

HABIT-TRACKER-APP

● DEVOPS DEMONSTRATION



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INHALT

PROJEKTÜBERSICHT

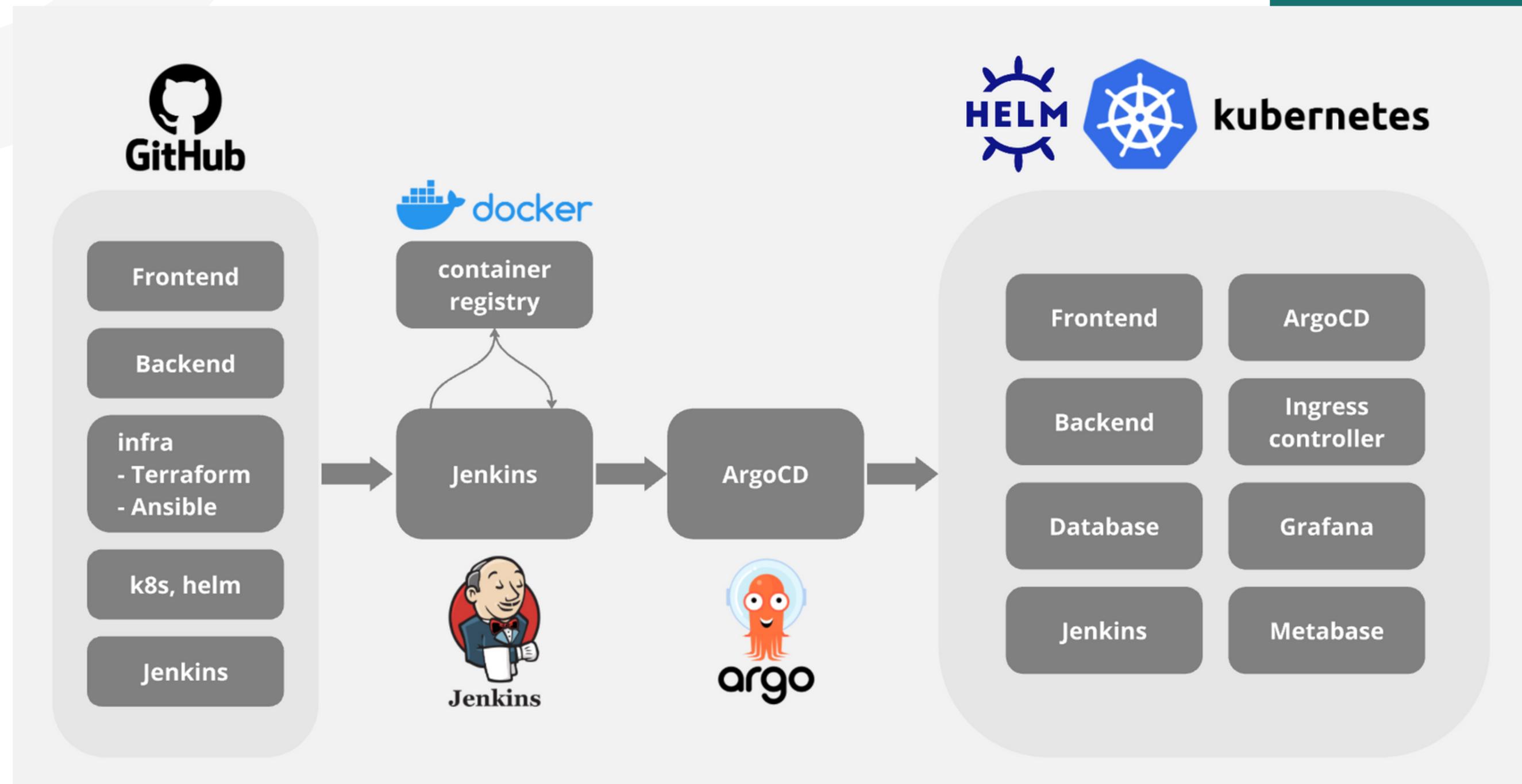
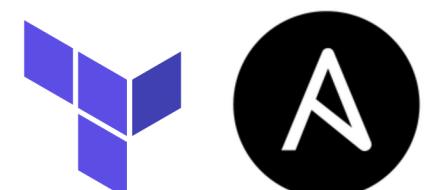
IDEE

Die Habit-Tracker-App hilft Nutzern dabei, ihre täglichen Gewohnheiten zu verfolgen und ihre Fortschritte zu überwachen. Sie bietet eine einfache Möglichkeit, Gewohnheiten zu etablieren, Ziele zu setzen und die persönliche Entwicklung zu fördern.



