

# REST API

## Overview

The Orange Tracker (OT) system contains an add-on to allow REST API. This allows users to develop an integration with OT and other applications they maintain. This integration can fetch information and display it within another system, create new items within OT, or edit current information within the OT system. This document will outline to basics of the add-on and how to obtain additional information.

## Authentication

Currently authentication for the Orange Tracker REST API is offered in two methods:

- OAuth (1.0a) - A token based method. This method is preferred as it is more flexible and secure.
- Basic (via SSL) - This method is easier to implement and can be used for certain scripts.

OAuth is the preferred method as it is more secure. There is more documentation online about security, <https://developer.atlassian.com/server/jira/platform/security-overview/>

## OAuth

To set up OAuth, you'll need to contact and work with the ITS AASC AAP team in order to get your token assigned to the account. They can be reached at [jira@syr.edu](mailto:jira@syr.edu)

You'll need do the following steps:

- Create private and public RSA keys
- The OT admins will take the public key and create an Application Link in Orange Tracker
- Generate a Request token and submit it to OT in order to generate an Access token. You'll need to do this part as the OT user you want the token assigned to.

Documentation on this process can be found here: <https://developer.atlassian.com/server/jira/platform/oauth/>

There is also a repository of code and examples on how to set up OAuth within a number of different programming languages, like Java, NodeJS, Python, and PHP. There are also examples using Google Web Toolkit (GWT), Perl, and Ruby. The code is located here: <https://bitbucket.org/atlassianlabs/atlassian-oauth-examples/>

## Basic

Basic authentication uses an user account to call the API methods. This method is less secure as it sends the user credentials in the URL string. For more information, please see the following page: <https://developer.atlassian.com/server/jira/platform/basic-authentication/>

## Methods

The REST API has a number of methods to call. These methods allow you to remotely manage the data within OT. For example, the REST API has methods to:

- Create an issue ticket from a web form
- Display open issue tickets within your web page
- Extract certain issue tickets to import into another system

For more information on the REST API and the methods it contains, please refer to the following link: <https://docs.atlassian.com/software/jira/docs/api/REST/7.7.2/>

## Additional Information

The ITS AASC AAP team is available to assist users with getting tokens and access into the OT system. If you have any issues, or general questions, please send an email to [jira@syr.edu](mailto:jira@syr.edu)