SF JavaScript Meetup May 2018

From Zero to Chatbot mini workshop

Twitter: @tessamero

Tessa Mero, Developer Evangelist, Cisco DevNet

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Agenda

- What are Chat Bots?
- What are the Benefits?
- Integrations vs Bots
- Getting Started with a Collaboration API
- Create a Chat Bot
- Using Deployment Services
- Creating a Webhook
- Testing Your Bot!

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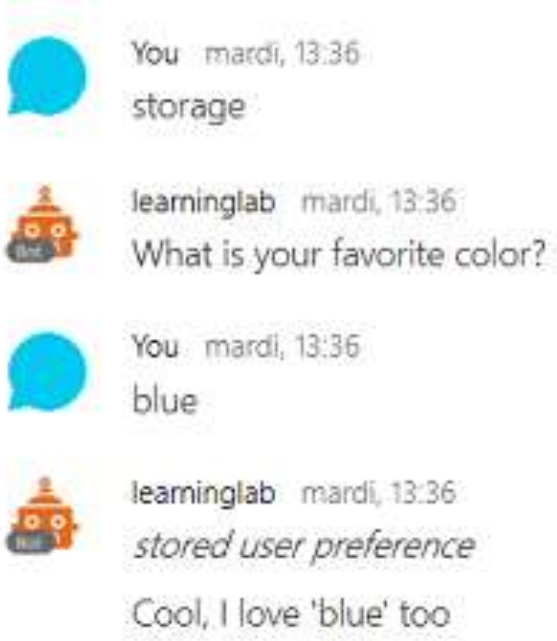
What You Will Need:

- Cisco Spark API Account: https://developer.webex.com/
- Create Heroku Account: https://heroku.com
- JSON Viewer (optional): http://tiny.cc/json-viewer
- Github Account: https://github.com
- Heroku Alternative (local tunnels): Localtunnel.me or ngrok.com

Objective



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What are Chat Bots?

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Clippy!

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Messages
Mail
Phone
What can I help you with?

amazon
amazon
amazon
amazon

CIRCUIT BREAKER \ TECH \ TRANSPORTATION

Watch Amazon's Alexa summon a Tesla Model S out of a garage

22

by Tom Warren | @tomwarren | May 6, 2016, 6:59am EDT

NOW TRENDING

MacBook Pro with Touch Bar review: a touch of the future

Bloomberg Markets

Carney Tells MPs Drop in Pound Is Due to Outlook for Slowe

The Bot Economy Is Growing Even Faster Than the App Economy Did

Apps are so 201

The Bot Economy

A new economic system is on the way.

What does that system look like? Obviously, it's very hard to see what is going to replace industrial, financial capitalism while we are still *inside* of the system.

INVESTOR'S BUSINESS DAILY

NEWS

MARKET TREND | STOCK LISTS | RESEARCH | NEWS | IBD VIDEOS | HOW TO INVEST | LEADERBOARD

TECHNOLOGY

Facebook Upside Coming From Growth of 'Bot Economy,' Says Citi

Geektime Locations Categories Startups News

What are the opportunities and legal challenges in the bot economy?

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What are the Benefits?

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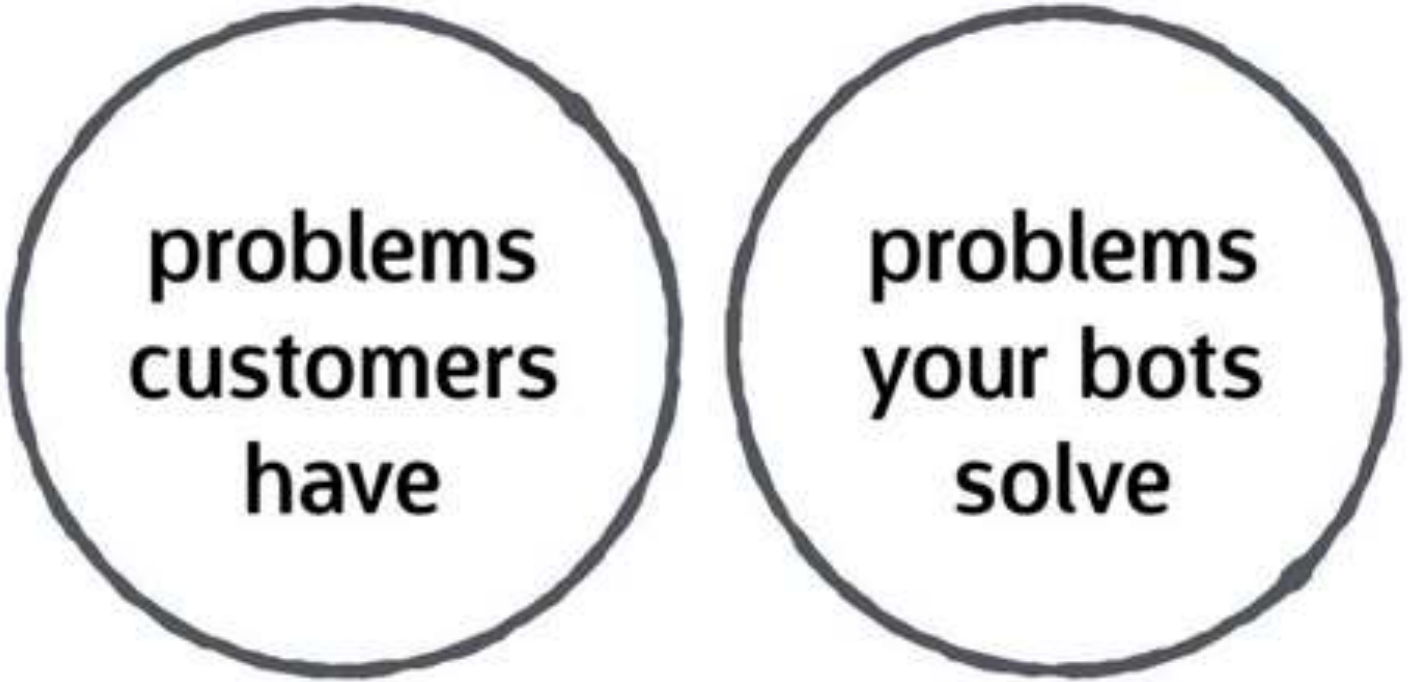

David J Bland @davidjbland · Apr 26

I've analyzed the Silicon Valley Bot Startup trend and created a handy venn diagram to help explain it.

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SmartSheet (smartsheet@sparkbot.io)

Bot by Gupshup

Productivity | Docs Management | Other

The Smartsheet bot sends you notifications whenever there is a change in your Smartsheet

Add to Room

Published Oct 27 2016

Developer Support

Developer Privacy Policy

Developer Website

Set alerts with the smartsheet bot and you will be notified for every changes you make in your smartsheet.

Triggers:

1. AUTH - For authorizing the bot in Smartsheet
2. CAE - For creating and enabling bot alerts.
3. CRE - For creating bot alerts.
4. ENA - For enabling pre-created bot alerts.
5. DEL - To delete pre-created alerts.
6. LIST - To get list of bot alerts with their status.

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MemeBot (bot)

Active 25 minutes ago

You 8:12 PM

we will test, in production! | insanity wolf

MemeBot (bot) 8:12 PM

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Integrations vs Bots

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An integration acts as YOU and can see and do the things you can do.

