



# A painless self-hosted Git service: Gitea

Bo-Yi Wu  
2017.08.05

# About me



Full Stack & DevOps engineer at Mediatek  
@appleboy at GitHub, Twitter and SlideShare

<https://blog.wu-boy.com>

# Thanks

OSS Planet .net

***#JustGoOpen***

Just Go Open,  
I've Got Your Back.

# Agenda



- ✦ Git Hosting Services
- ✦ What is Gitea?
- ✦ Why we choose Gitea?
- ✦ How to install Gitea?
- ✦ Integrate CI/CD Service
- ✦ How to contribute to Gitea

# Agenda



## ✦ Git Hosting Services

✦ What is Gitea?

✦ Why we choose Gitea?

✦ How to install Gitea?

✦ Integrate CI/CD Service

✦ How to contribute to Gitea

# Public Git Hosting Services



Bitbucket



GitHub



Gitlab



# Public Git hosting sites

Git Hosting	Open source	Self Host	Free Private Repo	UI/UX
GitHub	No	No	No	★★★
Bitbucket	No	Yes (Hard)	Yes	★
Gitlab	Yes	Yes (Hard)	Yes	★
Gitea	Yes	Yes (Easy)	Yes	★★★

# Agenda



- ✧ Git Hosting Services
- ✧ What is Gitea?
- ✧ Why we choose Gitea?
- ✧ How to install Gitea?
- ✧ Integrate CI/CD Service
- ✧ How to contribute to Gitea





# What is Gitea?



The initial development have been done on Gogs

<https://github.com/go-gitea/gitea>

# Purpose



✦ Easiest

✦ Fastest

✦ Painless

# Gitea hosted Gitea

- ✦ Comment on commit and PR (#124)
- ✦ Squash merge
- ✦ Complete Protected branch (#32 #339 )
- ~~✦ Complete API support (#64)~~
- ~~✦ OAuth provider (#27)~~
- ~~✦ API Documents (#194)~~
- ✦ Complete notifications system (#145)
- ~~✦ Complete Webhook support (#132 (PR #908) #895 #1002 )~~
- ✦ Better CI Integration (#996 (PR #1332))
- ✦ Approval system


# Agenda



- ✧ Git Hosting Services
- ✧ What is Gitea?
- ✧ Why we choose Gitea?
- ✧ How to install Gitea?
- ✧ Integrate CI/CD Service
- ✧ How to contribute to Gitea