DEVOPS-PLAN

WERKZEUGEN

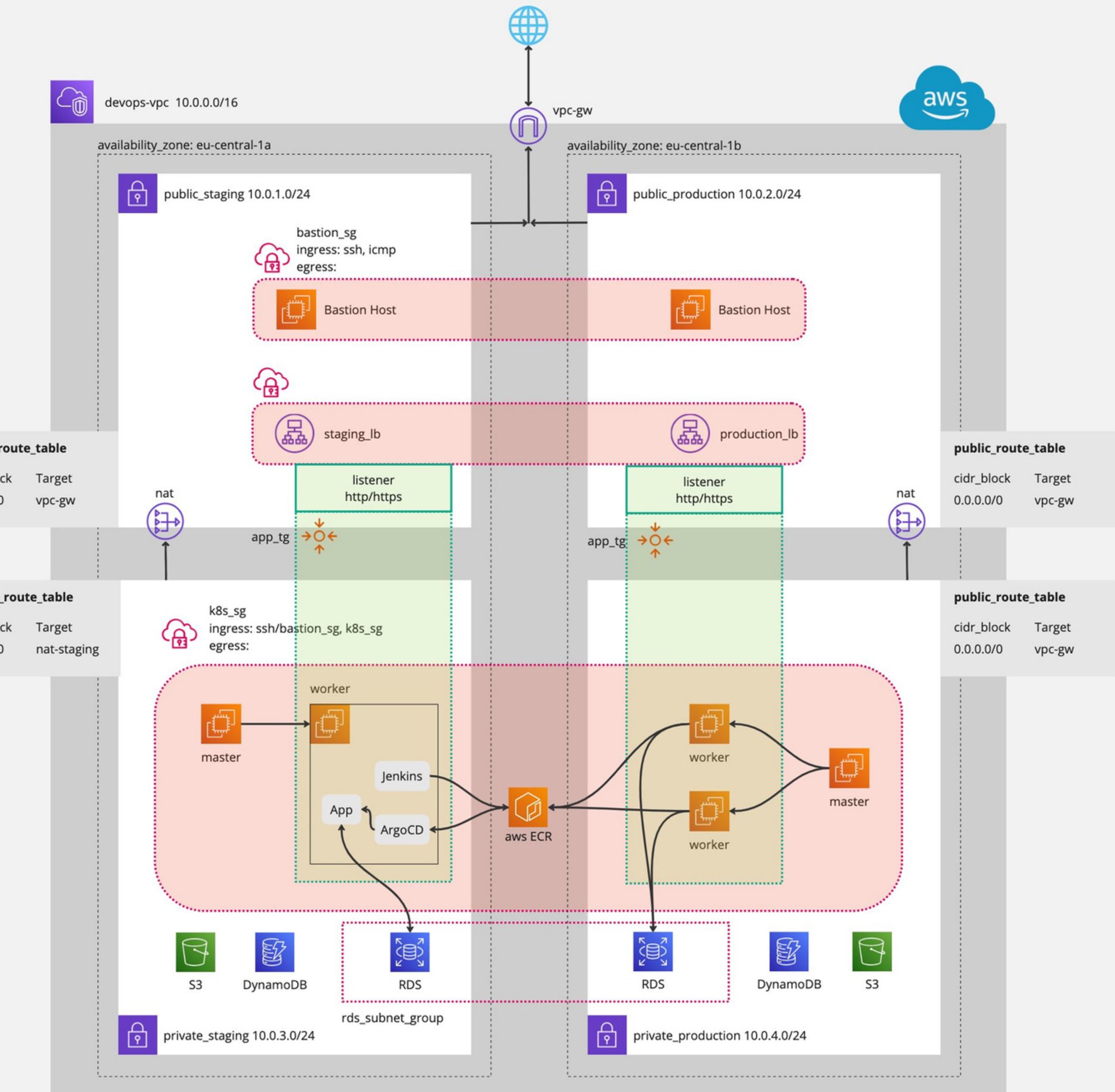


DEVOPS-PLAN

AWS-DIENSTE



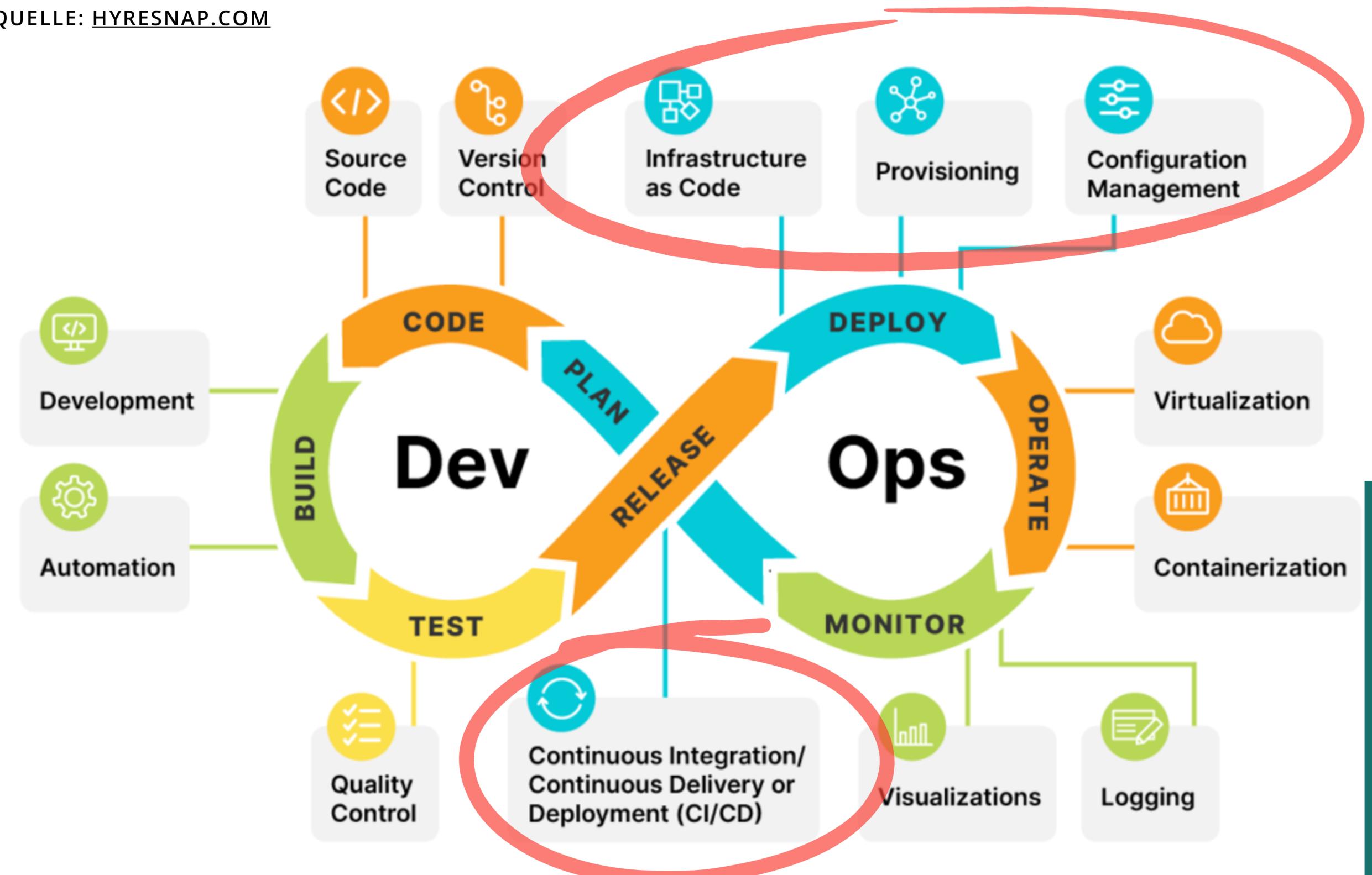
VPC, subnet, internet-gateway, nat-gateway, security-group, route-table, ec2, load-balancer, listener, target-group, s3, dynamoDB, RDS, rds-subnet-group, ecr....