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Out of Office Assistant is requesting the following:

- Post and delete messages on your behalf
- List the titles of rooms that you're in
- List the people in rooms that you're in
- Read the content of rooms that you're in
- Manage rooms on your behalf
- Read your profile and your company directory
- Invite people to rooms on your behalf

Decline | Accept

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Scopes

Scopes define the level of access that your integration requires. Learn more

- [x] `spark:people_read` Read your users' company directory
- [x] `spark:rooms_read` List the titles of rooms that your user's are in
- [ ] `spark:rooms_write` Manage rooms on your users' behalf
- [x] `spark:memberships_read` List people in the rooms your user's are in
- [ ] `spark:memberships_write` Invite people to rooms on your users' behalf
- [ ] `spark:messages_read` Read the content of rooms that your user's are in
- [ ] `spark:messages_write` Post and delete messages on your users' behalf
- [ ] `spark:teams_read` List the teams your users are in
- [ ] `spark:teams_write` Create teams on your users' behalf
- [ ] `spark:team_memberships_read` List the people in the teams your user's belong to
- [ ] `spark:team_memberships_write` Add people to teams on your users' behalf
- [ ] `spark-admin:people_read` Access to read your user's company directory

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A bot appears as another member of the room, but can only see messages that mention it.

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Getting Started with a Collaboration API – Webex Teams API

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Secure https://developer.webex.com

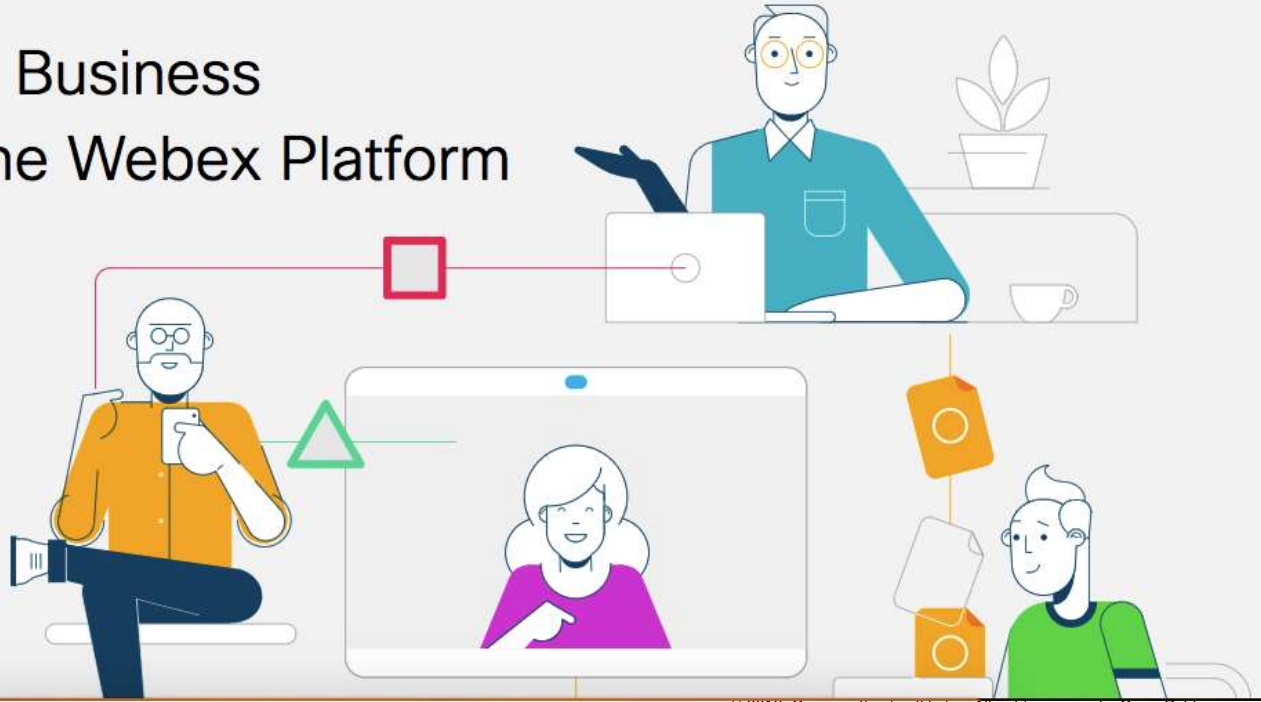
Apps | Cisco | Important Links | Cool Links | Resources | Read Later | Cisco Vendor Proce... | Meetings | Measuring Success | Evangelists Depot -... | Submit Event - Sm...

Cisco Spark for Developers is now Cisco Webex for Developers! Learn More.

Cisco Webex
for Developers

Docs Blog Support

Build the Future of Business Collaboration on the Webex Platform



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Create a Free Account

- Create an account at https://teams.webex.com and Login
- Login to https://developer.webex.com

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Creating a Chat Bot

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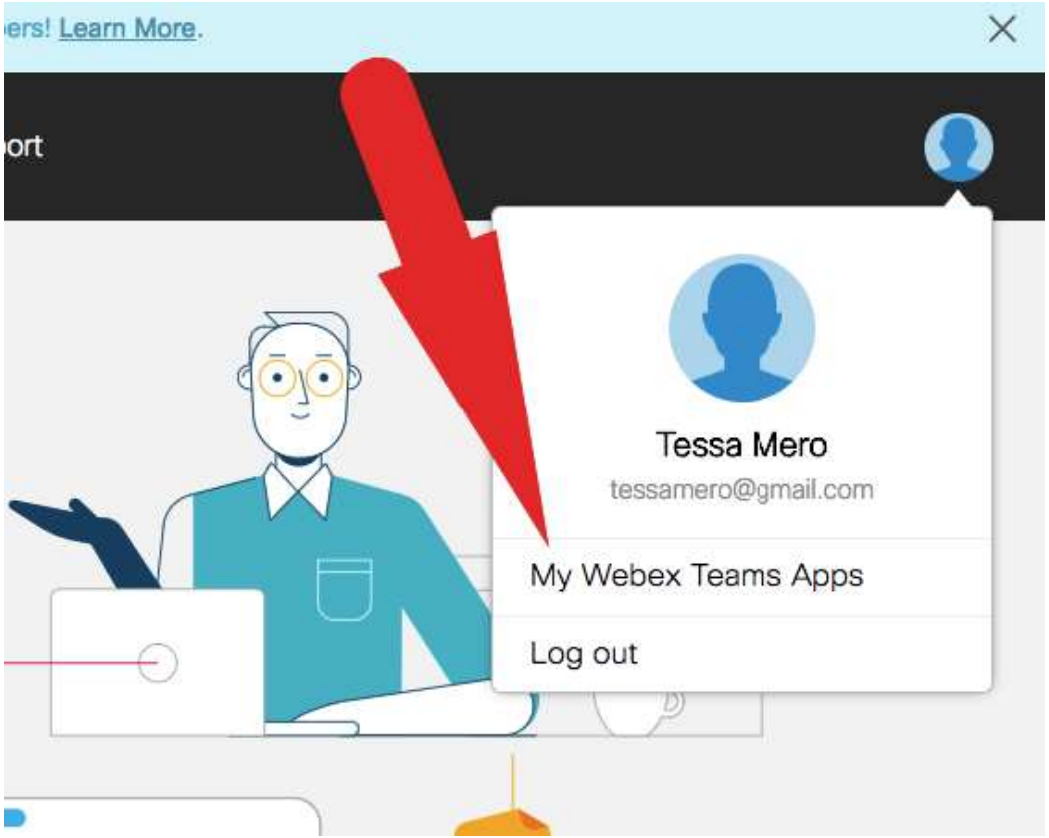
Click on “My Webex Teams Apps”