<https://github.com/go-gitea>





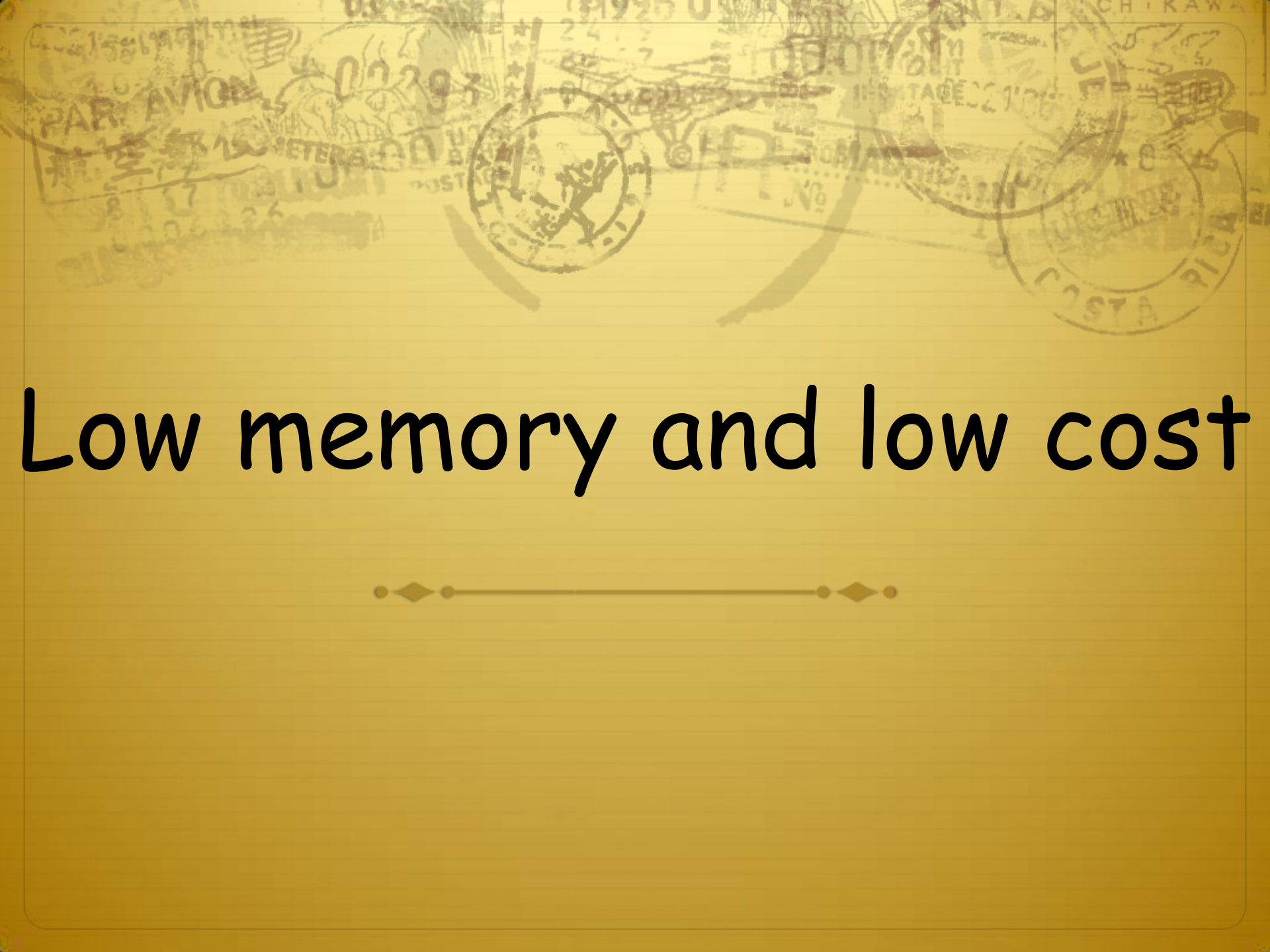
# Easy install than Gitlab

---


Gitlab: <https://goo.gl/YP3DF9>

Gitea: <https://goo.gl/GuCuQZ>



The background of the slide is a collage of various vintage postage stamps and postmarks. Visible text includes "PAR AVION", "00293", "PETERB", "POST", "CHITRAWA", "TAGEC", "COSTA RICA", and "PICA". There are also circular postmarks with dates like "1925" and "1926".

# Low memory and low cost

A decorative horizontal line with diamond shapes at each end, positioned below the main text.



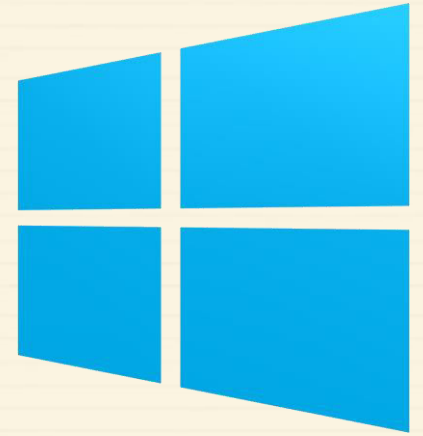
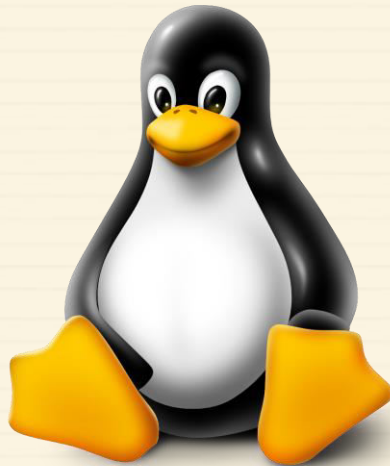
Gitea is written in Golang

