

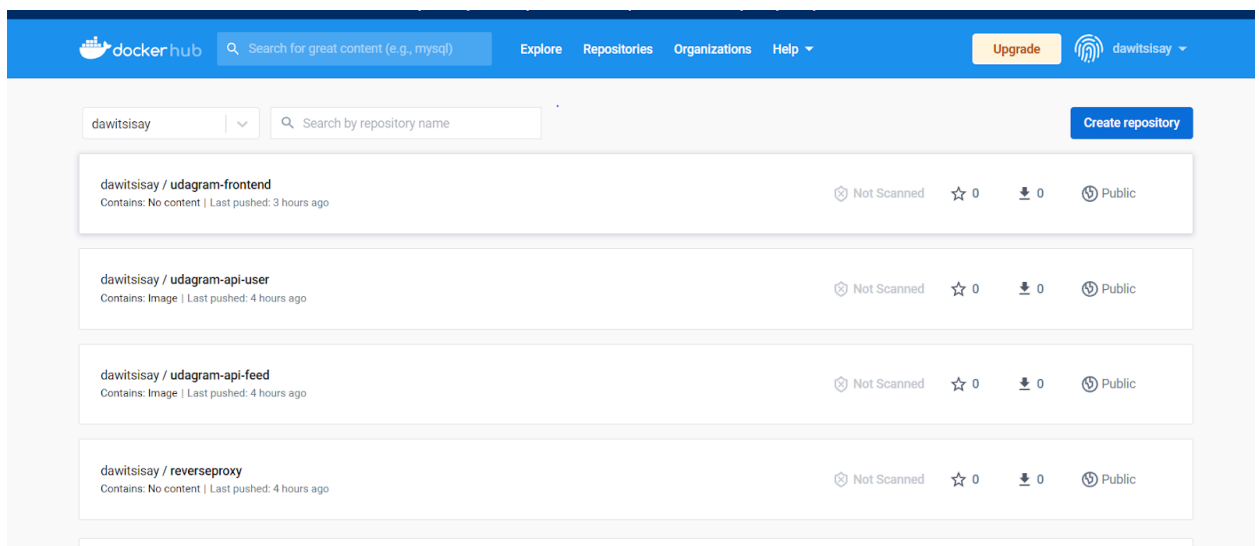
Screenshot of one of the backend API pod logs

```
Dawits@DESKTOP-8J5773R MINGW64 /g/Udacity-third-project (main)
$ kubectl logs backend-feed-848ccc558b-vxqz1

> udiagram-api@2.0.0 dev /usr/src/app
> ts-node-dev --respawn --transpile-only ./src/server.ts

[INFO] 15:57:25 ts-node-dev ver. 1.1.8 (using ts-node ver. 9.1.1, typescript ver. 3.9.10)
Initialize database connection...
Executing (default): CREATE TABLE IF NOT EXISTS "FeedItem" ("id" SERIAL , "caption" VARCHAR(255), "url" VARCHAR(255), "createdAt" TIMESTAMP WITH TIME ZONE, "u
pdatedAt" TIMESTAMP WITH TIME ZONE, PRIMARY KEY ("id"));
Executing (default): SELECT i.relname AS name, ix.indisprimary AS primary, ix.indisunique AS unique, ix.indkey AS indkey, array_agg(a.attname) as column_indexes,
array_agg(a.attname) AS column_names, pg_get_indexdef(ix.indexrelid) AS definition FROM pg_class t, pg_class i, pg_index ix, pg_attribute a WHERE t.oid = ix.in
drelid AND i.oid = ix.indexrelid AND a.attrelid = t.oid AND t.relkind = 'r' and t.relname = 'FeedItem' GROUP BY i.relname, ix.indexrelid, ix.indisprimary, ix.in
disunique, ix.indkey ORDER BY i.relname;
server running http://localhost:8100
press CTRL+C to stop server
Executing (default): SELECT count(*) AS "count" FROM "FeedItem" AS "FeedItem";
Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
```

Docker images in your repository in DockerHub



- TravisCI build pipeline showing successful build jobs

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Dashboard

Projects

Insights

Organization Settings

Plan

CI behind your firewall X just got easier

Install a more scalable, Kubernetes-friendly self-

Dashboard

Project

All Pipelines > Udacity-third-project

Udacity-third-project

Add team members

Edit Config

Trigger Pipeline

Project Settings

Filters

Everyone's Pipelines

Udacity-third-project

All Branches

All days

Auto-expand

Pipeline	Status	Workflow	Branch / Commit	Start	Duration	Actions
Udacity-third-project	Success	default	main 5b50756 commit	3h ago	3m 0s	
<div>Jobs</div> <div><div>lint-app 9</div><div>build-docker 10</div></div>						

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Plan

CI behind your firewall X just got easier

Install a more scalable, Kubernetes-friendly self-hosted runner in 5 minutes or less.