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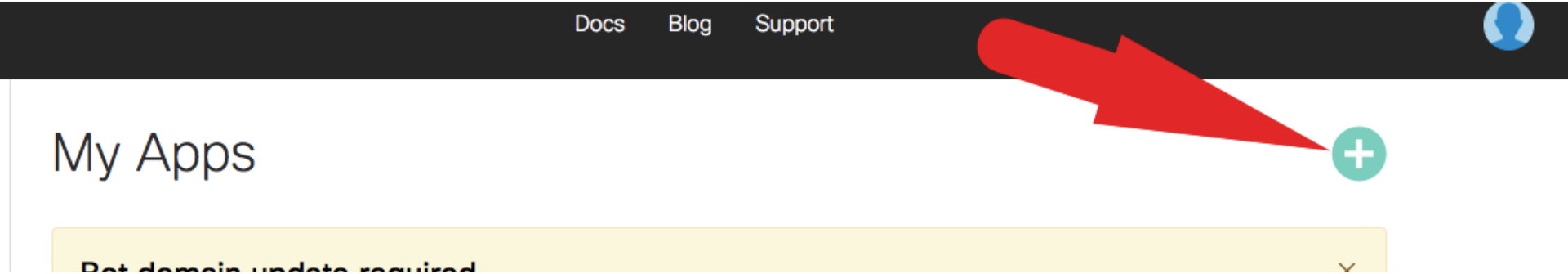
Click on ”+”



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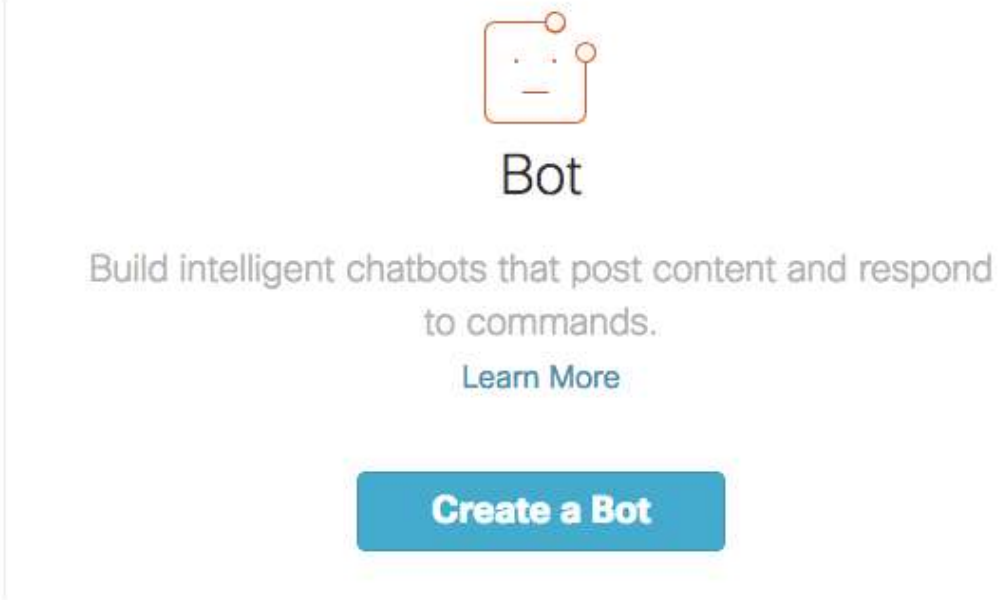
Select ”Create a Bot”



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New Bot

Name*

Name of your bot in 100 characters or less.

TessaBotTest

Bot Username*

The username users will use to add your bot to a space. Cannot be changed later.

tessabottest

@webex.bot ✓

Icon*

Exact size 512 (W) x 512 (H) in jpg or png format.
Upload your own or select from our defaults.

Edit

Description*

Details of what your bot does, how it does, benefits, your business model and how an end user can get started in 1000 characters or less. Bullets and links markdown

Testing a bot

Cis

Copy API Access Token (Not the Bot ID!)

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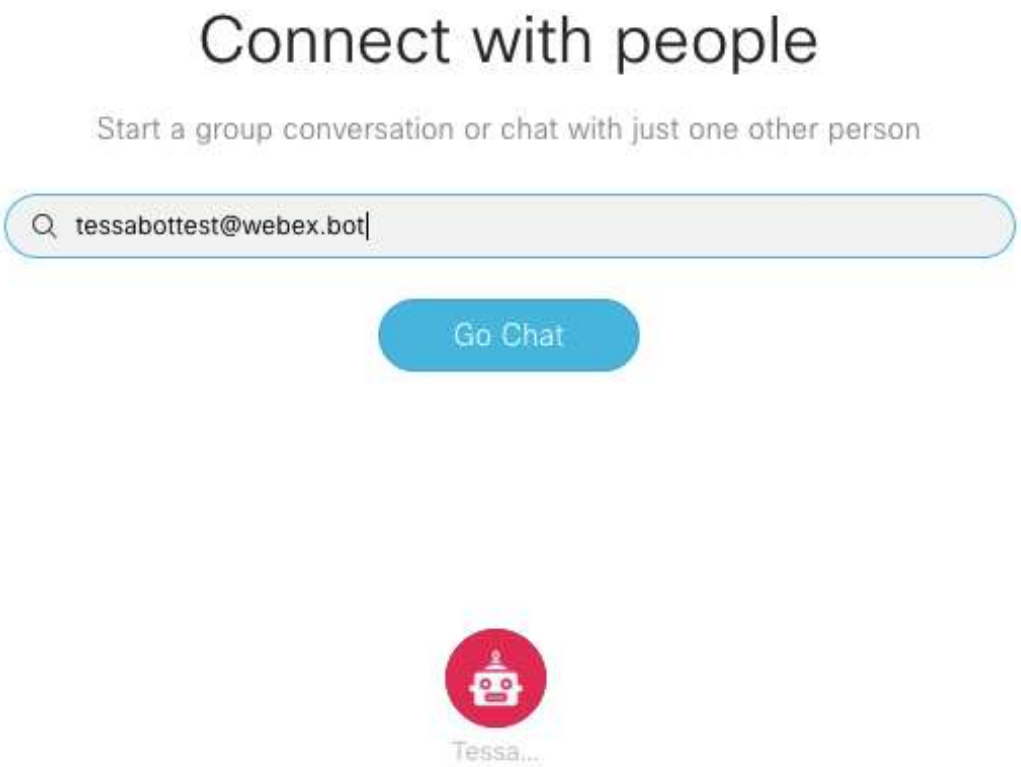
Add Bot to Chat on teams.webex.com



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Deploy a Bot on Heroku

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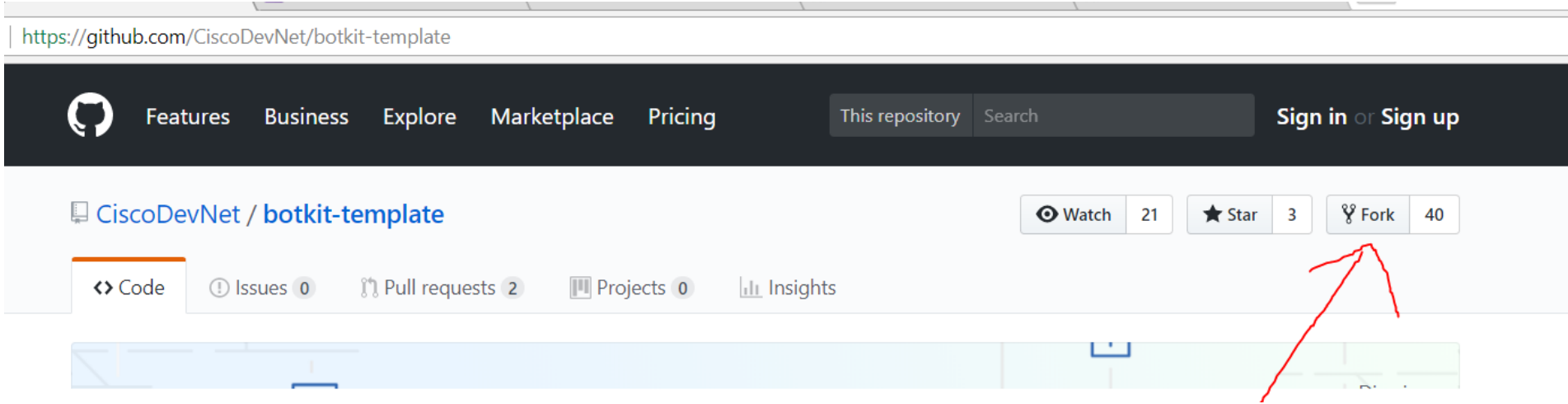
First - Fork the Github Repo