# Single Binary

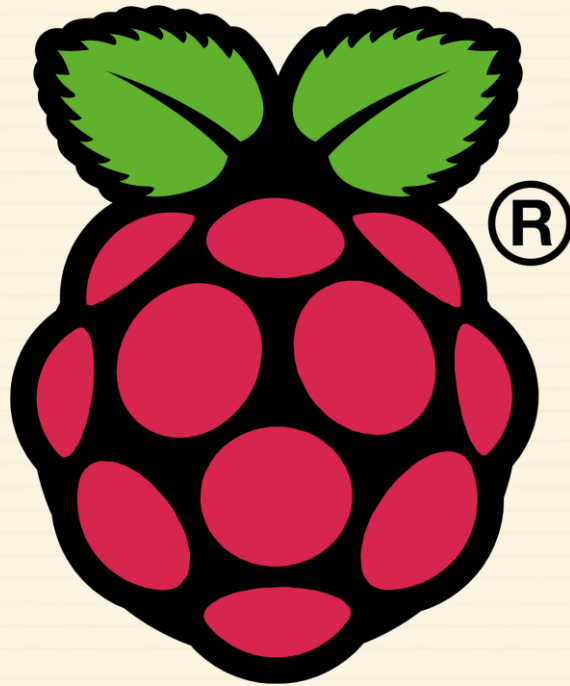
You don't need to install any dependency package on your server



# Cross Platform



# ARM Platform





# Agenda



- ✦ Git Hosting Services
- ✦ What is Gitea?
- ✦ Why we choose Gitea?
- ✦ How to install Gitea?
- ✦ Integrate CI/CD Service
- ✦ How to contribute to Gitea



# Installation

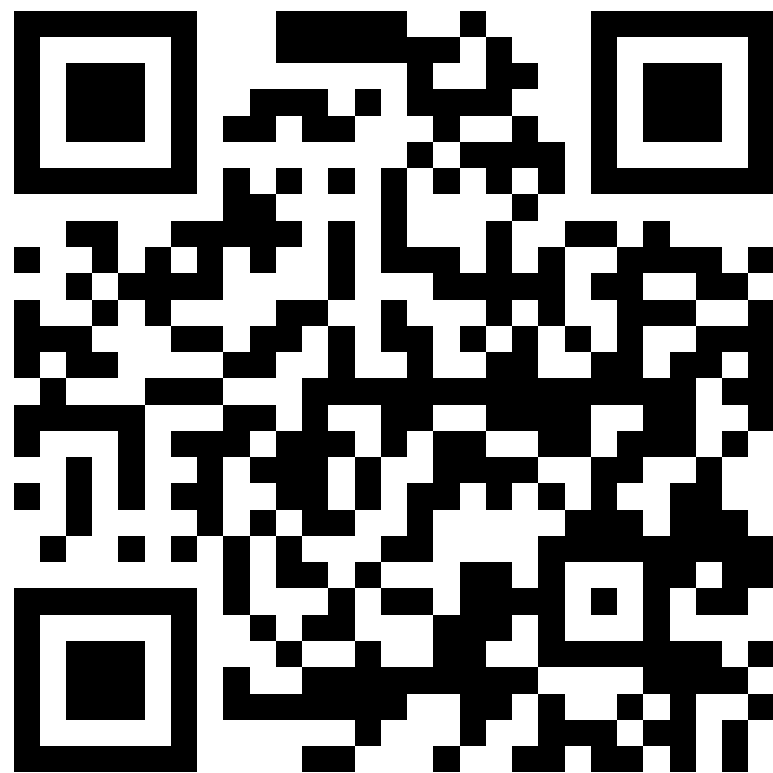


- ✦ Docker
- ✦ Binary
- ✦ Package
- ✦ Source

# Installation



- ✦ Docker
- ✦ Binary
- ✦ Package
- ✦ Source




<http://bit.ly/install-gitea>

<https://dl.gitea.io/gitea>

The background of the slide is a collage of various vintage postage stamps and postmarks. Visible text includes "PAR AVION", "00293", "POST", "CHITRAWA", "TAGEC 2106", "COSTA RICA", and "PICA". There are also circular postmarks with dates like "1925" and "1926".