Dashboard

Project

Branch

Workflow

Job

All Pipelines > Udacity-third-project > main > default > build-docker (10)

build-docker

Success

Rerun

Duration / Finished

Queued

Executor / Resource Class

Branch

Commit

Author & Message

2m 52s / 3h ago

0s

Machine / Linux Large

main

5b50756

commit

STEPS

TESTS

TIMING

ARTIFACTS

RESOURCES

NEW

Parallel runs

0 02:53

Use parallelism to run faster tests

Parallelism speeds up tests by splitting them across multiple executors.

Go to Docs

Spin up environment

0s

Preparing environment variables

0s

Checkout code

0s

Build docker container for each microservices

2m 51s

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Dashboard
Projects
Insights
Organization Settings
Plan

CI behind your firewall X just got easier
Install a more scalable, Kubernetes-friendly self-hosted runner in 5 minutes or less.

Getting Started
Notifications
Status OPERATIONAL

Build docker container for each microservices
2m 51s

Your output is too large to display in the browser.
Only the last 400000 characters are displayed.

Download the full output as a file

```

3468 Sending build context to Docker daemon 6.317MB
3469 Step 1/7 : FROM node:12
3470 12: Pulling from library/node
3471
3472 f5196cdf2518: Pulling fs layer
3473 9bed1e86f01e: Pulling fs layer
3474 f44e4b3a6c: Pulling fs layer
3475 2f75d131f406: Pulling fs layer
3476 07dff4ad21eb: Pulling fs layer
3477 e0ac4f13b766: Pulling fs layer
3478 df2c3b2eb7cc: Pulling fs layer
3479 efe636eac583: Pulling fs layer
3480 Digest: sha256:01627afeb110b3054ba4a1405541ca095c8bfca1cb6f2be9479c767a2711879e
3481 Status: Downloaded newer image for node:12
3482 --> 6c8de432fc7f
3483 Step 2/7 : WORKDIR /usr/src/app
3484 --> Running in 52a359a5df31
3485 Removing intermediate container 52a359a5df31
3486 --> e84cab02bb15
3487 Step 3/7 : COPY package*.json ./
3488 --> dfed3d027461
3489 Step 4/7 : RUN npm ci
3490 --> Running in 43c83fe1628e
3491

```

- Kubernetes `kubectl get pods` output

```

Dawits@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-848ccc558b-vxqz1       1/1     Running   0           78m
backend-user-d6b585bcf-2zr4v        1/1     Running   0           77m
backend-user-d6b585bcf-nnf4c        1/1     Running   0           78m
frontend-5b7489dbcc-8zgpb           1/1     Running   0           28m
frontend-5b7489dbcc-jwqvg           1/1     Running   0           28m
reverseproxy-6c646bc87-mcmfm        1/1     Running   0           77m
reverseproxy-6c646bc87-s4l9b        1/1     Running   0           77m

Dawits@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)

```

- Kubernetes `kubectl describe services` output

```
Dawits@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
```

```
$ kubectl describe services
```

```
Name:          backend-feed
Namespace:     default
Labels:        app=backend-feed
Annotations:   <none>
Selector:      app=backend-feed
Type:          ClusterIP
IP Family Policy: SingleStack
IP Families:   IPv4
IP:            10.100.243.179
IPs:           10.100.243.179
Port:          8080 8080/TCP
TargetPort:    8080/TCP
Endpoints:     192.168.3.8:8080
Session Affinity: None
Events:        <none>
```

```
Name:          backend-user
Namespace:     default
Labels:        app=backend-user
Annotations:   <none>
Selector:      app=backend-user
Type:          ClusterIP
IP Family Policy: SingleStack
IP Families:   IPv4
IP:            10.100.166.121
IPs:           10.100.166.121
Port:          8080 8080/TCP
TargetPort:    8080/TCP
Endpoints:     192.168.20.71:8080,192.168.36.122:8080
Session Affinity: None
Events:        <none>
```

```
Name:          frontend
Namespace:     default
Labels:        app=frontend
Annotations:   <none>
Selector:      app=frontend
Type:          ClusterIP
IP Family Policy: SingleStack
IP Families:   IPv4
IP:            10.100.206.140
IPs:           10.100.206.140
Port:          8100 8100/TCP
TargetPort:    80/TCP
Endpoints:     192.168.46.153:80,192.168.7.254:80
Session Affinity: None
Events:        <none>
```

```
Name:          kubernetes
Namespace:     default
Labels:        component=apiserver
               provider=kubernetes
```

IPs: 10.100.206.140
Port: 8100 8100/TCP
TargetPort: 80/TCP
Endpoints: 192.168.46.153:80,192.168.7.254:80
Session Affinity: None
Events: <none>

Name: kubernetes
Namespace: default
Labels: component=apiserver
provider=kubernetes
Annotations: <none>
Selector: <none>
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.0.1
IPs: 10.100.0.1
Port: https 443/TCP
TargetPort: 443/TCP
Endpoints: 192.168.101.109:443,192.168.76.213:443
Session Affinity: None
Events: <none>

