

# HEROKU FEATURES THAT WE LOVE



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## HOW IT WORKS



- ▶ Ruby app
- ▶ Gemfile
- ▶ on Github

## HOW IT WORKS

Deploy a GitHub branch

This will deploy the current state of the branch you specify below.

⌵ Deploy Branch

**OR**

```
$ git push heroku master
...
remote: ----> Compressing...
remote:      Done: 137.6M
remote: ----> Launching...
remote:      Released v50
remote:      https://primehammer-staging.herokuapp.com/ deployed to Heroku
$ heroku open
```

**OR AUTOMATIC DEPLOYS**

# HOW IT WORKS



Heroku Dynos



Postgres



Redis

**NO INFRASTRUCTURE MAINTENANCE**

**FOCUS ON DELIVERING VALUE**

## IN SHORT

- ▶ Founded in 2007 in San Francisco
- ▶ Acquired by Salesforce in 2010
- ▶ Region in Frankfurt (runs on AWS)
- ▶ Over 150 Elements (addons)

## ADD-ON CATEGORIES

Data Stores

Data Store Utilities

Monitoring

Logging

Email/SMS

Caching

Errors and Exceptions

Content Management

Search

Metrics and Analytics

Testing

Messaging and Queueing

Network Services

Alerts and Notifications

User Management

Development Tools

Security

Dynos

Content

Document Processing

Image Processing

Video Processing

Continuous Integration and Delivery

Utilities

## Errors and Exceptions Find and stop errors before they become a problem.



### Airbrake Error Monitoring

Powerful error monitoring software captures bugs so you fix them fast



### Rollbar

Real-time error monitoring, alerting, and analytics for developers.



### Exceptiontrap

Powerful & intelligent error tracking and exception monitoring from Germany.



### AppSignal

Error Tracking & Performance Insights for Ruby and Elixir



### Honeybadger

The web developer's secret weapon



### Sentry

Error tracking that helps developers monitor and fix crashes in real time

## HEROKU ELEMENTS

- ▶ Single Sign On
- ▶ Creates ENV var
- ▶ Multiple plans, one billing
- ▶ May become expensive



Hobby Dev	Free
Hobby Basic	\$9/mo
<b>Standard 0</b>	<b>\$50/mo</b>
Standard 2	\$200/mo
Premium 0	\$200/mo
Private 0	\$300/mo
Premium 2	\$350/mo
Shield 0	\$350/mo
Standard 3	\$400/mo
Private 2	\$600/mo
Shield 2	\$750/mo
Premium 3	\$750/mo
Standard 4	\$750/mo

Postgres Extensions	✓
RAM	4 GB
Database Forks	✓
Direct SQL access	✓
Row Limit	
Storage Capacity	64 GB
Database Followers	✓
Dataclips	✓
Continuous Protection	✓
Connection Limit	120
High Availability	
Rollback	✓
Rollback	4 Days

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## YOU CAN START SMALL

- ▶ Hobby web dyno &7
- ▶ Postgres - Hobby Basic \$9 (10M rows)
- ▶ Sentry - Free (10,000 events)
- ▶ Papertrail (10MB/day)

# SELECTED FEATURES

# PIPELINE

The screenshot displays a Heroku Pipeline interface with two environments: STAGING and PRODUCTION. An arrow points from the Staging environment to the Production environment.

**STAGING + Add app**

- heroku-flow-demo-staging  
Auto deploys master ✓  
5f4b650d ✓ Deployed 2 days ago  
[Promote to production...](#)

**PRODUCTION + Add app**

- heroku-flow-demo-eu  
5f4b650d ✓ Deployed 2 days ago
- heroku-flow-demo-prod  
d09f377c ✓ Deployed 4 days ago

## PIPELINE PROMOTION

- ▶ **Slug** is a bundle of your source, fetched dependencies, the language runtime, and compiled/generated output of the build system - ready for execution.
- ▶ Moves slug to the next stage, avoids rebuilding
- ▶ Promotion not for stateful builds (hardcoded keys)