https://github.com/CiscoDevNet/botkit-template



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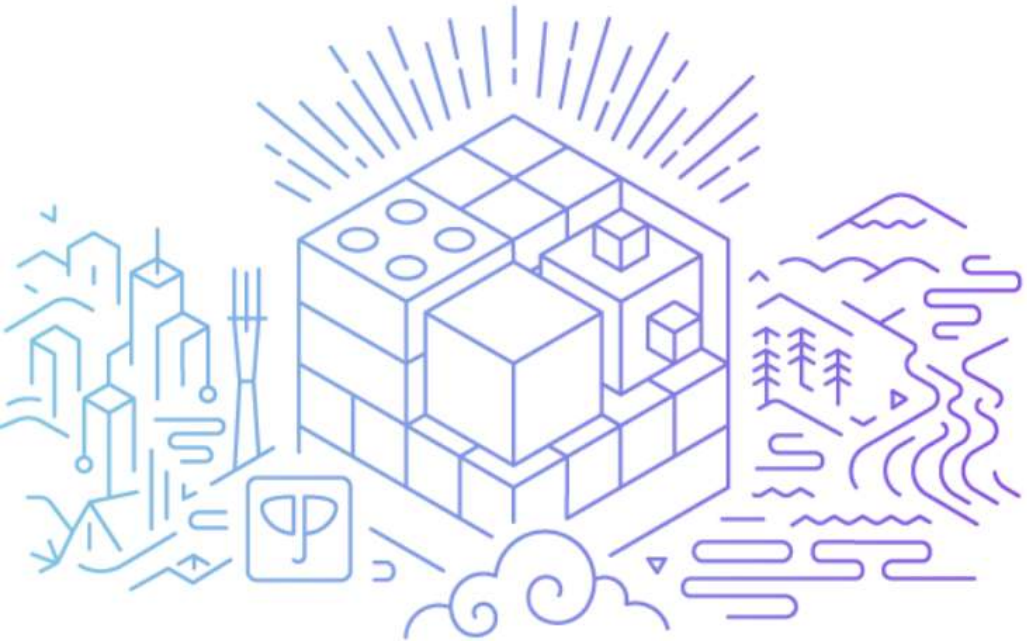
https://www.heroku.com

ucts Elements Pricing Documentation Support More



NEW

Heroku Postgres PGX: New Plans, More Possibilities

We're excited to announce our new lineup of Postgres production plans. PGX Plans introduce larger database sizes, more generous resource allocations, and a broader set of options to suit your needs and to help your applications scale more smoothly.

SIGN UP FOR FREE

Explore Heroku Postgres

Read our Announcement

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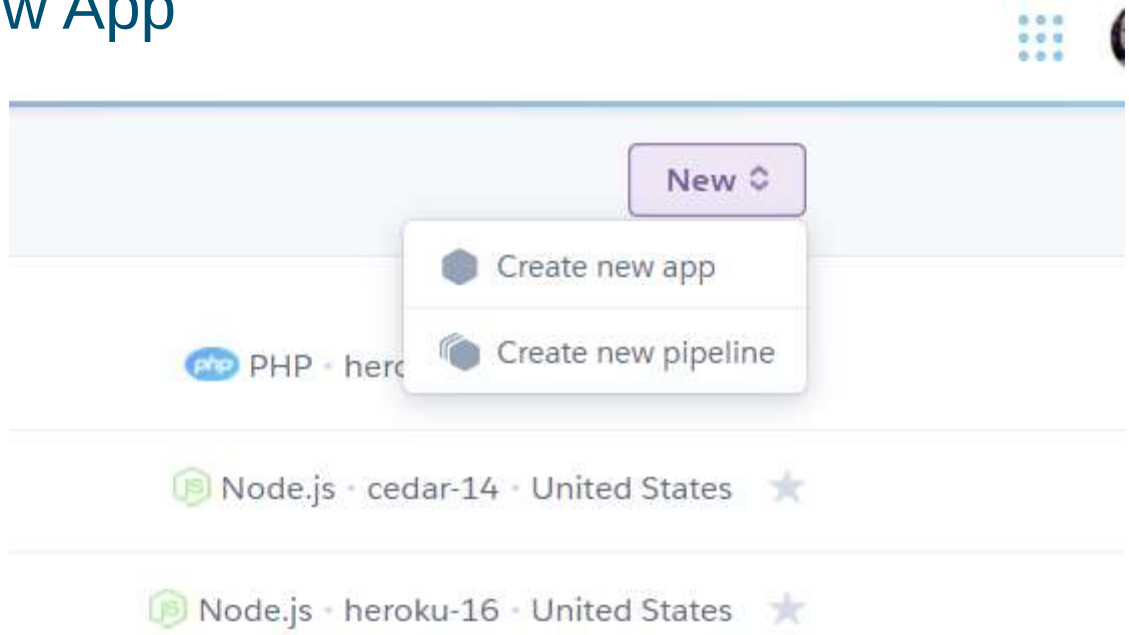
Create New App



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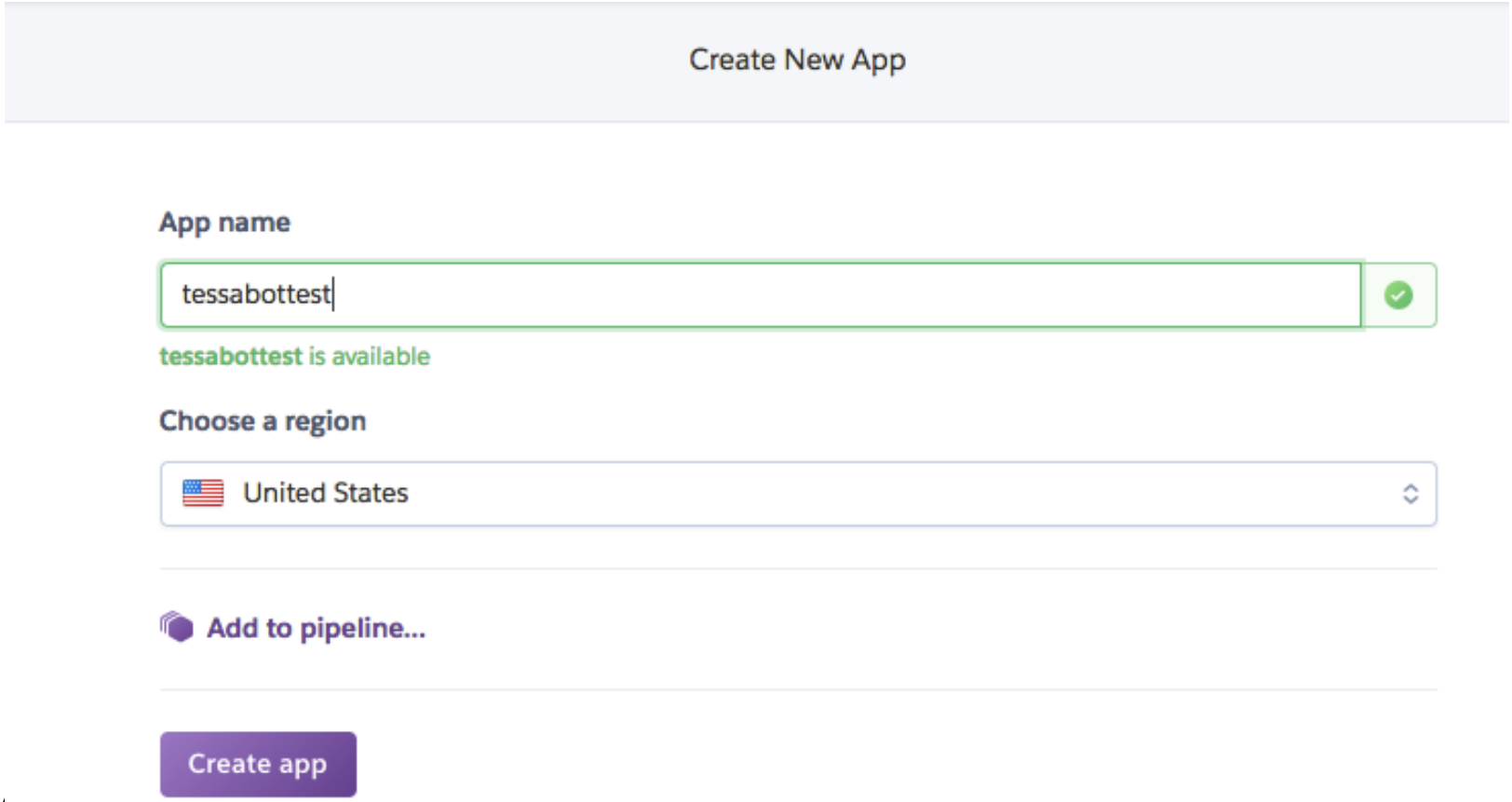
Create App Unique Name



