

DEVCON (20)

# 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

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- 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

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# REST Application for Blackboard Learn

Register and Setup

# Register on developer.blackboard.com

developer.blackboard.com/portal/applications

Blackboard Community Explore APIs My Apps My Groups My Account Logout

## Manage Your Applications

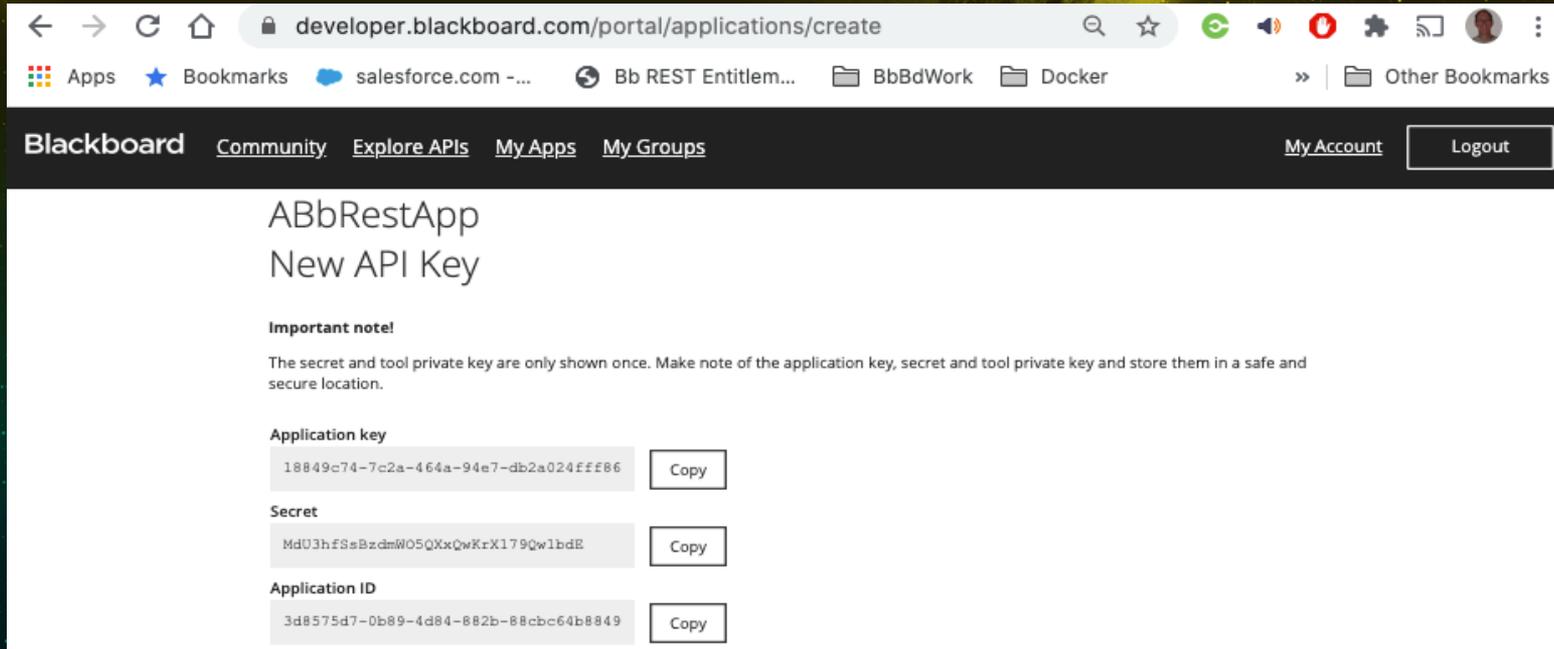
Click (+) to Register a New Application

My Applications My Site Registrations

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 at the URL `developer.blackboard.com/portal/applications/create`. The page title is "ABbRestApp New API Key". Below the title, there is an "Important note!" section stating: "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 note, there are three rows of information, each with a text field and a "Copy" button:

- Application key:** `18849c74-7c2a-464a-94e7-db2a024fff86`
- Secret:** `MdU3hfSsBzdmW05QXcQwKrXl79Qw1bdE`
- Application ID:** `3d8575d7-0b89-4d84-882b-88cbc64b8849`

- PAUSE!!
- Save This Information

# Setup on Learn

Administrator Panel REST API Integrations Create Integration

## Create Integration

\* Indicates a required field.

