

# Maksym Shaposhnikov

Senior Systems Engineer, Build, Release and Configuration Manager

CI/CD | AWS | Ansible | Terraform | Python | Docker | Jenkins | Kubernetes

Kiev, Ukraine

- telegram shaposhnikoff

## RESUME SUMMARY

I am a qualified specialist with extensive hands-on experience in build engineering, configuration management, and DevOps practice.

Linux guy first and foremost. Experience in centralized config management, cloud and some on-premise infrastructure, CI/CD. Always aiming for zero downtime and those lovely smooth deployments. Experience in centralized config management, cloud and some on-premise infrastructure, CI/CD. Always aiming for zero downtime and those lovely smooth deployments.

My key expertise includes design and implementation of continuous integration, delivery, and deployment using Jenkins, Gitlab CI/CD, Argo CD/CD, Git, Docker, Vagrant, Ansible, and AWS/EC2.

- Linux, Docker, Kubernetes, Packer, Vagrant, MySQL, Redis, Shell, Ansible, Artifactory, Nexus, Git, Nginx, Zabbix, Prometheus, HAProxy, SQL, Apache, Logstash, Elasticsearch, Kibana, Fluent-bit/Fluentd, FreeRADIUS, TCP/IP, DNS, SNMP, LDAP, RADIUS, HTTP(S), RESTful, XML, JSON.
- Jenkins - Release build out, environment, deployment, configuration, continuous delivery, Gerrit integration.
- Docker - pack Java microservices into a shipping containers, which will be deployed to Kubernetes.
- Kubernetes - Jenkins CI/CD - ARGO CI/CD integrations, include creating fully automated build. environments, with Amazon (Gitlab/Dockerhub) container service as Docker registry, Kubernetes as Jenkins nodes runner and Spring Boot application Docker images hosting.
- Centralized pods logging, using Elasticsearch/Fluent-bit
- Helm package creation, to improve deployment speed.
- Monitoring - Prometheus (alertmanager, blackboxexporter, other types of exporters), Nagios, Zabbix

## WORK Experience

### Zoolatec - Senior Systems Engineer

Dec,2020 - Now

Main responsibilities on the project

- Create and maintain fully automated CI/CD pipelines for code deployment using Jenkins/Terraform/Ansible/Docker
- Prepare and maintain EC2 Fleet cloud instances , which launches EC2 Spot or On Demand instances as worker nodes for Jenkins CI server, automatically scaling the capacity with the load.
- Create and applied completely from scratch an assembly of AMI images - x86 and Graviton (arm64) automatic deployment (updating AMI images) for more than 30 clusters ECS - python and boto3
- Create and maintain Terraform infrastructure for all ECS/ECR/Lambda/ALB types of AWS infrastructure of a project
- Centralised Monitoring system ( migrated is about 8000 nodes from NewRelic to Datadog )
- Reduced costs by ~\$3,000 each month by eliminating unnecessary servers and consolidating databases
- Improving developer workflow, increasing scalability, and optimizing speed.
- Miscellaneous Docker/Ansible/Python work

### Grid Dynamics - Senior Systems Engineer

Dec,2017 - Dec,2020

IOT && ECS project for NDA company

Main responsibilities on the project

- AWS (EC2, SNS, SQS, IoT Core, Lambda, S3, Route 53, ACM, WAF, KMS, DynamoDB, ECS Fargate, ECR, Cognito, CodeBuild), Docker, Terraform, Ansible, Azure Devops, Jenkins - pipelines, releases, AWS integration (CodeBuild, CodeDeploy)
- Create and maintain full stack of Terraform infrastructure in AWS - creating infrastructure for
- ECS (Fargate, task definitions and service descriptions)
- ELB (Application LB, target groups for set of Docker containers)
- ECR (Automated creation Docker repo from CI/CD pipelines)
- ACM (Automated provision of LetsEncrypt / Other types of certs)

- VPC (Subnets, Nat GW, IGW)
- Route53, SNS, SQS, Lambda
- Hashicorp Packer provision containers for AWS (creating custom AMI, upload it to S3, deploy to EC2)
- Maintenance of project infrastructure (CI/CD pipelines (Jenkins), Help with creating Dockerfiles, knowledge sharing)
- Create and maintain Kubernetes cluster that work as Jenkins slave runner for needs of Development team (Kubernetes run specific pods, for example with specific version of Node.js and this allows developers to run various environments to getting the best results). We use Kubernetes cluster for these purposes because we can start and stop pods in cluster very quickly.
- Automated build and deployment process with Gitlab CI, eliminating 80% of manual work.
- Automated deployments for 200+ cloud servers (EC2/ECS) using Ansible, Terraform and Bash.
- Applying configuration changes using Ansible, AWS, Terraform, Packer, etc.
- Maintenance of K8S cluster, creating HELM charts for Jenkins deployed microservices via Jenkins jobs, configuration, and patch management.

All this infrastructure are developed to use in separate environments, so, to prepare it to use in dev, or stage, or prod we need to change only AWS Network settings (VPC, SG, Subnets) and we ready to apply this configuration to another account.

I'm also spend a 12 month as a contractor in Google (Seattle), works as Release Engineer in a Google Cloud Frontend Team.

### **EPAM Systems - Senior Systems Engineer**

Feb 2014 - Apr 2017

- Design and develop continuous deployment pipeline, integrating Test-Kitchen, Docker, Git, Jenkins and Ansible across geographically separated hosting zones in AWS.
- Performed new Ansible automation to replace old-bash-style scripting tools to provide Continuous integration / Continuous delivery of results working of Development team.
- Performed custom Docker integration solution to run test suites (functional, unit, web, integration tests) - running tests in docker-compose created environment with hybris image and wide range of MySQL database versions.
- Developed fully completed CI/CD solution (Jenkins/Docker/Ansible based) from scratch to build and deploy artifacts starting from git pull and ending to checking Hybris startup logs and email notification to dev team members.
- Developed many fully customized Ansible playbooks for maintenance next application on customer cloud - Apache Solr Cluster, SMTP server Postfix.
- Also, created and maintained everyday ansible automation and special

automated branch to GoLive production environments.

- Collect the new technologies and tools and introduced them to the client; in which way it helped the company build up an agile development environment - it improved the product quantity and the work efficiency.
- Developed automation and deployment utilities using Bash and Ansible.
- Designed and developed automated deployment and scaling processes based on Docker and Ansible for a wide range of server types and application tiers, including Elasticsearch, Tomcat, Varnish and SOLR Clusters.
- Wrote custom monitoring and integrated monitoring methods into deployment processes to develop self-healing solutions.
- Created automation and deployment templates for relational databases (standalone and RDS).
- Wrote custom monitoring and integrated monitoring methods into deployment processes to develop self-healing solutions (Zabbix && Ansible).

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