

Integrating Custom Node.js Webhooks with GitHub

Introduction to Integrating Node.js Applications with GitHub



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What Are Webhooks?

Transmission of structured JSON / XML data to a specified URL

URL contains custom "listener" script

Similar concept to event / callback architecture in JavaScript

Webhooks and GitHub Explained



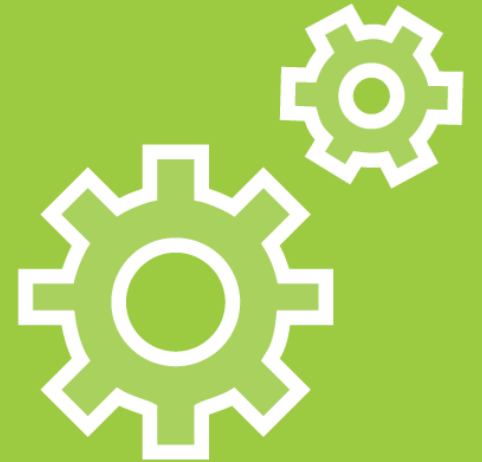
GitHub sends POST
request of data to
any URL



URL can direct to
Heroku app or local
machine



Payload contains
action and
repository info



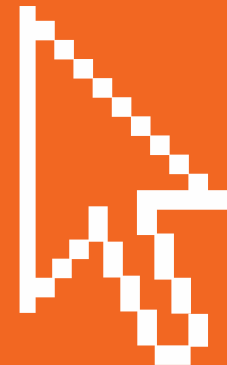
Can run any custom
Node.js script

Creating a Simple Webhook in Node.js

POST listener created with Express

Heroku will be used to quickly deploy
webhook

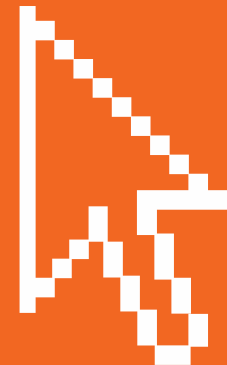
Webhook will output payload contents
to log



Enabling Webhooks

Webhooks can be added by administrators via repository control panel

External webhooks created by integrations should not be edited



Webhook Applications

Webhooks essential
for creating custom
GitHub integrations

Code pushes can
trigger pull
requests (Heroku)

Interact with
mechanical objects
(lights, buzzer) via
Arduino + NodeJS

Work with
repositories in
granular detail

Webhooks Summary

Useful for anything not covered by 3rd-party integrations

Most low-level dev-ops tool available

Integrate closely with GitHub