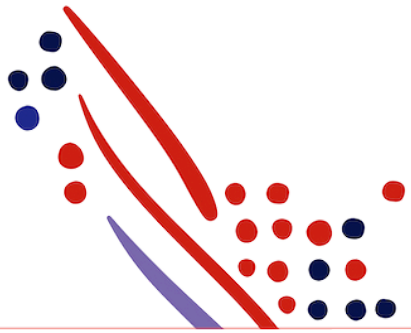
ADP Restful APIs

from ADP Marketplace ESI - Getting started

Published on
Mar 22, 2022, 09:18 AM

Last modified
Jul 15, 2025, 02:47 PM

Always Designing for People™



ADP Copyright Information

ADP, the ADP logo, and Always Designing for People are trademarks of ADP, Inc.

Windows is a registered trademark of the Microsoft Corporation.

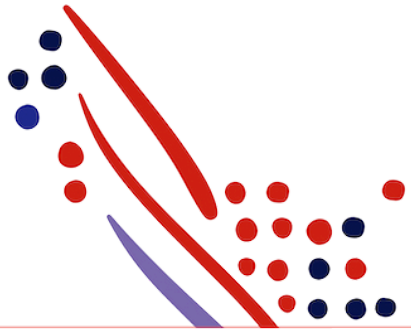
All other trademarks are the property of their respective owners.

Copyright © 2025 ADP, Inc. ADP Proprietary and Confidential - All Rights Reserved. These materials may not be reproduced in any format without the express written permission of ADP, Inc.

These materials may not be reproduced in any format without the express written permission of ADP, Inc. ADP provides this publication "as is" without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. ADP is not responsible for any technical inaccurancies or typographical errors which may be contained in this publication. Changes are periodically made to the information herein, and such changes will be incorporated in new editions of this publication. ADP may make improvements and/or changes in the product and/or the programes described in this publication.

Published on
Mar 22, 2022, 09:18 AM

Published on
Jul 15, 2025, 02:47 PM



Chapter Contents

Chapter 4

ADP Marketplace ESI - Getting started

Retrieving Resources

Example (Curl)

Throttling

Global Sequence

Chapter 4

ADP Restful APIs

ADP APIs are designed using REST for resource management. This pattern separates the act of retrieving resources and modifying them into separate activities along with providing event notifications that indicate changes to a resource.

Retrieving Resources

The most common method to retrieve resources through the ADP REST APIs is to do a GET against the resource endpoint. By default, this request returns all resources of a given type, but supports several query parameters to control what is returned.
For example, the resource you are interested in is Worker v2. The request to get all workers is: **GET https://api.eu.adp.com/hr/v2/workers**. You can control the results returned by using the following query parameters:

- **$top**: Specifies the upper limit on the number of items to return.
- **$skip**: Specifies the number of items to skip from the beginning of the list.
- **$filter**: Specifies an expression that an item must match to be included in a response.

Another example is that you can do the following:

- Request only the first 10 workers:
  GET https://api.eu.adp.com/hr/v2/workers?$top=10

Example (Curl)

A Curl example of how to perform a request for a worker call from ADP

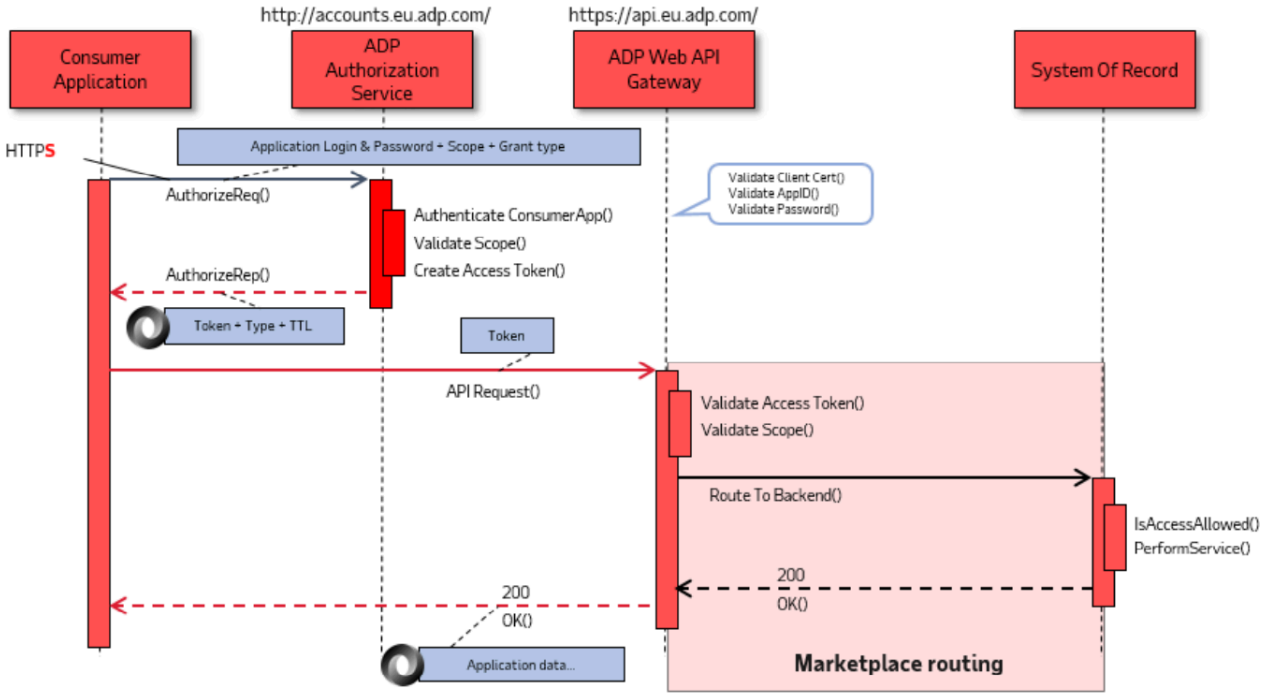
```
curl
   --location --request GET 'https://api.eu.adp.com/hr/v2/workers'
   --header 'Authorization: Bearer 024ded5f831d4483a9c606710026b09b'
```

Throttling

To prevent high load on ADP infrastructure ADP Marketplace ESI supports throttling. Throttling in this context means ADP Marketplace ESI will respond with error codes (429) once a certain requests threshold has been reached. The response contains a retry-after header that you can use to wait for the next request. The value is in seconds. When ADP Marketplace ESI responds with a http 429 error, the request is not passed to the systems of records preventing overload on these systems. ADP Marketplace ESI allows you to perform up to 10 concurrent api calls per second with some burst allowance (150% within a minute). Everything beyond this threshold will result in a 429 error.

Global Sequence

The following drawing provides some details of requesting a token call and performing a call to retrieve workers from the SOR.


http://accounts.eu.adp.com/
https://api.eu.adp.com/
Consumer Application
ADP Authorization Service
ADP Web API Gateway
System Of Record
HTTPS
Application Login & Password + Scope + Grant type
AuthorizeReq()
Authenticate ConsumerApp()
Validate Scope()
Create Access Token()
Validate Client Cert()
Validate AppID()
Validate Password()
AuthorizeRep()
Token + Type + TTL
Token
API Request()
Validate Access Token()
Validate Scope()
Route To Backend()
IsAccessAllowed()
PerformService()
200
OK()
200
OK()
Application data...
Marketplace routing