PROJEKT-FOKUS

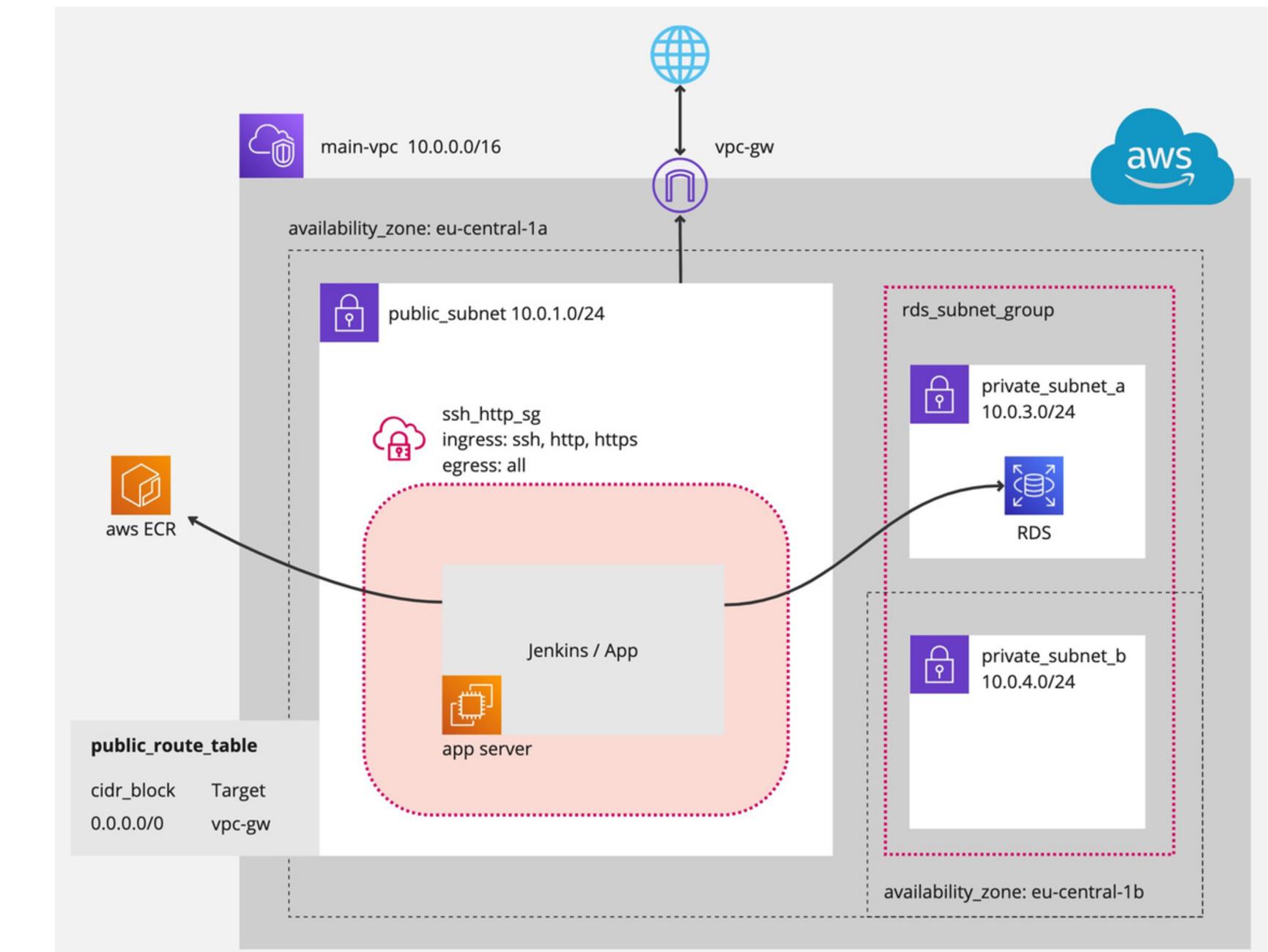
