



## New Splunk Assistant: PwnyBot – Slack Bot

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# Issues that we noticed are...

#inefficiency

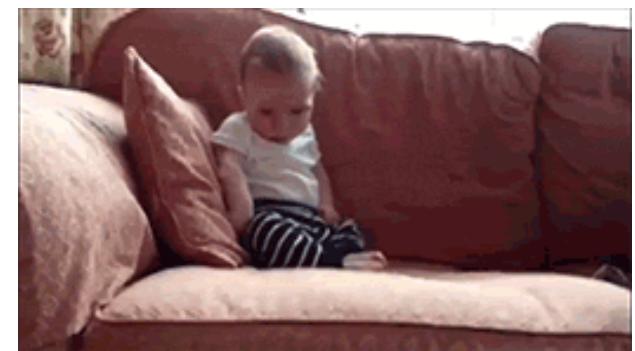
People keep asking the  
same questions over  
and over and over...



Everyone is working  
and may not be able to  
answer you. #busy



People are working in  
different time zones,  
not always connected.



In a Perfect  
World, we  
needed to...

#theholysplunk

1. Increase productivity
2. Share knowledge on the-fly
3. Make it available 24/7, anywhere



**Given Name**

@PwnyBot

**Date of Birth**

8/2/2019 @ 10:18 AM PST

**Job Title**

Your Super Awesome Pwny Bot

**Mission**

Help the Splunk Users & the Community, anytime, anywhere.