### GENERAL INFORMATION

\* Application ID

\* Learn User

\* End User Access  Yes  No

\* Authorized To Act As User  Yes  No  Service Default (No)

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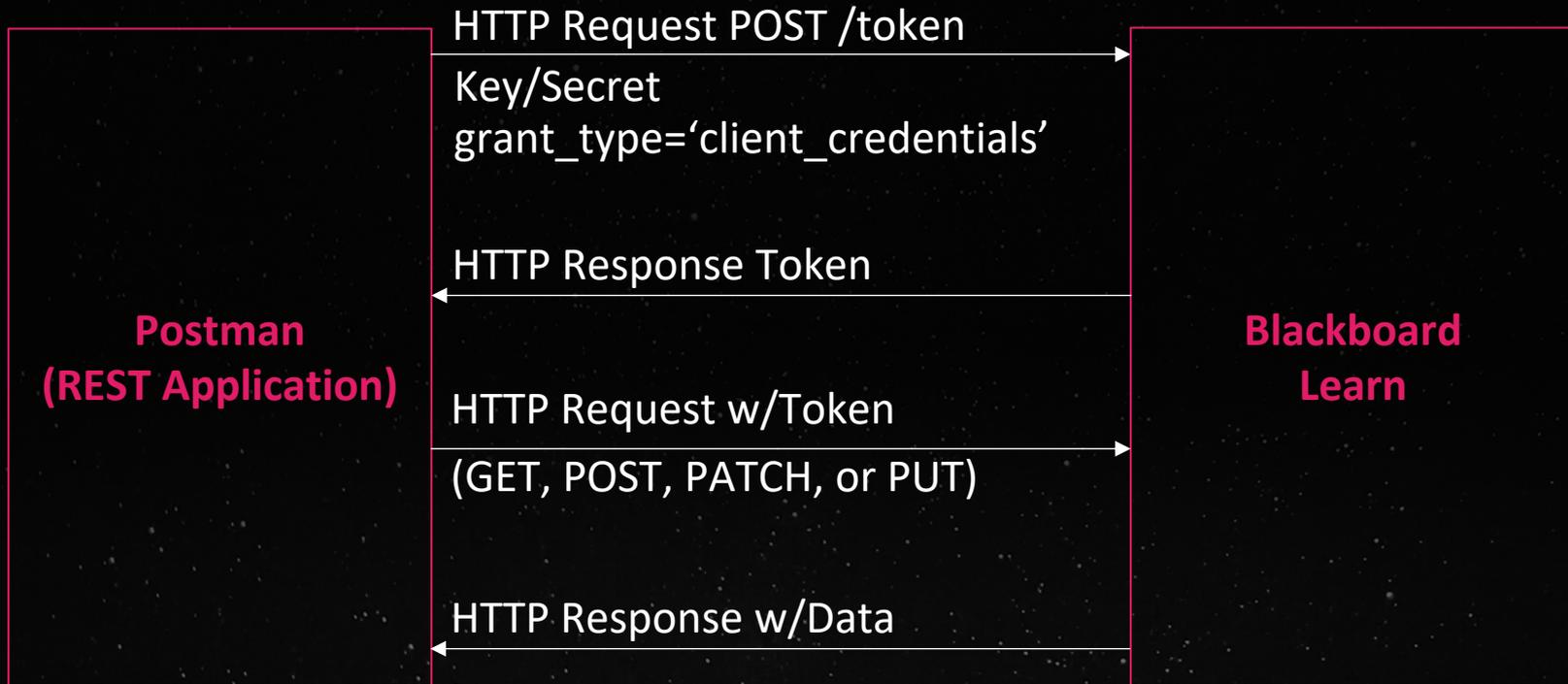