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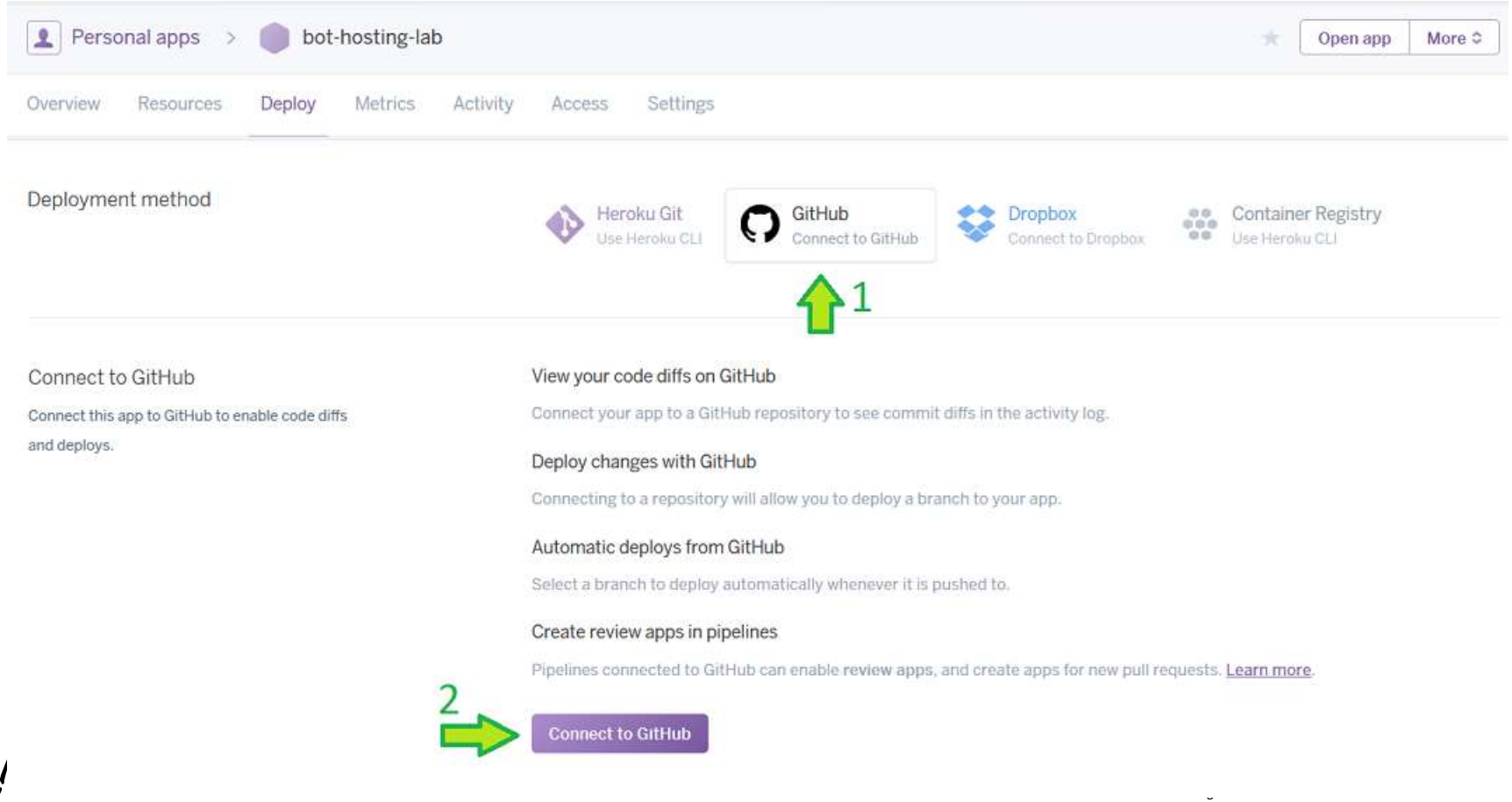
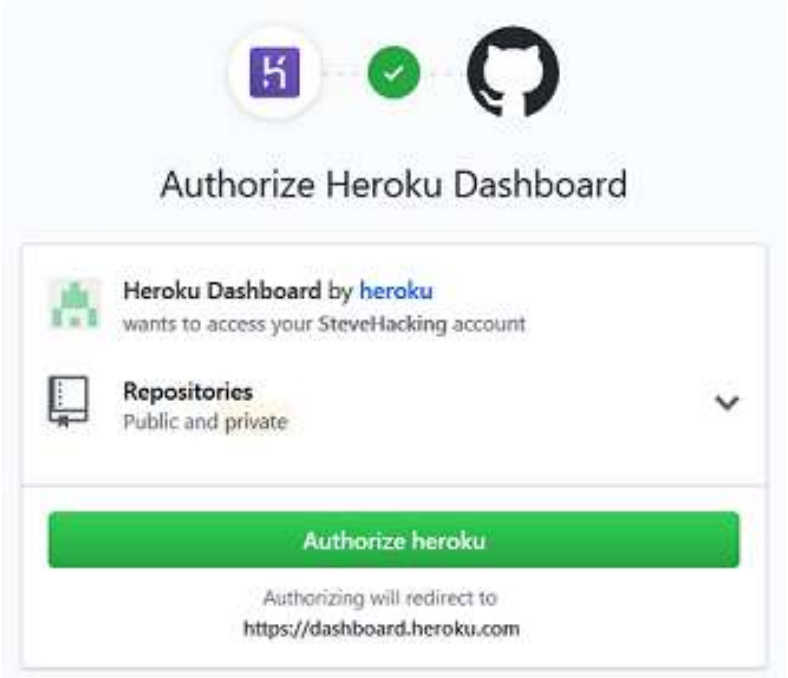
Deployment method: Select GitHub



Authorize GitHub



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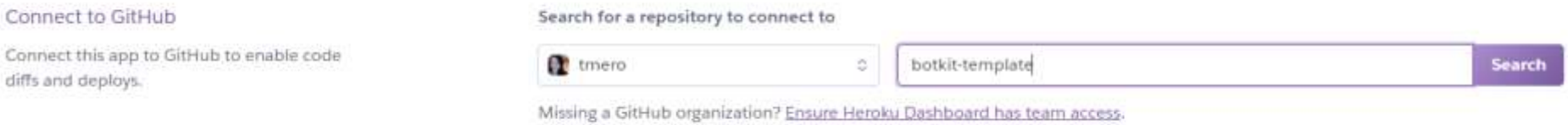
Search for botkit-template repo in your GitHub – Connect!



