

The Python and the Postman

REST APIs For Beginners

Forward-Looking Statement

Statements regarding our product development initiatives, including new products and future product upgrades, updates or enhancements represent our current intentions, but may be modified, delayed or abandoned without prior notice and there is no assurance that such offering, upgrades, updates or functionality will become available unless and until they have been made generally available to our customers.



About Me

- Blackboard's Partner Software Engineer/5yrs+
- Former Blackboard Learn Admin & Dev @ CSU Chico
- Scientist/Engineer @ Hewlett-Packard
 - Report Generation System and Method, US Patent# 7031979
- Grandfather, 6X marathons, hiking & gaming
- Into Science Fiction

Agenda

REST Application for Blackboard Learn

- Register App on Developer Portal
- Integrate App With Blackboard Learn

Postman

- Authenticate
- Make REST API calls to Blackboard Learn

Python

- Use M.D's BbRest Python package to make REST API calls to Blackboard Learn

REST Application for Blackboard Learn

Register and Setup

Register on developer.blackboard.com

The screenshot shows a web browser window for developer.blackboard.com. The address bar displays the URL. The top navigation bar includes links for Apps, Bookmarks, and various saved items like 'Bb REST Entitlements', 'BbBdWork', 'Docker', and 'DevCon2020'. Below the navigation is a secondary menu with links for Blackboard, Community, Explore APIs, My Apps, and My Groups. On the right, there are 'My Account' and 'Logout' buttons. The main content area features a large heading 'Manage Your Applications'. Below it, there are two tabs: 'My Applications' (which is selected and highlighted in purple) and 'My Site Registrations'. A callout text 'Click (+) to Register a New Application' points to a blue plus sign button. A descriptive paragraph explains the functionality of managing applications. The background of the page has a space-themed graphic with stars and a planet.

developer.blackboard.com/portal/applications

Blackboard Community Explore APIs My Apps My Groups My Account Logout

Manage Your Applications

Text

My Applications My Site Registrations

Click (+) to Register a New Application

(+)

You may edit an application's Name and Description. You can view the Schools using your application. You may also request your Application Key. Finally, you may also delete your application.

- No LTI Needed For This Workshop
- Domains: localhost[,<any domains your app may run on>]

Register on developer.blackboard.com

The screenshot shows a web browser window for developer.blackboard.com. The URL in the address bar is developer.blackboard.com/portal/applications/create. The page title is "Blackboard". The navigation menu includes "Community", "Explore APIs", "My Apps", and "My Groups". On the right, there are links for "My Account" and "Logout". The main content area displays the creation of a new application named "ABbRestApp". It shows a section titled "Important note!" with the text: "The secret and tool private key are only shown once. Make note of the application key, secret and tool private key and store them in a safe and secure location." Below this, three fields are shown: "Application key" (18849c74-7c2a-464a-94e7-db2a024ffeb6), "Secret" (MdU3hf9sBzdmW05QXxQwKrX179QwlbdE), and "Application ID" (3d8575d7-0b89-4d84-882b-88cbc64b8849). Each field has a "Copy" button to its right.

- PAUSE!!
- Save This Information

Setup on Learn

Administrator Panel

REST API Integrations

Create Integration

Create Integration

* Indicates a required field.

GENERAL INFORMATION

* Application ID

appId from registration

* Learn User

user/sysrole => entitled

Browse...

* End User Access

Yes No

* Authorized To Act As User

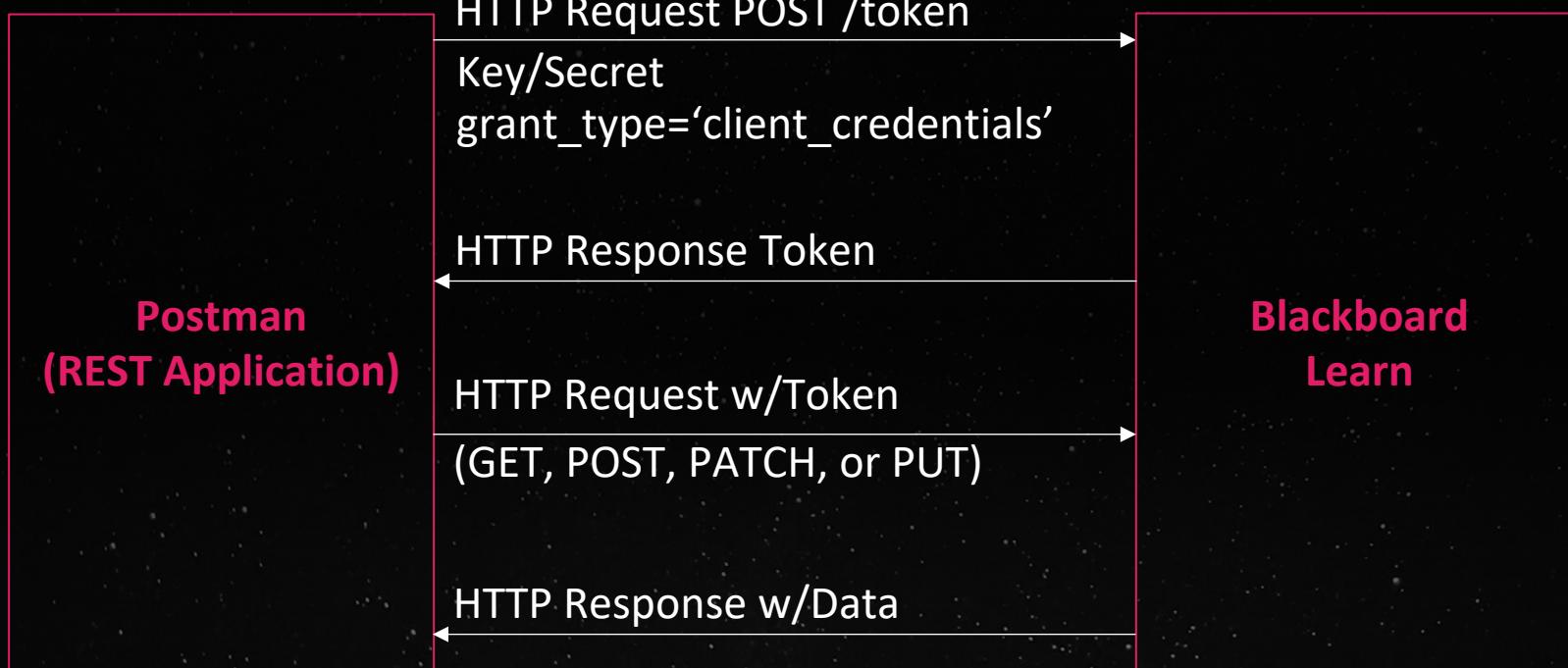
Yes No Service Default (No)



