



POSITION IMAGING

amoeba**or**RTLS

REST API Guide



<b>90036</b>	
<i>amoebaRTLS</i>	
<i>REST API Guide</i>	
<b>Rev</b>	<b>Date</b>
1	Apr, 2019

## Copyright © 2019 - Position Imaging, Inc.

This manual and the software described herein are solely for the licensed use of Position Imaging, Inc. products and are copyrighted with all rights reserved. Under the copyright laws, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form by any means, electronic, mechanical, by photocopying, recording, or otherwise, without prior written permission of Position Imaging, Inc.

Information furnished by Position Imaging, Inc. is believed to be accurate and reliable and is subject to change without notice. However, no responsibility is assumed by Position Imaging, Inc. for its use or any errors that may appear in this document, nor for any infringements of patents or other rights of third parties which may result from its use.

### Getting Assistance

If you have any questions or comments, or need assistance from Technical Support, please contact Position Imaging, Inc. at their toll-free number: 1-855-662-8777.

Or, email: [support@position-imaging.com](mailto:support@position-imaging.com).

Product names mentioned herein are for identification purposes only and may be trademarks and/or registered trademarks of their respective companies: Amoeba™ Module, iPickup™, amoebaRTLS™, and Smart Package Room® are trademarks or registered trademarks of Position Imaging, Inc. in the U.S. and internationally. All information in this document is considered proprietary and property of Position Imaging, Inc. Reproduction and distribution is prohibited without a mutual non-disclosure agreement and expressed written permission from Position Imaging, Inc. Other references to trademarks are the rights of their respective owners. Other US and foreign patents pending.

Position Imaging, Inc.  
155 Fleet St.  
Portsmouth, NH 03801  
603-686-7800  
Fax - 603-237-1616

Printed in the United States of America



---

## About the amoebaRTLS REST API

---

The amoebaRTLS API is a REST API used to help you manage your RTLS devices and Nucleus software as part of your app development.

A security token is required to access this API. Once you register with Position Imaging, Inc., using your email and a password, you will gain access to use our amoebaRTLS REST API.

## Getting Started

---

The first thing you have to do is request an access token from the amoebaRTLS API. All subsequent requests to the API must include your token as an Authorization header. The token is good for 10 hours, and at that point must be re-requested.

REST calls using an expired or invalid token will always return error code 401: Unauthorized.

The code used in the amoebaRTLS REST API reflects the most current release of the product. The code pages include sample code and references (parameters, descriptions, and responses) to help you get started.

To get the most up-to-date amoebaRTLS API, click the link below or copy the URL into a Browser's address bar:

<https://pinucleus.eastus.cloudapp.azure.com/docs>

Sample code (Javascript) requesting a Token:

```
var apiKey;
function requestToken() {
  var xhr = new XMLHttpRequest();
  xhr.open('POST', API_URL + 'token', true);
  xhr.setRequestHeader("Content-Type", "application/x-www-form-urlencoded; charset=UTF-8");
  xhr.onload = function() {
    if (xhr.status == 200) {
      let json = JSON.parse(xhr.response);
      apiKey = json.token;
    }
  };
  xhr.send('email=' + YOUR_EMAIL + '&pass=' + YOUR_PASSWORD);
}
```

The below function requests information on all of your Pods, using an access token:

```
function getPods() {
  let xhr = new XMLHttpRequest();
  xhr.open('GET', http://pinucleus.eastus.cloudapp.azure.com/api/v1/pods, true);
  xhr.setRequestHeader("Content-Type", "application/json");
  xhr.setRequestHeader("Authorization", "Bearer " + apiKey);
  xhr.onload = function() {
    switch(this.status) {
      case 200:
        //print out pod data to console
        console.log(xhr.response);
        break;
      case 401:
        // token has expired! Need to request a new one before we can access pod information.
        break;
    }
  };
  xhr.send();
}
```



**To test out a request for a Token:**

1. Click on the link to the amobeartls REST API.

**Note:** Bookmark this link for future use.

2. From the **Token** field, click the **POST** parameter.
3. Click **Try it out**.
4. Enter your registered email and password as POST parameters.

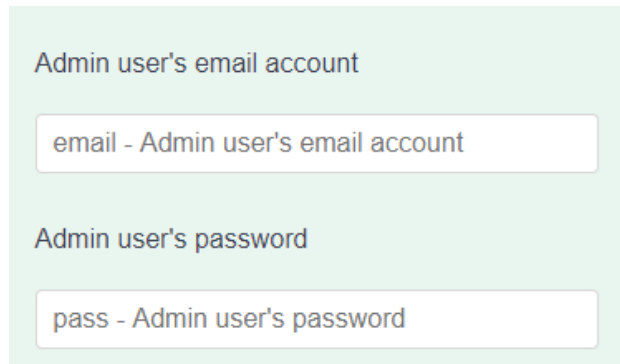


Figure 1: Email and password as POST parameters

5. Then click **Execute**.  
A box will appear showing the output of the request, including the new token.
6. From the main API page, click the **Authorize** button.



Figure 2: Authorize button

The Available authorizations window opens.

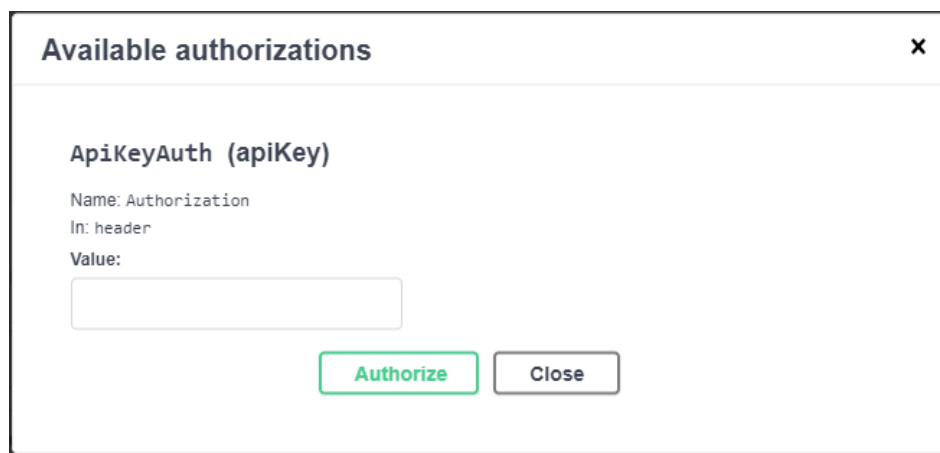


Figure 3: Available authorizations window

7. In the Available authorizations window, enter "Bearer plus your new token".  
For example: Bearer 453498x9c8g0df980980958e989f89fgcvbv9b

**Note:** "Bearer" is text that the API expects when you send for a token, similar to a label.



8. Click **Authorize**.

You now have access to the amoebaRTLS REST API. This access is good for 10 hours. After 10 hours or if you exit the API, you will need to request a new token.

If you receive an error after you click Authorize, review the information you entered and try again.

## Contact Us

---

Contact Position Imaging Technical Support with any questions:

Email: [support@position-imaging.com](mailto:support@position-imaging.com)

Phone: 1-855-662-8777