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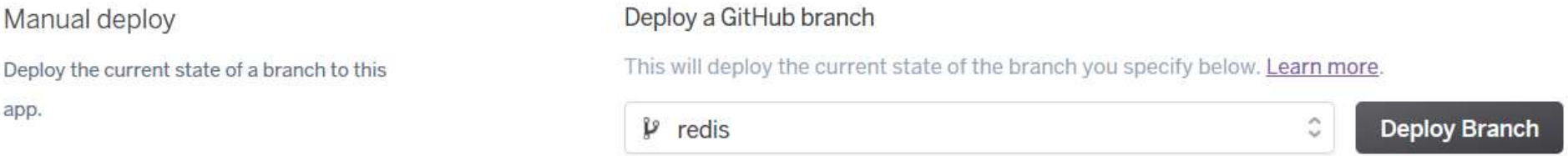
Select “redis” branch – Deploy Branch



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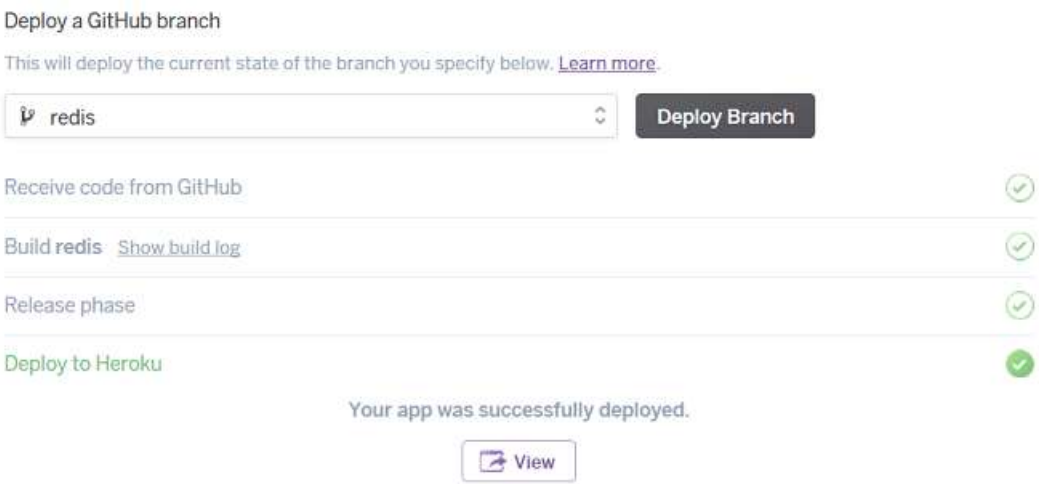
Successfully Deployed – Click View



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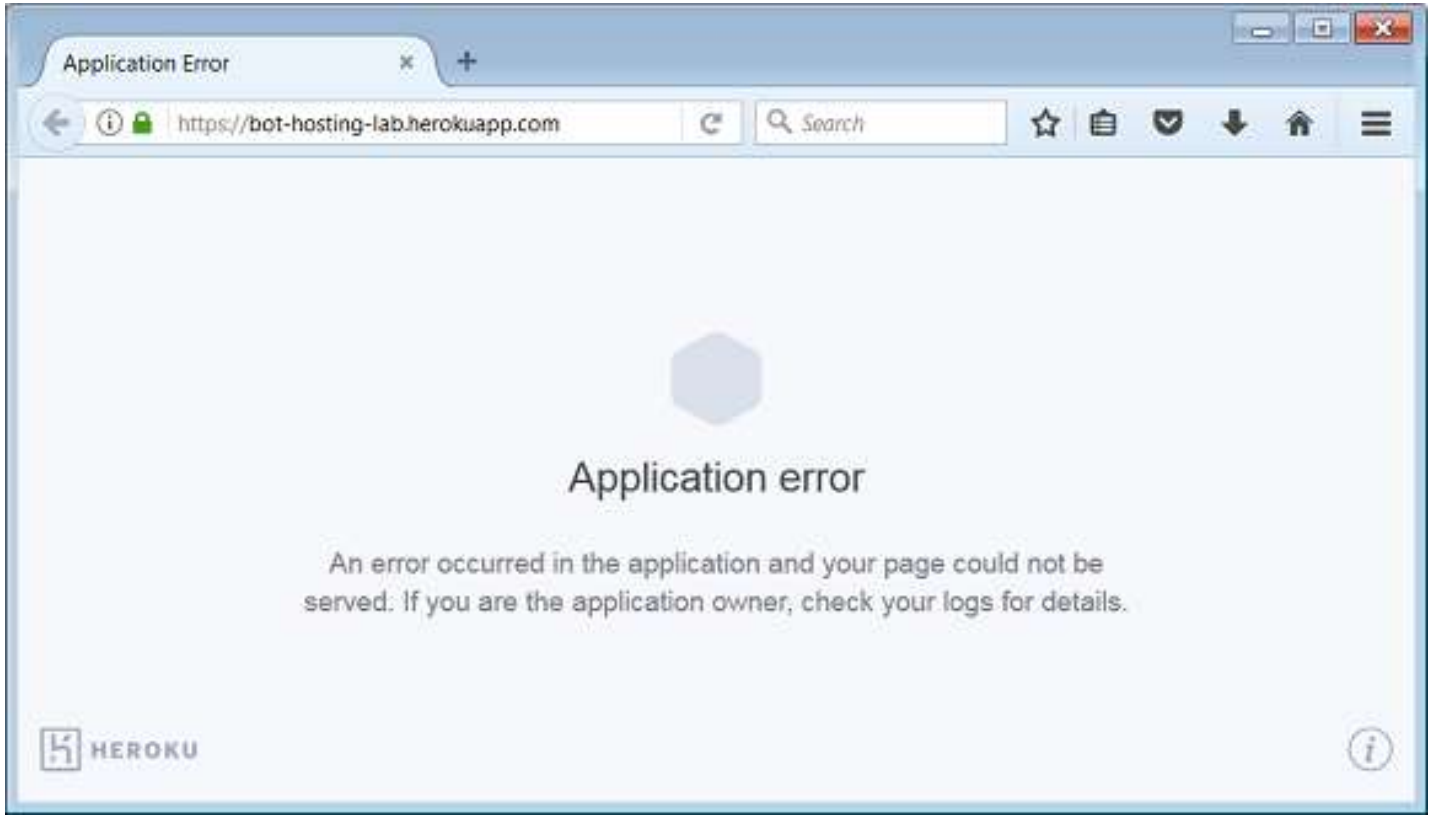
Application error