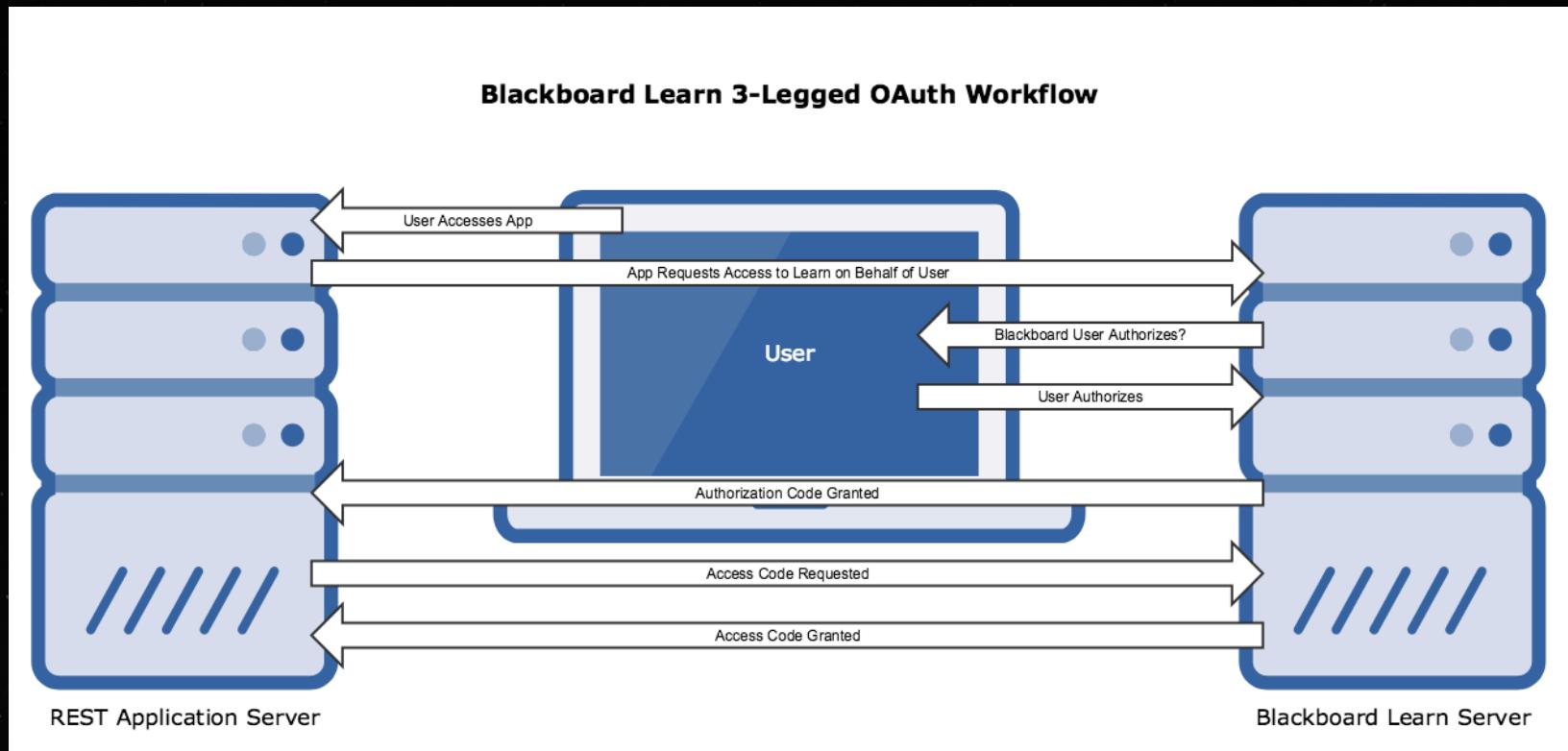
Postman

<https://www.postman.com/>

Authenticate - Two-legged



Authenticate - Three-legged



Postman Demo!

Import Blackboard Learn APIs

Two-legged OAuth 2

REST API Requests

Three-legged OAuth 2

REST API Requests

DEVCON 20



Python

BbRest is Your Friend!

Python

Python

Python is a programming language that lets you work quickly and integrate systems more effectively.

<https://www.python.org/>

BbRest

Blackboard REST APIs... for humans? (TM)

<https://github.com/mdeakyne/BbRest>

A Match Made In Heaven

For Python Developers Making REST API Request To Blackboard Learn

Python & BbRest Demo!

The Code!

<https://github.com/mark-b-kauffman/bbrest-devcon2020>

Questions?

DEVCON 20