# REVIEW APPS - GITHUB


add foo #1

 **Open** friism wants to merge 1 commit into `master` from `foo-branch`

 Conversation **0**    Commits **1**    Files changed **1**




friism commented 31 seconds ago

Owner 

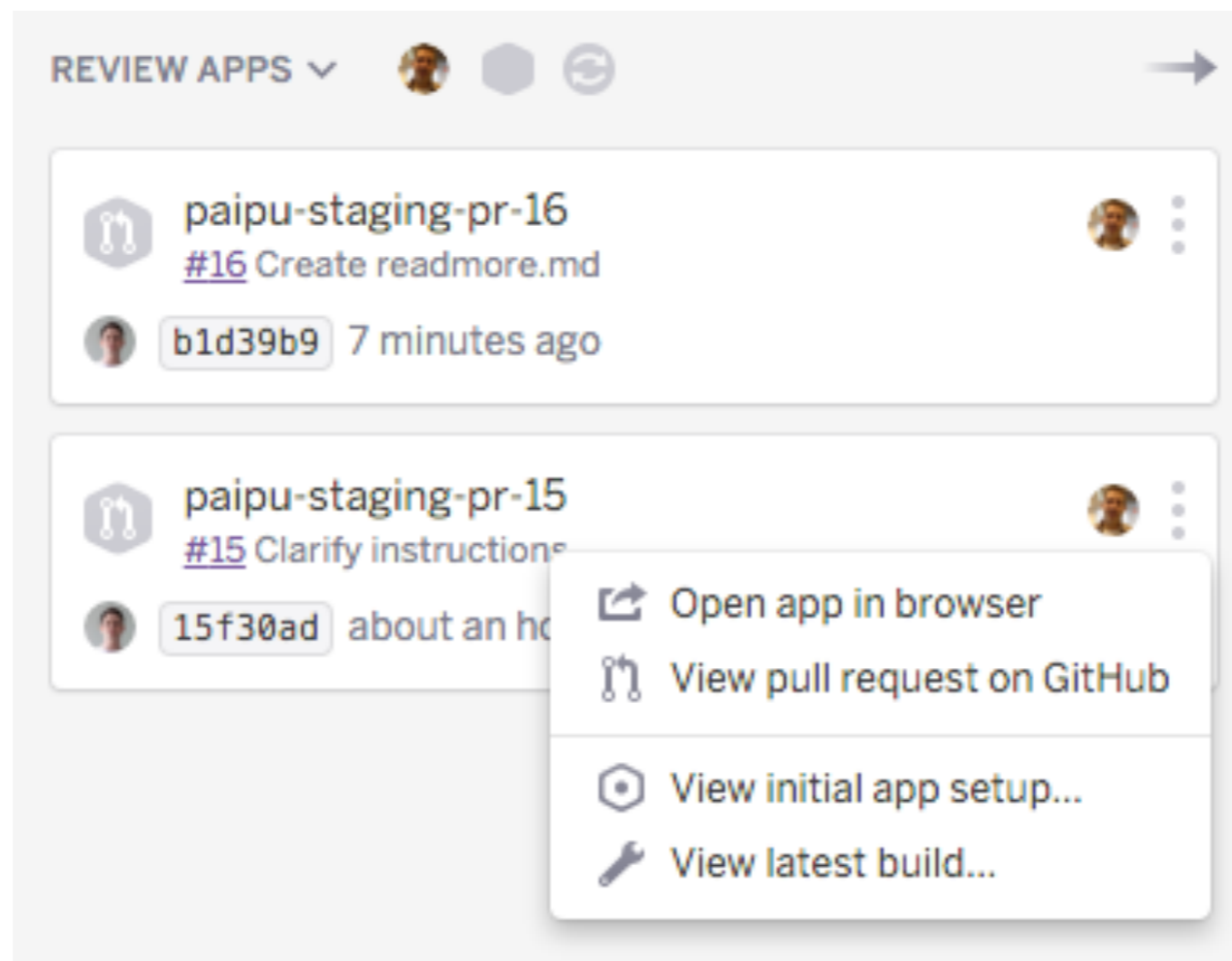
*No description provided.*

  add foo a742b72

  **friism** deployed to boiling-beyond-4812-pr-1 31 seconds ago



# REVIEW APPS - DASHBOARD



## REVIEW APPS - LIFECYCLE AND CAVEATS



- ▶ Set parent app
- ▶ **app.json** stored in your repository  
add-ons, env var inheritance, post-deploy scripts
- ▶ Auto destroy in 1,2,5,30 days
- ▶ Some add-ons don't support review apps
- ▶ Gotchas: domains, expensive/unsupported add-ons



### Create review apps for open GitHub pull requests

Pull requests opened on the GitHub repo can be deployed to new review apps, manually or automatically. There must be an `app.json` file, which will be used to set config variables, create add-ons, and run any post-deploy scripts. [Learn more.](#)

Inherit config vars from an app in this pipeline

 samco-staging-apr 

Create new review apps for new pull requests automatically

Enable this option if you want every new pull request to create an app.

Destroy stale review apps automatically

Enable this option to delete review apps after 5 days with no deploys.