**Favorite Quote**

*“Life isn’t always 🌴 & ponies.  
But it should be.”*

Splunk

Hackathon - TE... ▾

Philippe Tang 🌈

Jump to... < >

All Unreads

Threads

Channels +

# general

# pwnybot-demo

+ Add a channel

Direct Messages +

+ Invite people

Apps +

PwnyBot

#pwnybot-demo

☆ | 1 | 0 | Add a topic

Search

Thread # pwnybot-demo

Philippe Tang 🌈 Today at 8:45 PM Hi @PwnyBot

1 reply

PwnyBot APP 7 minutes ago @ptang, <https://gph.is/1pYHG8r>

Giphy (1 MB) ▾

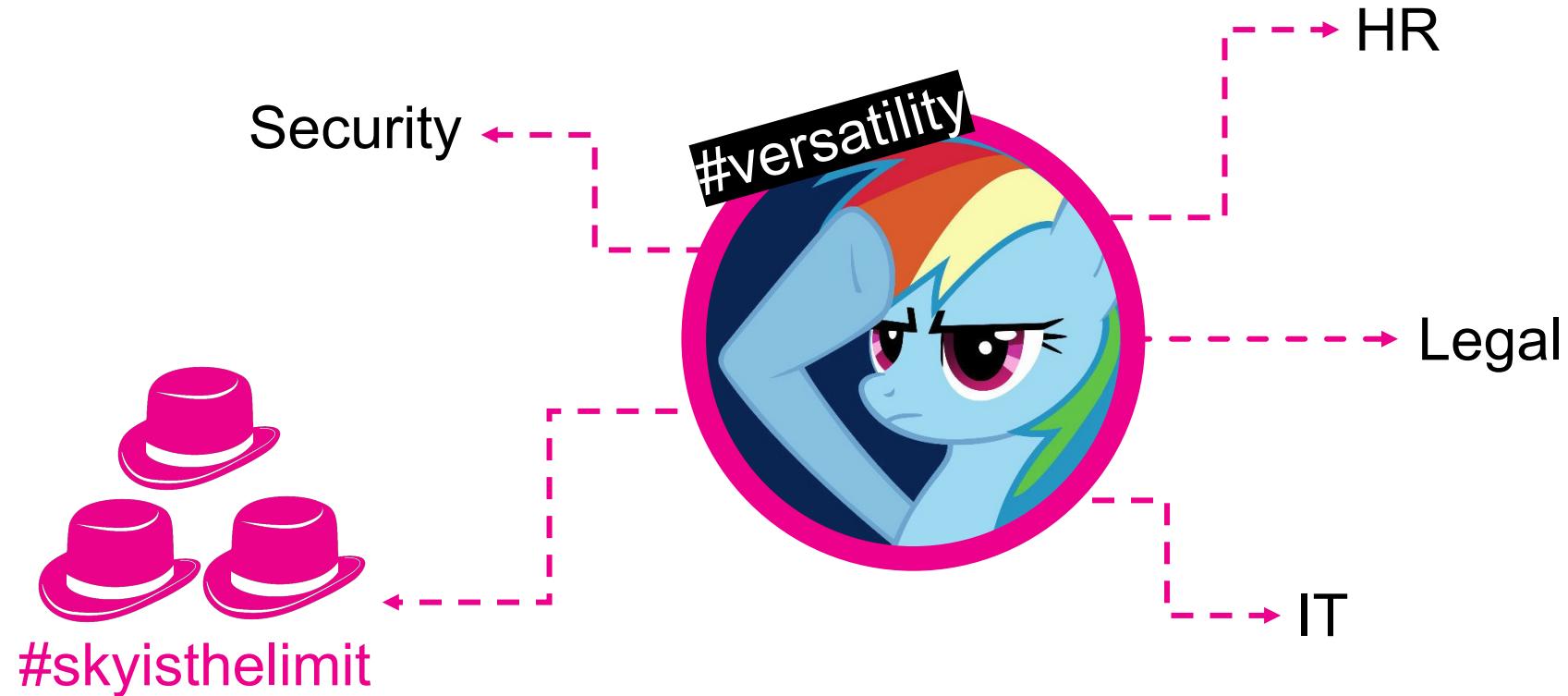


Reply...

# Ride your own Pwny anywhere, anytime 24/7 in real-time

#thevision

# Not your Average Pwny



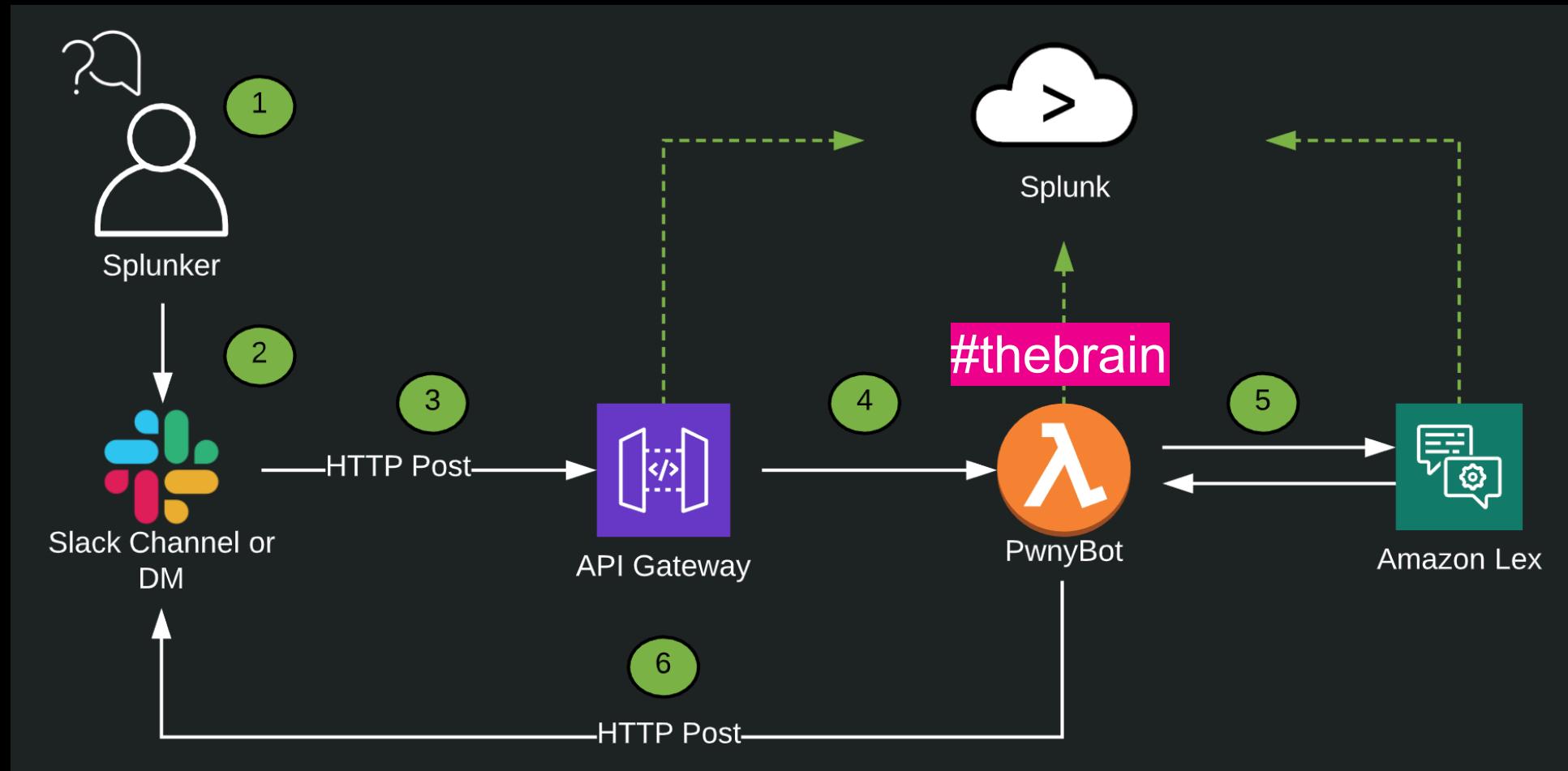
# How many horsepower she got?