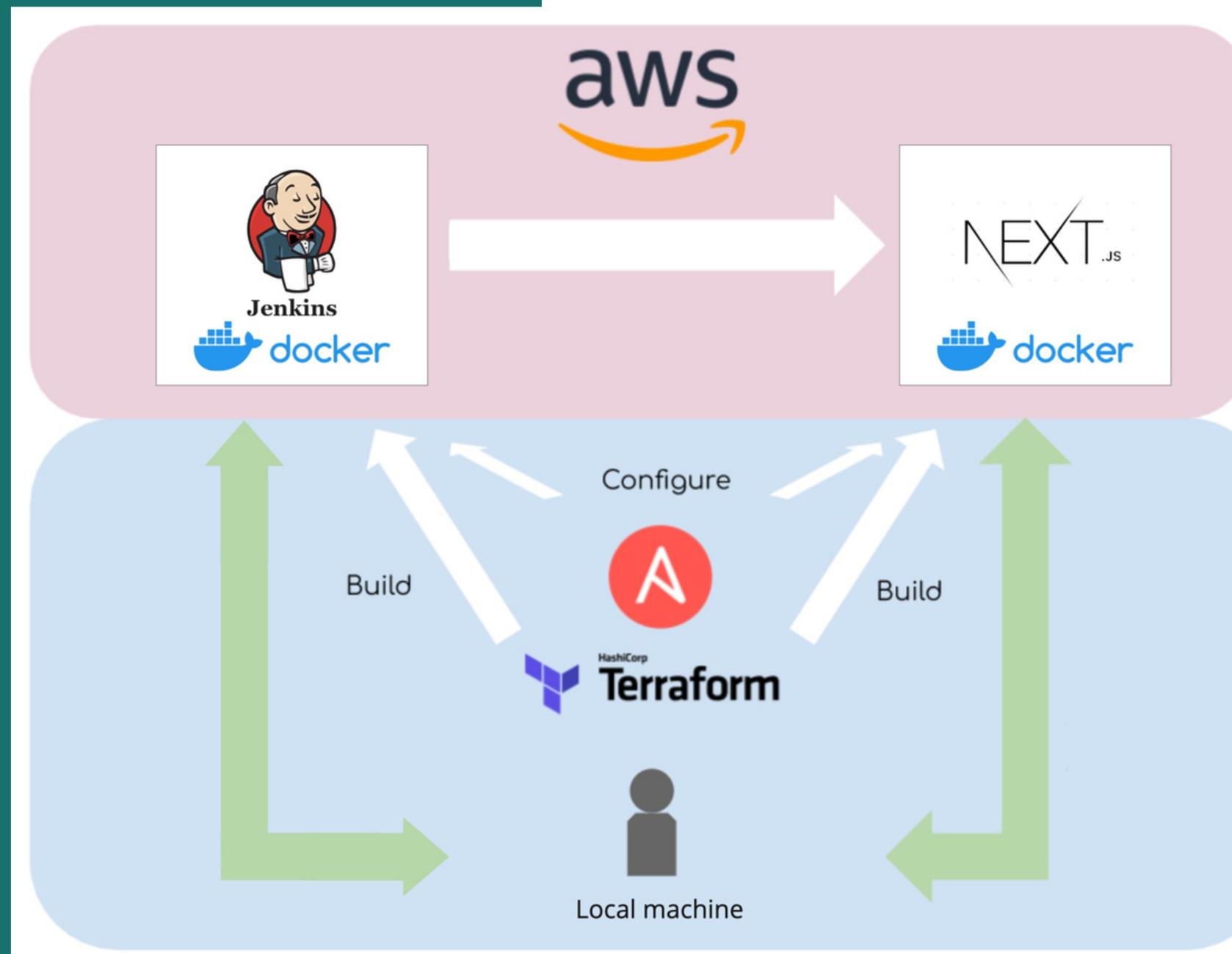
1. INFRASTRUCTURE AS CODE (IAC)