Review apps may incur dyno and add-on charges. These are invoiced to the app owner. [Learn more.](#)

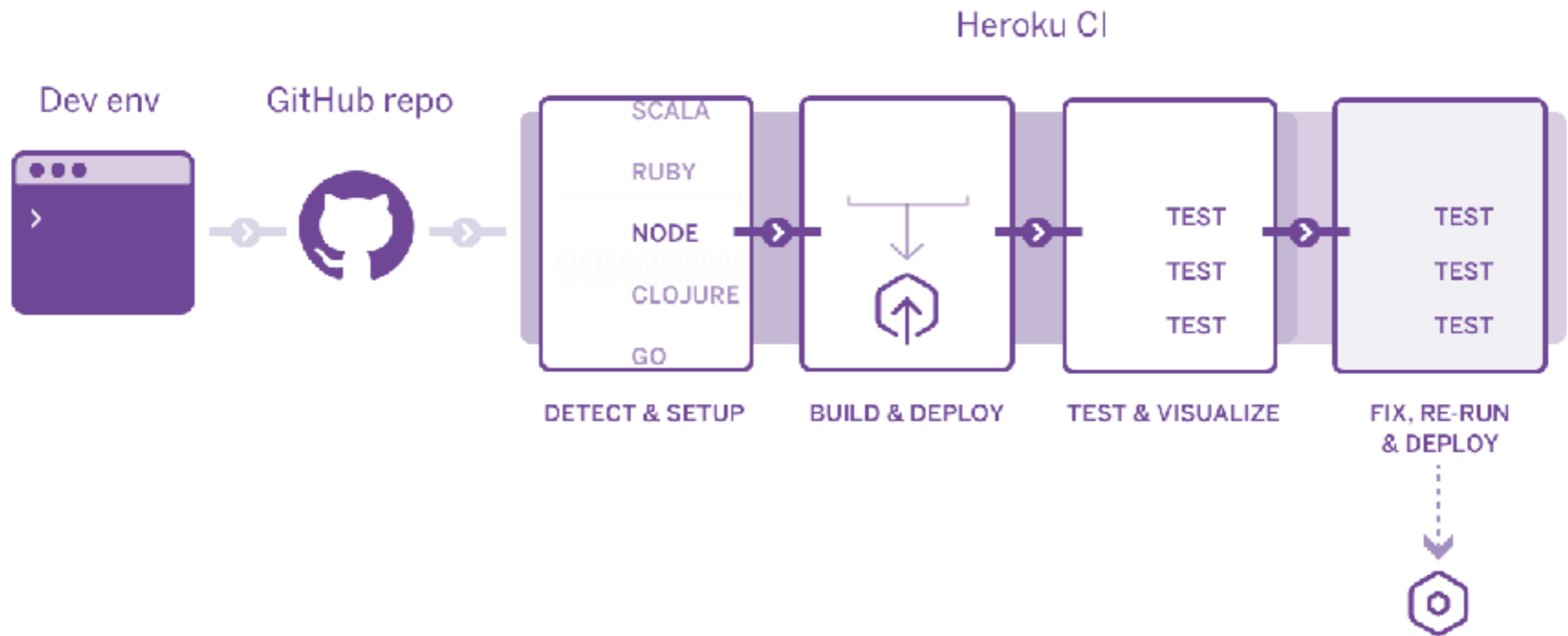
Cancel

Enable

## APP.JSON EXAMPLE

```
{
  "name": "ruby-sample-app",
  "scripts": {
    "postdeploy": "bundle exec rails db:schema:load db:seed",
    "pr-predestroy": "bin/teardown"
  },
  "env": {
    "SECRET_TOKEN": {
      "generator": "secret"
    },
    "APPSIGNAL_PUSH_API_KEY": {
      "required": true
    }
  },
  "addons": [
    "heroku-postgresql"
  ],
  ...
}
```

# CONTINUOUS INTEGRATION



## RELEASE PHASE

- ▶ Allows to run certain tasks before a new release of the app is deployed
- ▶ After app build, pipeline promotion, setting config var
- ▶ No more “heroku run rake db:migrate”
- ▶ **Procfile:**

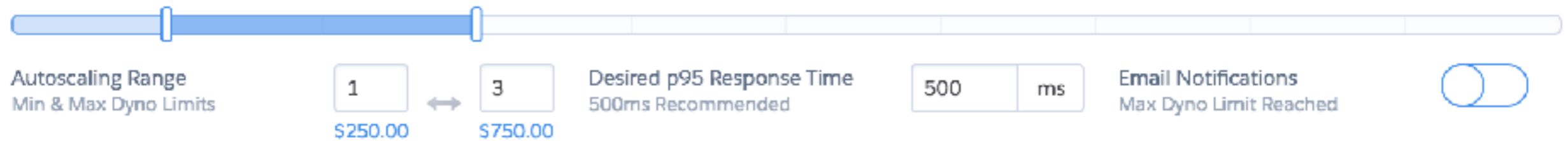
```
1 web: bundle exec puma -t 4:4 -w 1 --preload -e $RAILS_ENV -p $PORT
2 release: bin/heroku_release
```