POSTMAN

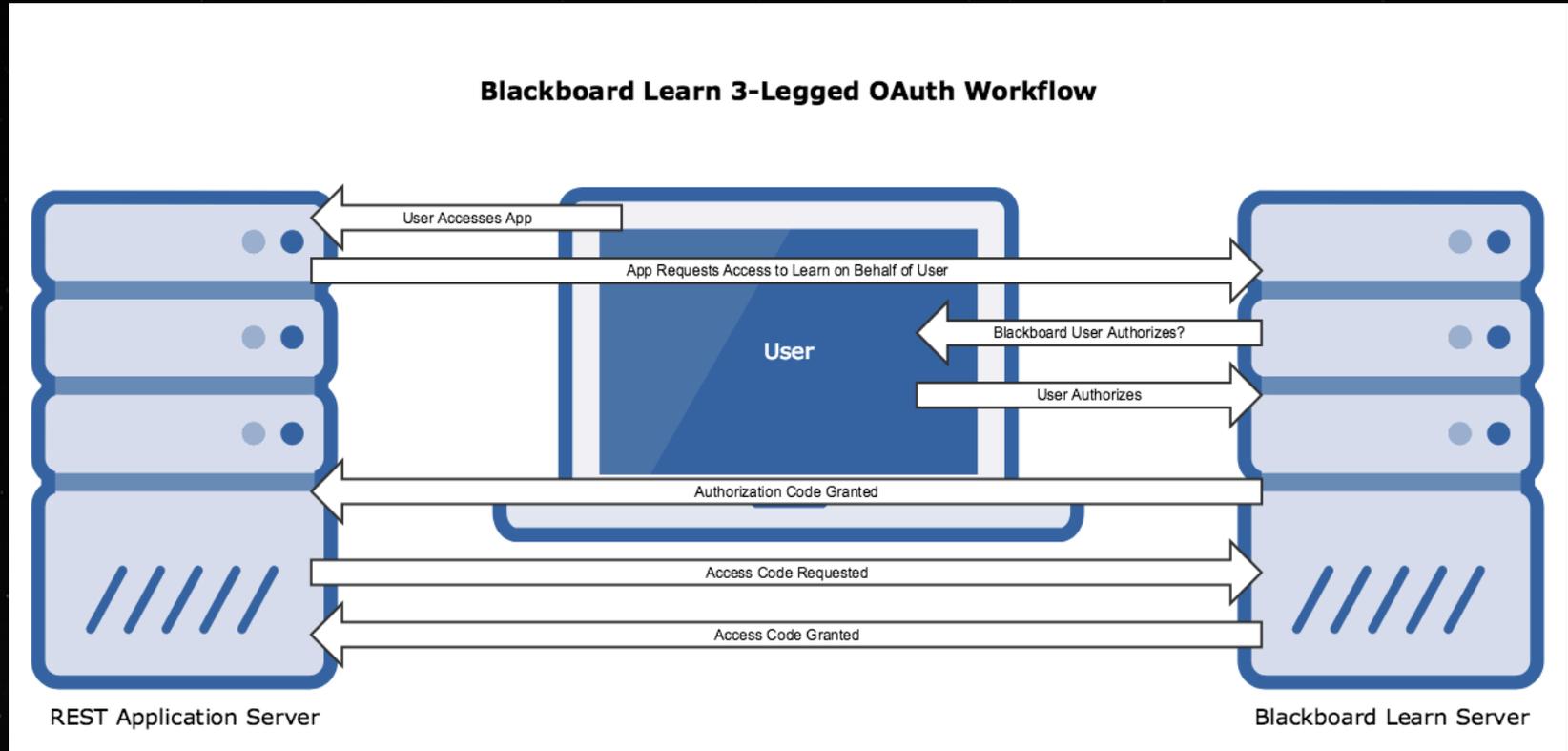
# Postman

<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

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# Python

BbRest is Your Friend!

Blackboard

#BbWorld20

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

Blackboard

#BbWorld20