# Run the Gitea Service



`gitea web`

# First Install

## Install Steps For First-time Run

If you're running Gitea inside Docker, please read the [Guidelines](#) carefully before you change anything on this page!

### Database Settings

Gitea requires MySQL, PostgreSQL, SQLite3 or TiDB.

**Database Type \***

SQLite3 ▼

**Path \***

data/gitea.db

The file path of SQLite3 or TiDB database.  
Please use the absolute path when you start as service.

### Application General Settings

**Application Name \***

Gitea: Git with a cup of tea

Put your organization name here huge and loud!

**Repository Root Path \***

/home/git/gitea-repositories

All Git remote repositories will be saved to this directory.



The background of the slide is a collage of various vintage postage stamps and postmarks. Visible text includes "PAR AVION", "00293", "PETERB", "POST", "CHITRAWA", "TAGEC", "COSTA RICA", and "PICA". There are also circular postmarks with dates like "1925" and "1926".

Don't Run Gitea as **root** user



# Create *git* User



```
useradd -m git
```

# SSH Protocol



appleboy / test-repo

Unwatch

1

Star

0

## Quick Guide

Settings

**Clone this repository** Need help cloning? Visit [Help!](#)

HTTP

SSH

git@128.199.111.130:appleboy/test-repo.git



## Create a new repository on the command line

```
touch README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@128.199.111.130:appleboy/test-repo.git
git push -u origin master
```

# Missing https?

**Clone this repository** Need help cloning? Visit [Help!](#)

HTTP

SSH

`http://128.199.111.130:3000/appleboy/test-repo.git`



# CADDY

You don't need to care about expire time of certificate file.



```
example.com {  
    proxy / localhost:3000  
}
```

<https://github.com/caddyserver/examples/tree/master/gitea>





Easy install in 5 minute

# Agenda



- ✦ Git Hosting Services
- ✦ What is Gitea?
- ✦ Why we choose Gitea?
- ✦ How to install Gitea?
- ✦ Integrate CI/CD Service
- ✦ How to contribute to Gitea