Name: publicfrontend
Namespace: default
Labels: app=frontend
Annotations: <none>
Selector: app=frontend
Type: LoadBalancer
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.132.99
IPs: 10.100.132.99
LoadBalancer Ingress: ad33eba7da5b9402b8176ddbc9510e2e-917423760.us-east-1.elb.amazonaws.com
Port: <unset> 80/TCP
TargetPort: 80/TCP
NodePort: <unset> 30846/TCP
Endpoints: 192.168.46.153:80,192.168.7.254:80
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>

Name: publicreverseproxy
Namespace: default
Labels: app=reverseproxy
Annotations: <none>
Selector: app=reverseproxy
Type: LoadBalancer
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.151.119
IPs: 10.100.151.119
LoadBalancer Ingress: add69abb0908d43d0be4f1c76fdccef3-371097149.us-east-1.elb.amazonaws.com
Port: <unset> 8080/TCP

```

Name:                publicfrontend
Namespace:           default
Labels:              app=frontend
Annotations:         <none>
Selector:            app=frontend
Type:               LoadBalancer
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                 10.100.132.99
IPs:                10.100.132.99
LoadBalancer Ingress: ad33eba7da5b9402b8176ddbc9510e2e-917423760.us-east-1.elb.amazonaws.com
Port:               <unset> 80/TCP
TargetPort:         80/TCP
NodePort:           <unset> 30846/TCP
Endpoints:          192.168.46.153:80,192.168.7.254:80
Session Affinity:    None
External Traffic Policy: Cluster
Events:             <none>

Name:                publicreverseproxy
Namespace:           default
Labels:              app=reverseproxy
Annotations:         <none>
Selector:            app=reverseproxy
Type:               LoadBalancer
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                 10.100.151.119
IPs:                10.100.151.119
LoadBalancer Ingress: add69abb0908d43d0be4f1c76fdccef3-371097149.us-east-1.elb.amazonaws.com
Port:               <unset> 8080/TCP
TargetPort:         8080/TCP
NodePort:           <unset> 30095/TCP
Endpoints:          192.168.46.92:8080,192.168.8.25:8080
Session Affinity:    None
External Traffic Policy: Cluster
Events:             <none>

Name:                reverseproxy
Namespace:           default
Labels:              app=reverseproxy
Annotations:         <none>
Selector:            app=reverseproxy
Type:               ClusterIP
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                 10.100.72.139
IPs:                10.100.72.139
Port:               8080 8080/TCP
TargetPort:         8080/TCP
Endpoints:          192.168.46.92:8080,192.168.8.25:8080
Session Affinity:    None
Events:             <none>

Dawits@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
$ |

```

- Kubernetes `kubectl describe hpa` output

```

DawitS@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
$ kubectl describe hpa
Name: backend-feed
Namespace: default
Labels: <none>
Annotations: <none>
CreationTimestamp: Sun, 30 Oct 2022 20:07:45 +0300
Reference: Deployment/backend-feed
Metrics: ( current / target )
  resource cpu on pods (as a percentage of request): 0% (0) / 50%
Min replicas: 1
Max replicas: 10
Deployment pods: 1 current / 1 desired
Conditions:
  Type            Status  Reason              Message
  ----            -
  AbleToScale     True    ReadyForNewScale    recommended size matches current size
  ScalingActive   True    ValidMetricFound    the HPA was able to successfully calculate a replica count from cpu resource utilization (percentage of request)
  ScalingLimited  True    TooFewReplicas      the desired replica count is less than the minimum replica count
Events: <none>

DawitS@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
$ |

```

- Kubernetes `kubectl logs <your pod name>` output

```

DawitS@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)
$ kubectl logs backend-feed-848ccc558b-vxqz1
> udagram-api@02.0.0 dev /usr/src/app
> ts-node-dev --respawn --transpile-only ./src/server.ts

[INFO] 15:57:25 ts-node-dev ver. 1.1.8 (using ts-node ver. 9.1.1, typescript ver. 3.9.10)
Initialize database connection...
Executing (default): CREATE TABLE IF NOT EXISTS "FeedItem" ("id" SERIAL , "caption" VARCHAR(255), "url" VARCHAR(255), "createdAt" TIMESTAMPT WITH TIME ZONE, "updatedAt" TIMESTAMPT WITH TIME ZONE, PRIMARY KEY ("id"));
Executing (default): SELECT i.relname AS name, ix.indisprimary AS primary, ix.indisunique AS unique, ix.indkey AS indkey, array_agg(a.attname) AS column_indexes, array_agg(a.attname) AS column_names, pg_get_indexdef(ix.indexrelid) AS definition FROM pg_class t, pg_class i, pg_index ix, pg_attribute a WHERE t.oid = ix.indexrelid AND i.oid = ix.indexrelid AND a.attrelid = t.oid AND t.relkind = 'r' and t.relname = 'FeedItem' GROUP BY i.relname, ix.indexrelid, ix.indisprimary, ix.indisunique, ix.indkey ORDER BY i.relname;
Server running http://localhost:8100
press CTRL+C to stop server

DawitS@DESKTOP-8J577JR MINGW64 /g/Udacity-third-project (main)

```