QUELLE: HYRESNAP.COM

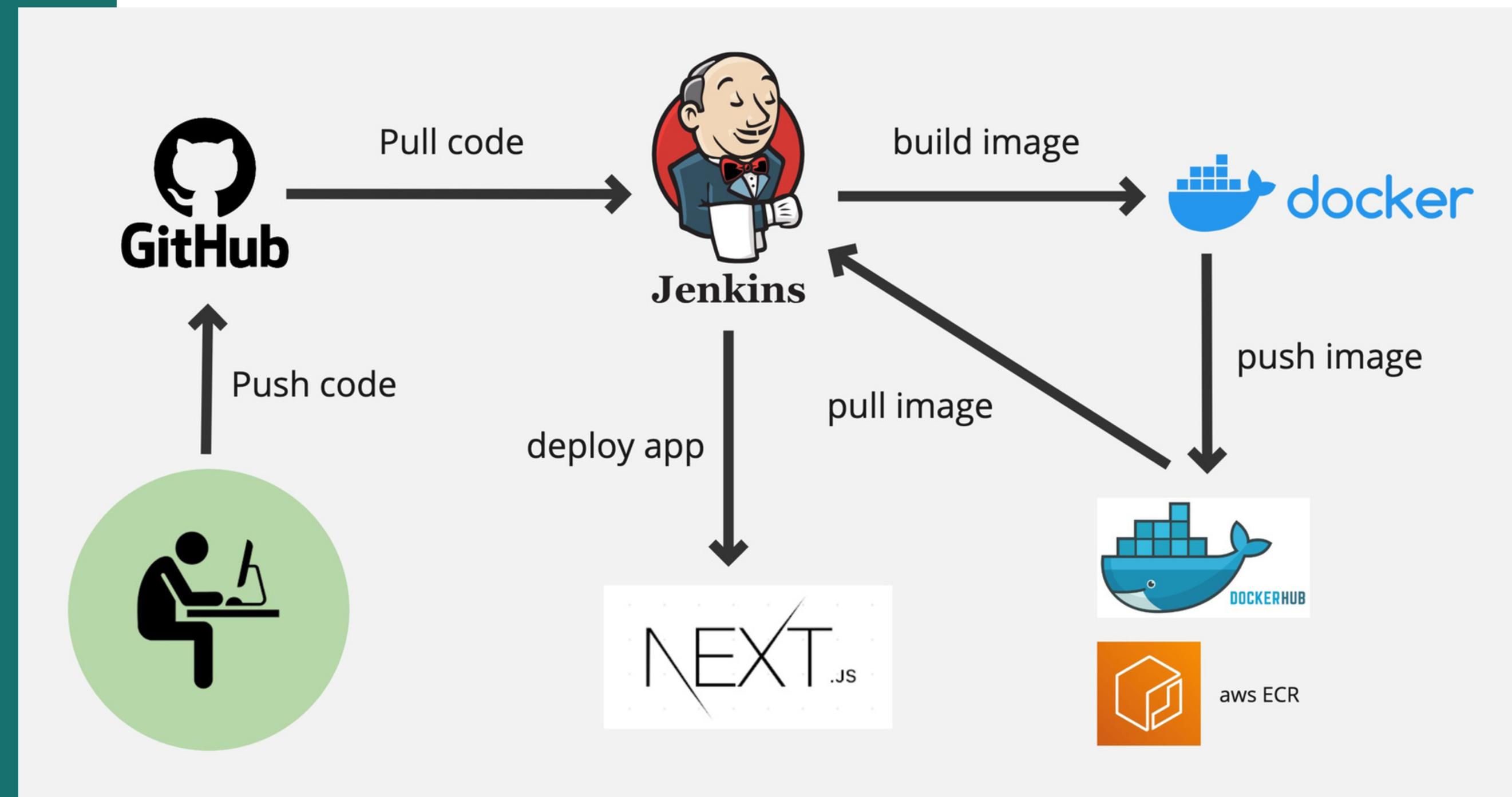


2. CI/CD MIT JENKINS UND GIT

INFRASTRUCTURE AS CODE (IAC)