---

What does she eat?



# Under the Hood



# Why this Architecture?

#benefits

## AWS Lambda

- ▶ On the Cloud
- ▶ No server to manage (Serverless)
- ▶ Scalability
- ▶ Cost effective(\$)
- ▶ Real-time stream processing
- ▶ Easy integration with AWS
  - E.g.: Cloudwatch, S3, **API Gateway**, SNS, etc.
- ▶ Metrics



## Amazon Lex

- ▶ Easy integration with AWS
- ▶ Integrated NLP Service/Solution
  - Detects similar questions – Intentions
  - Answer differently (more human)
- ▶ Easy to use and maintain
- ▶ Possibility for multiple chatbots
- ▶ Metrics





# How do we Interact with PwnyBot?

## @PwnyBot

- ▶ /invite @PwnyBot
- ▶ Feel like sharing?
- ▶ Help your peers
- ▶ Knowledge transfer
- ▶ Channel history
- ▶ Continuous showcase
- ▶ Replies in Thread
- ▶ Share the Fun!

## Direct Message

- ▶ Private
- ▶ Different mood
- ▶ Less prune to criticism

**Thread**

# splunk\_at\_splunk

Clara Merriman Today at 2:27 PM  
@PwnyBot when is conf19?

1 reply

PwnyBot APP < 1 minute ago  
@Clara Merriman, Who doesn't love .conf! It's the greatest conference around! .conf19 is in Las Vegas on October 21-24. Splunk University is held from October 19-21. Check out more details [here](#)

**Thread**

# splunk\_at\_splunk

Disha Sharma Aug 6th at 2:27 PM  
@PwnyBot tell me a joke

1 reply

PwnyBot APP 2 months ago  
@dsharma, Why did the developer go broke? Because he used up all his cache!

Philippe Tang 2:28 PM  
Who are your creators?

PwnyBot APP 2:28 PM  
@ptang, <https://gph.is/g/ZI63Obx>

My Masters

Giphy (413 kB) ▾

# Maslow's Hierarchy of Needs

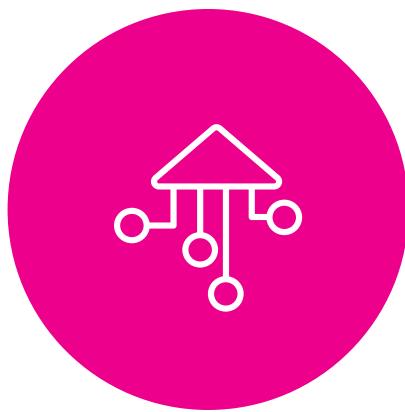
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Splunk, Learn, Teach, Train, Feed your Pwny



# Maslow's Hierarchy of Needs

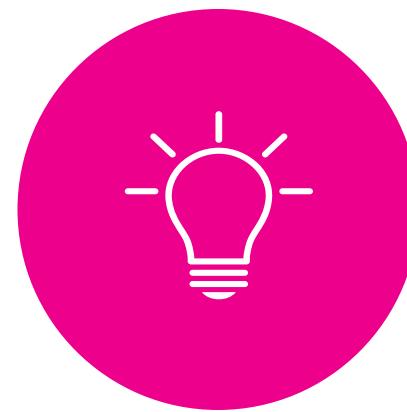
#improvement



Splunk  
Everything



Learn Her  
Moves



Teach New  
Tricks



Train Super  
Kicks Level  
9000+



Feed  
PwnyGotchi



# #Demo

Splunk

Hackathon - TE... ▾ 🔔

Philippe Tang 🎉

Jump to... < >

All Unreads

Threads

Channels +

# general

# pwnybot-demo

+ Add a channel

Direct Messages +

+ Invite people

Apps +

PwnyBot

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Giphy (1 MB) ▾



Reply...