## DEPLOYMENT STEPS

1. Push code & deploy
2. Build -> slug
3. Release script (defined in Procfile)
4. Post-deploy script for Review app (defined in app.json)


# AUTOSCALING





- ▶ Horizontally scales web dynos based on response time
- ▶ Min-max



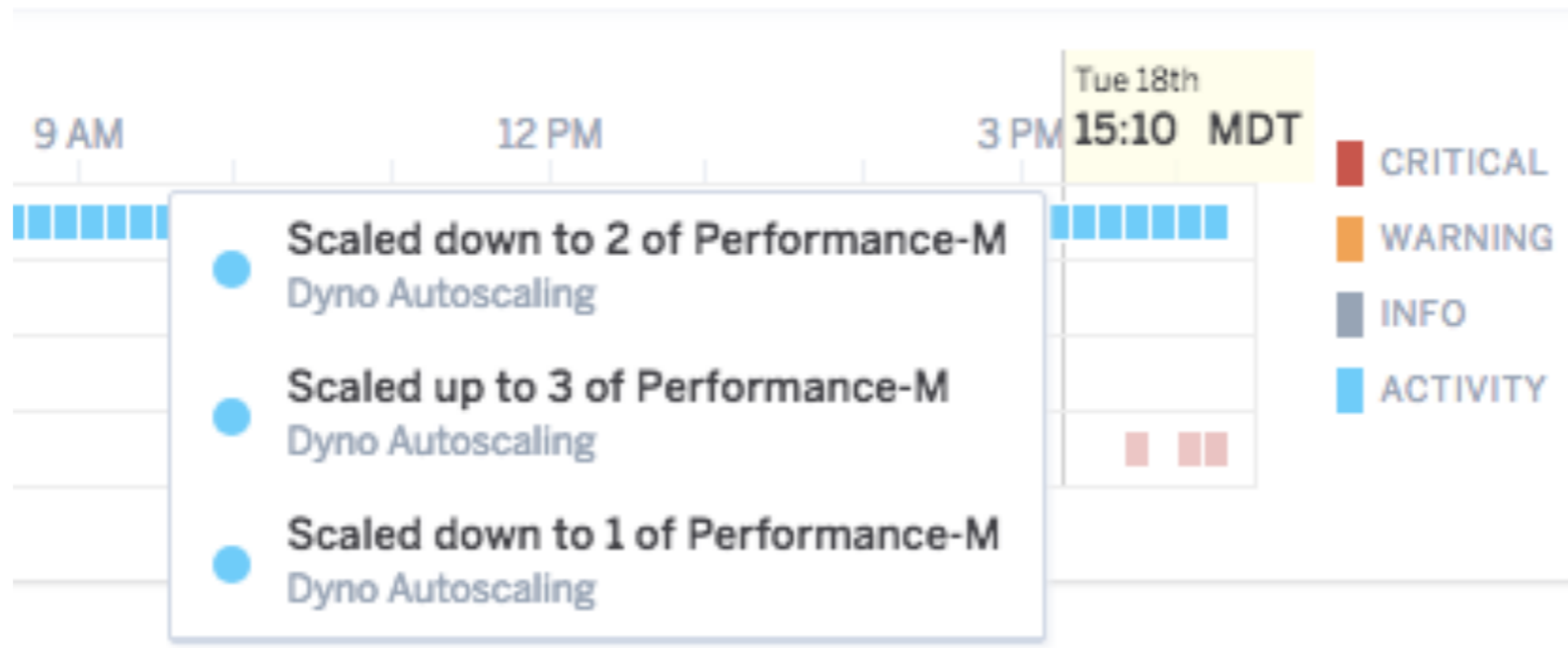
# AUTOSCALING

Professional Dynos [Change Dyno Type](#)

 **web**  
`bundle exec puma -t 4:4 -w 1 -`

-  **Standard-1X dynos**  
Shared  
512 MB RAM  
\$25.00/dyno/month
-  **Standard-2X dynos**  
Shared  
1 GB RAM  
\$50.00/dyno/month
-  **Performance-M dynos** ✓  
Dedicated  
2.5 GB RAM  
\$250.00/dyno/month
-  **Performance-L dynos**  
Dedicated  
14 GB RAM  
\$500.00/dyno/month

# AUTOSCALING





## SUMMARY

- ▶ Pipeline, Review apps, Release Phase, Autoscaling
- ▶ More features: Private Spaces, Heroku Shield for HIPPA, Buildpacks
- ▶ It's productive but not suitable for everyone due to pricing

**THANK YOU.  
QUESTIONS?**