CI/CD MIT JENKINS UND GIT



```

$ deploy.sh U .gitignore M ! setup.yml
habit-tracker-infra > ansible > playbooks > ! setup.yml
  1   - name: Setup App Server and Jenkins Server
  34  tasks:
  49  149   - name: Debug ECR repo URL
  50  150     debug:
  51  151       msg: "ECR Repo URL: {{ ecr_repo_url }}"
  52  152   - name: Authenticate to AWS ECR
  53  153     shell: aws ecr get-login-password --region "{{ aws_region }}" | docker login --username _json_key --password-stdin ecr_repo_url
  54  154
  55  155
  56  TASK [Remove existing Jenkins container (if exists)] *****
  57  changed: [app_host]
  58  TASK [Run Jenkins container with custom image] *****
  59  changed: [app_host]
  60  TASK [Install AWS CLI] *****
  61  ok: [app_host]
  62  TASK [Read AWS credentials from CSV file] *****
  63  changed: [app_host]
  64  TASK [Configure AWS CLI with IAM user credentials] *****
  65  changed: [app_host]
  66  TASK [Verify AWS CLI configuration] *****
  67  changed: [app_host]
  68  TASK [Debug ECR repo URL] *****
  69  ok: [app_host] => {
  70    "msg": "ECR Repo URL: 329599638481.dkr.ecr.eu-central-1.amazonaws.com/habit-tracker"
  71  }
  72  TASK [Authenticate to AWS ECR] *****
  73  changed: [app_host]
  74  PLAY RECAP *****
  app_host : ok=23  changed=16 unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
+ echo 'Deployment Completed Successfully!'
+ Deployment Completed Successfully!
+ xinyuXinyu-MacBook-Pro-habit-tracker-infra %

```

VPC dashboard

Resources by Region

- VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only Internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- NAT gateways
- Peering connections

Security

- Network ACLs
- Security groups

PrivateLink and Lattice

Infrastructure as Code (IaC)

Bereitstellung von AWS-Ressourcen mit Terraform und Konfiguration mit Ansible



S	Build	Time Since	Status
✓	habit-tracker-pipeline > main #26	5.6 sec	?
✓	habit-tracker-pipeline > main #25	1 hr 32 min	back to normal
✗	habit-tracker-pipeline > main #24	1 hr 41 min	broken since build #21
✗	habit-tracker-pipeline > main #23	1 hr 45 min	broken since build #21
✗	habit-tracker-pipeline > main #22	2 hr 38 min	broken since build #21
✗	habit-tracker-pipeline > main #21	2 hr 51 min	broken since this build
✓	habit-tracker-pipeline > main #20	3 hr 7 min	back to normal
✗	habit-tracker-pipeline > main #19	3 hr 8 min	broken for a long time
✗	habit-tracker-pipeline > main #18	3 hr 25 min	broken for a long time
✗	habit-tracker-pipeline > main #17	3 hr 40 min	broken for a long time
✗	habit-tracker-pipeline > main #16	3 hr 48 min	broken for a long time



```

Started by user xyc
20:43:19 Connecting to https://api.github.com using admin-habit-tracker/*****
Obtained Jenkinsfile from 62eb4b27f2fb1e9e7351c33fb7d6cf03a801f286
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /Users/xinyu/.jenkins/workspace/habit-tracker-pipeline_main
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
The recommended git tool is: NONE
using credential admin-habit-tracker
> git rev-parse --resolve-git-dir /Users/xinyu/.jenkins/workspace/habit-tracker-pipeline_main/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/xyc-tw/habit-tracker-app.git # timeout=10
Fetching without tags
Fetching upstream changes from https://github.com/xyc-tw/habit-tracker-app.git
> git --version # timeout=10
> git --version # 'git version 2.39.3 (Apple Git-146)'
using GIT_ASKPASS to set credentials
> git fetch --no-tags --force --progress -- https://github.com/xyc-tw/habit-tracker-app.git

```

CI/CD mit Jenkins und Git

Automatisierung der App-Bereitstellung mit Jenkins

DANKE FÜR IHRE
AUFMERKSAMKEIT