Deploy

Develop



Testing

Pull  
Request



Code  
Review





Gitea



Drone

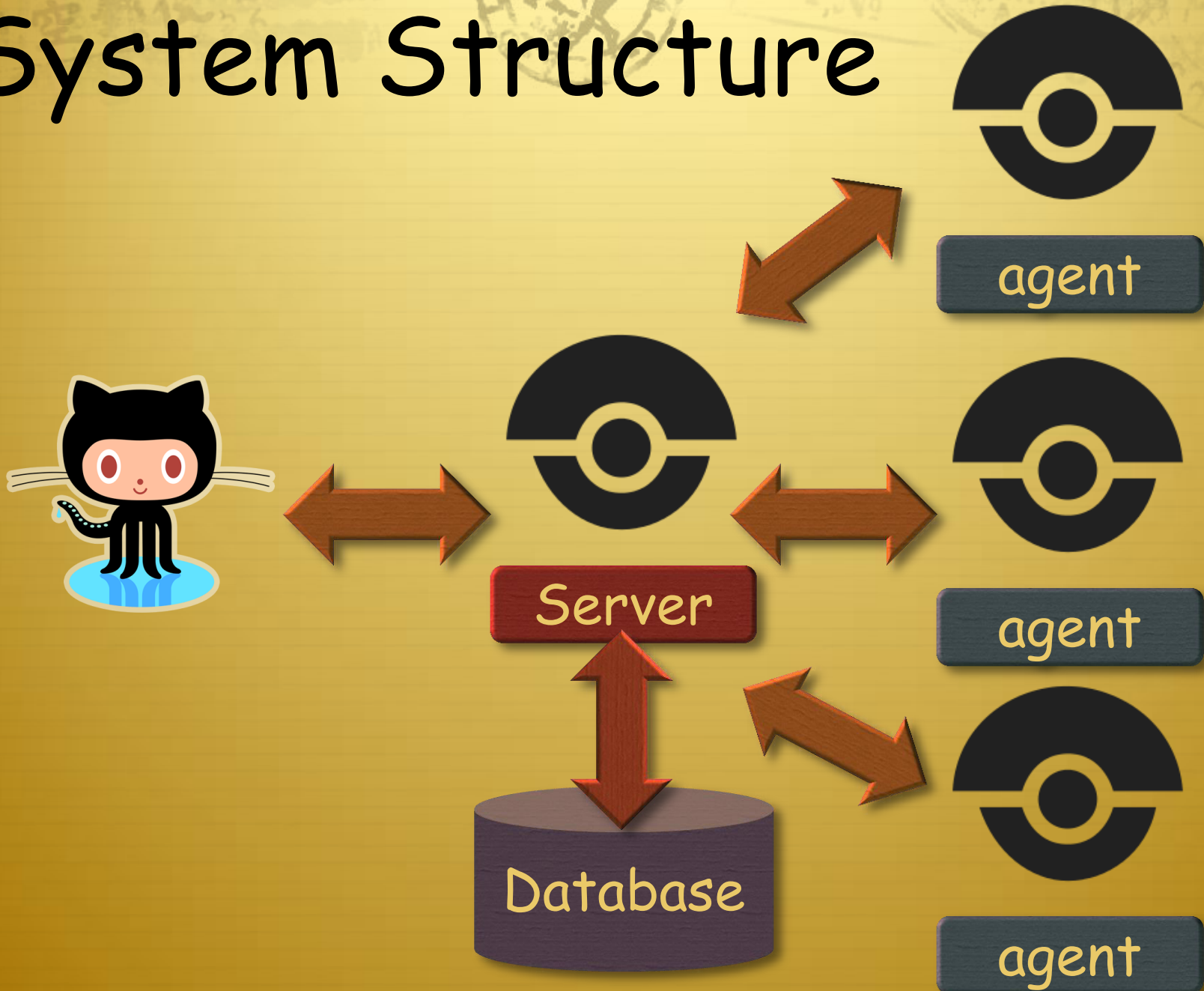


# What is Drone?

Drone is a Continuous Delivery system built on container technology.



# System Structure





# Drone Server

drone-server:

image: drone/drone:0.8

ports:

- 8080:8000
- 9000:9000

volumes:

- ./:/var/lib/drone/

restart: always

environment:

- DRONE\_HOST=http://localhost:8080
- DRONE\_OPEN=true
- DRONE\_SECRET=drone-workshop
- DRONE\_ADMIN=appleboy

# Gitea Config

- DRONE\_GITEA=true
- DRONE\_GITEA\_URL=https://try.gitea.io
- DRONE\_GITEA\_GIT\_USERNAME=admin\_username
- DRONE\_GITEA\_GIT\_PASSWORD=admin\_password

## Drone Agent

drone-agent:

image: drone/agent:0.8

restart: always

depends\_on:

- drone-server

volumes:

- /var/run/docker.sock:/var/run/docker.sock

environment:

- DRONE\_SERVER=drone-server:9000
- DRONE\_SECRET=drone-workshop
- DRONE\_MAX\_PROCS=3



<https://github.com/go-training/drone-tutorial>



Easy install in 5 minute

# Agenda



- ✦ Git Hosting Services
- ✦ What is Gitea?
- ✦ Why we choose Gitea?
- ✦ How to install Gitea?
- ✦ Integrate CI/CD Service
- ✦ How to contribute to Gitea



<https://goo.gl/JiMsyA>

<https://goo.gl/JiMsyA>



# Contribution Guide



- ✦ Bug reports
- ✦ Discuss your design
- ✦ Testing before sending your pull request
- ✦ Code review

The background features a collage of various vintage travel stamps and postmarks. Visible text includes "PAR AVION", "02293", "PETERB", "POST", "CHITRAWA", "TAGEC", "COSTA RICA", and "PICA". There are also circular postmarks with dates like "1925" and "1926".

# Join us become a maintainer

contributed at least 4 accepted PRs.

<https://try.gitea.io>

The background features a collage of vintage postmarks and stamps. Visible text includes "PAR AVION", "00293", "PETERB", "POST", "CHITRAWA", "TAGEC", "COSTA RICA", and "PICA". There are also circular stamps with various designs and numbers.

# Thank you

Any problems?