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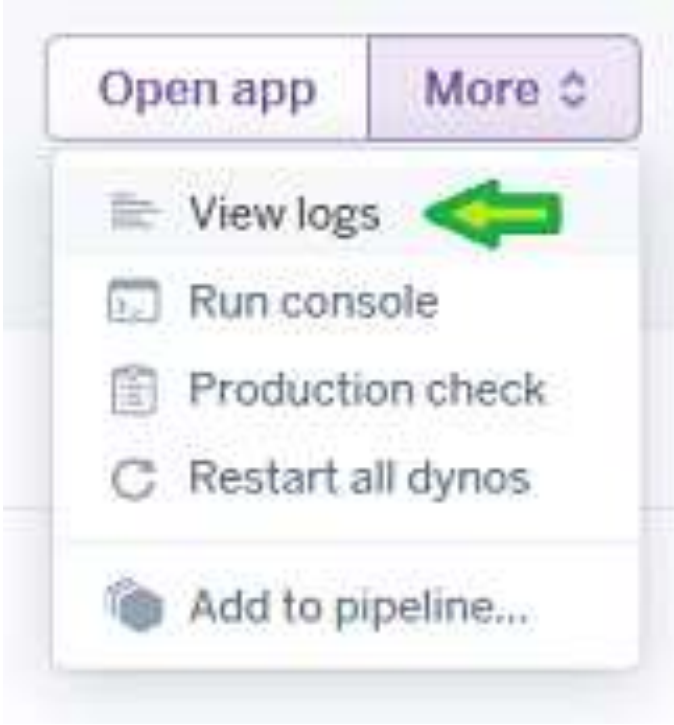
View Error Logs



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View Errors (missing Spark token)

Application Logs

```
2017-09-23T07:24:05.690662+00:00 heroku[web.1]: State changed from starting to crashed
2017-09-23T07:24:05.672572+00:00 heroku[web.1]: Process exited with status 1
2017-09-23T07:24:51.096828+00:00 heroku[web.1]: State changed from crashed to starting
2017-09-23T07:24:55.425122+00:00 heroku[web.1]: Starting process with command `npm start`
2017-09-23T07:25:02.960512+00:00 app[web.1]:
2017-09-23T07:25:02.960526+00:00 app[web.1]: > @0.6.0-redis3 start /app
2017-09-23T07:25:02.960527+00:00 app[web.1]: > node bot.js
2017-09-23T07:25:02.960528+00:00 app[web.1]:
2017-09-23T07:25:03.210237+00:00 app[web.1]: Could not start as bots require a Cisco Spark API access token.
2017-09-23T07:25:03.212596+00:00 app[web.1]: Please add env variable SPARK_TOKEN on the command line or to the .env file
2017-09-23T07:25:03.213229+00:00 app[web.1]: Example:
2017-09-23T07:25:03.213340+00:00 app[web.1]: > SPARK_TOKEN=XXXXXXXXXXX PUBLIC_URL=YYYYYYYYYYY node bot.js
2017-09-23T07:25:03.247424+00:00 app[web.1]:
2017-09-23T07:25:03.292780+00:00 app[web.1]: npm ERR! Linux 3.13.0-123-generic
2017-09-23T07:25:03.296822+00:00 app[web.1]: npm ERR! argv "/app/.heroku/node/bin/node" "/app/.heroku/node/bin/npm" "start"
2017-09-23T07:25:03.296828+00:00 app[web.1]: npm ERR! node v6.11.3
2017-09-23T07:25:03.296828+00:00 app[web.1]: npm ERR! npm  v3.10.10
2017-09-23T07:25:03.296829+00:00 app[web.1]: npm ERR! code ELIFECYCLE
2017-09-23T07:25:03.296830+00:00 app[web.1]: npm ERR! @0.6.0-redis3 start: `node bot.js`
2017-09-23T07:25:03.296831+00:00 app[web.1]: npm ERR! Exit status 1
2017-09-23T07:25:03.296832+00:00 app[web.1]: npm ERR!
2017-09-23T07:25:03.296833+00:00 app[web.1]: npm ERR! Failed at the @0.6.0-redis3 start script 'node bot.js'.
2017-09-23T07:25:03.296833+00:00 app[web.1]: npm ERR! Make sure you have the latest version of node.js and npm installed.
2017-09-23T07:25:03.296834+00:00 app[web.1]: npm ERR! If you do, this is most likely a problem with the  package,
```

☐ Autoscroll with output

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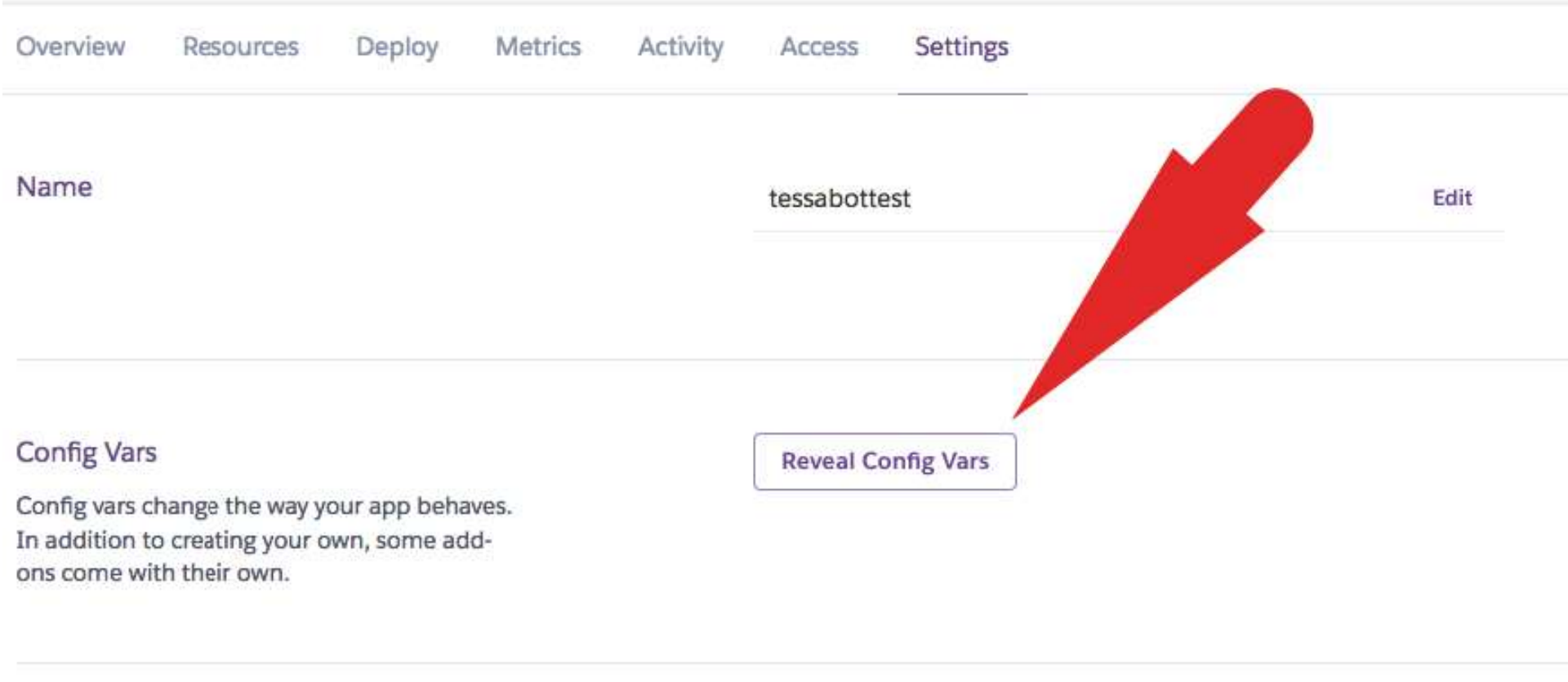
Go to Settings -> Reveal Config Vars



Settings -> Reveal Config Variables -> Config Variables

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Open App (Check if it is working)

```
// 20180530122858
// https://tessabottest.herokuapp.com/

{
  "up-since": "Wed, 30 May 2018 19:28:55 GMT",
  "hostname": "f6e2e10b-0acb-4e28-ba99-b73dacc46710:30011",
  "version": "v0.7.0-redis2",
  "bot": "tessabottest@webex.bot",
  "botkit": "v0.6.14"
}
```