#pwnybot

**PwnyBot Overview**

AWS API Gateway AWS Lambda Overview PwnyHealth PwnyBot Team Others ▾

**PwnyBot** Edit Export ...

### PwnyBot Overview

How many questions did PwnyBot answer?

**11**

How many questions did PwnyBot answer to?

How many questions was PwnyBot not able to answer?

**3**

Number of questions that PwnyBot was not able to answer

**PwnyBot Success Rate**

**100.0 %**

Percentage of questions PwnyBot answered correctly

How many users have reached PwnyBot for help?

**1**

Unique Users Reaching PwnyBot for Help

How are users reaching PwnyBot?

Method	Value
app_mention	84.62
message	15.38

**Top Users**

**PwnyBot Interactions Over Time**

**Type of Interactions (Categories)**

Category	Count
Who_Is	1
AD_Group	1
Author	1
Engagement	1
Greetings	1
Guest_WIFI	1
SFDC	1
Learning_Resources	1

**Top Questions**

Question	Count	Percent
what is the wifi password	2	20.00 %
who created you	1	10.00 %
where is my data	1	10.00 %
when is conf	1	10.00 %
what services does splunk@splunk offer	1	10.00 %
what are the splunk learning resources	1	10.00 %
i need to be added to an ad group	1	10.00 %

**Questions that PwnyBot was not able to answer**

Question	Count	Percent
wifi guest	1	33.33 %
who made you	1	33.33 %
what do you think of butterchat?	1	33.33 %

#splunkeverything



The screenshot shows the AWS Lambda Overview page within the Splunk Enterprise interface. Key metrics displayed include:

- Current Month Cost: **0.00 \$**
- Average Script Execution Duration: **418 ms**
- Average Script Billed Execution Duration: **494 ms**
- Average Memory Usage: **76 MB**
- Maximum Allocated Memory Usage: **128 MB**

A note at the top states: "Note: Estimated cost calculated based on <https://aws.amazon.com/lambda/pricing>".

The Lambda Execution Resource Cost chart tracks Duration (ms) and Memory (MB) from 2:40 PM to 5:00 PM on Thursday, September 26, 2019. The chart shows two distinct peaks in both duration and memory usage around 4:00 PM and 4:30 PM.

#cost

splunk>enterprise App: PwnyBot

Philippe Tang Messages Settings Activity Help Find

PwnyBot Overview AWS API Gateway AWS Lambda Overview PwnyHealth PwnyBot Team Others

## PwnyHealth

1. Splunker thinks "Gee...I have a question about something Splunk related"  
 2. Splunker uses infinite wisdom to post aforementioned question on #splunk\_at\_splunk Slack channel  
 3. Through the magic of HTTP Post, the question is transported through the Amazon API Gateway  
 4. After a wild ride through the internet, the question is greeted by PwnyBot in a luxury AWS Lambda environment.  
 5. PwnyBot confers with Amazon Lex to process the Splunker's natural language  
 6. PwnyBot responds to the question via HTTP Post, yet again. Technology, it's amazing.  
 7. PwnyBot wants to learn. PwnyBOT NEEDS to learn. Questions and responses are sent to Splunk in order to determine unknown questions or inaccurate responses.

Splunker → Slack Channel or DM → API Gateway → PwnyBot → Amazon Lex → Splunk

**3. API Gateway**  
100.0 % →  
API Gateway Health % from Slack HTTP POST

**4. Lambda**  
100.0 % →  
Lambda Health % based on Total Errors

**6. Lambda -> Slack**  
100.0 % →  
HTTP Post Health % from Lambda to Slack

**Data to Splunk**

#heartbeats

The creator of PwnyBot

Pwny  
@PwnyBot

Disha Sharma  
@dsharma

Clara Merriman  
@cmerriman

Philippe Tang  
@ptang

#thejockeys

#comingsoon

“Ride your Own Pwny!”

# The Jockeys

---

The Team that Made it Possible





@PwnyBot



Clara Merriman  
Sr. Splunk Engineer



Philippe Tang  
Sr. Splunk Engineer  
Product Owner



Disha Sharma  
Sr. Splunk Engineer

# Q&A

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See you at the **#AskTheExperts** Booth!

Both @cmerriman (Clara) and @l00py (me) will be there!



# Feedback Welcome!

<https://ponypoll.com/ukcbzlv>



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splunk>

Thank  
You!

Go to the .conf19 mobile app to

**RATE THIS SESSION**