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Create Webhook events

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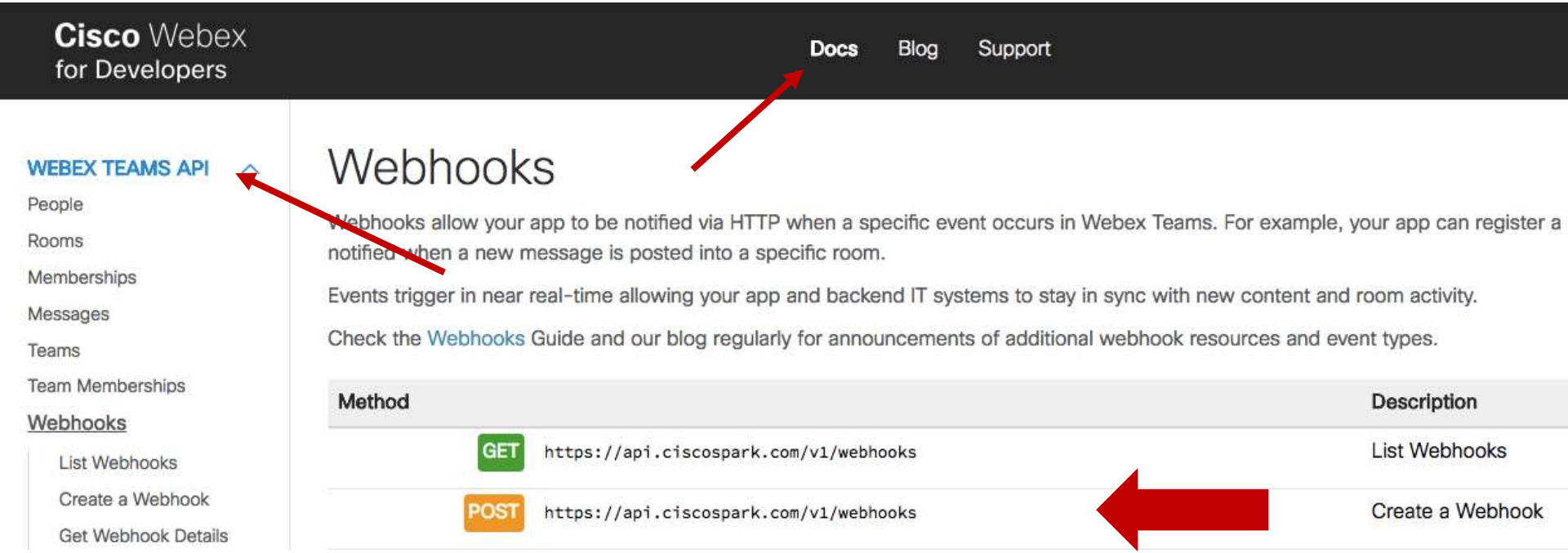
Webhook Documentation – developer.webex.com



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Turn on Test Mode -> Create Webex Webhook

POST https://api.ciscospark.com/v1/webhooks

Request Headers

Content-type	application/json; charset=utf-8
Authorization	Bearer NWMzMGUyOGMtMzdmMC00OWF

Request Parameters

Name	Type	Your values	Required
name	string	Heroku to WebexTeams	✓
targetUrl	string	https://tessabottest.her	✓
resource	string	messages	✓
event	string	all	✓

Request

```
{
  "name": "Heroku to WebexTeams",
  "targetUrl": "https://tessabottest.herokuapp
  "resource": "messages",
  "event": "all"
}
```

200 Success!

- Click “Run”

- See a “200/success” displayed – webhook assigned to unique identifier
- Fired off every time a new message is added to a room your bot is a member of

Presentation ID © 2018 Cisco and/or its affiliates. All rights reserved. Cisco Public

Test Your Webex Teams Bot

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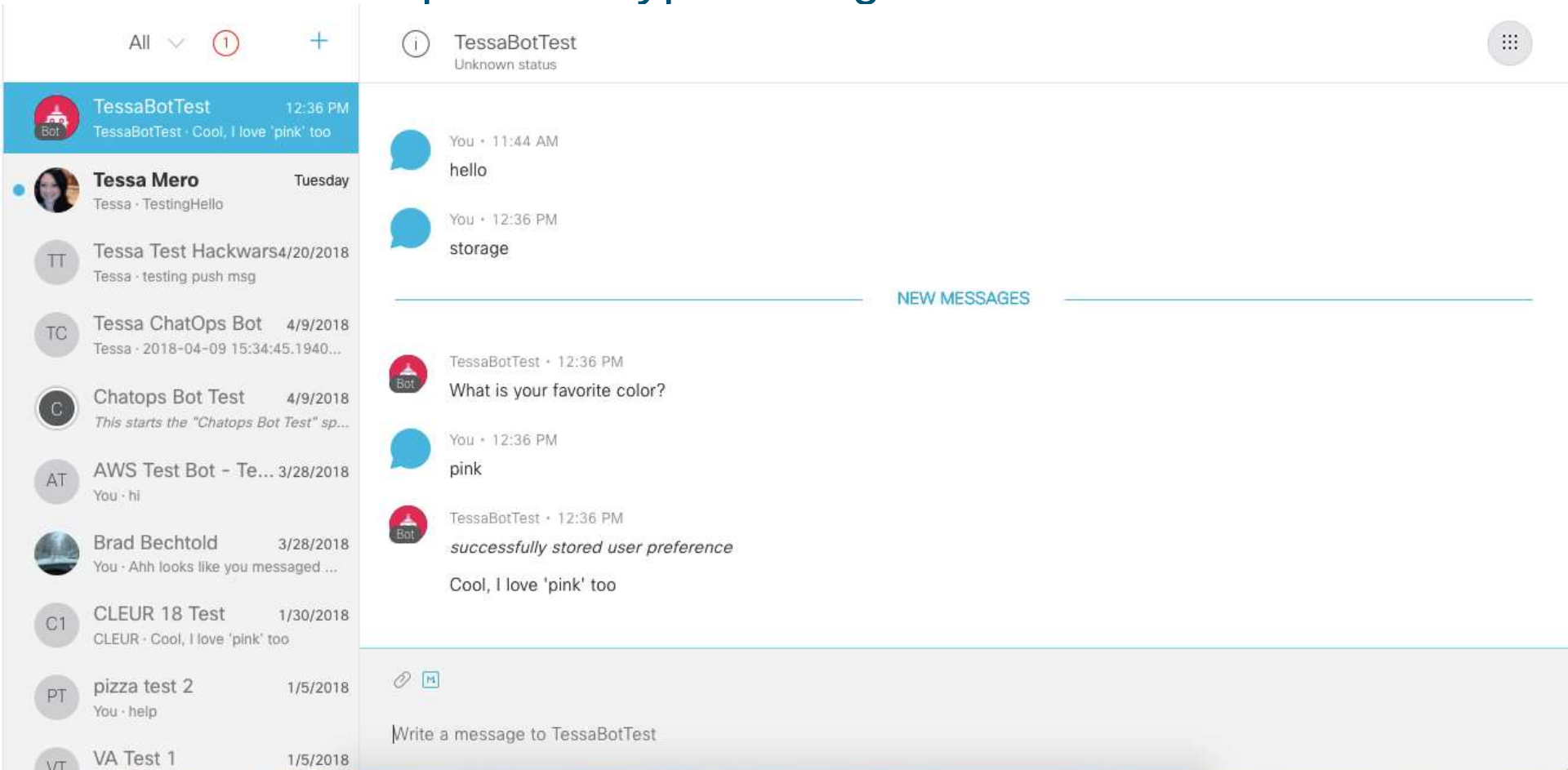
Test Bots Response – type storage



Thank you

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