Sébastien Coavoux

Cloud Architect, Devops, Linux

fr en

Email: **contact@azoplee.com**

Availability: Available

About

I offer services in cloud infrastructure projects. I have expertise in containers, CI/CD and DevOps methodology. Independent for 5 years, I have 12 years of experience in a diverse range of industries: transportation, telecommunications, home care, horticulture, government agencies. I'm familiar with Agile methodology, got a good team spirit and can communicate easily. I can translate business or technical needs into infrastructure needs and help achieve them.

My main objective : ship work the way I would like to receive it Let's discuss your needs and see how we can have a fit.

Experience

Azoplee.com

Senior Consultant

November 2019 - present

Client: Bayer - April 2023 to December 2023

Mission : Software build in the horticulture industry

Assignment : Cloud infrastructure architecture

- Design infrastructure solution in Azure
- IOT pipeline integration
- Azure integration to achieve passwordless approach

Assignment : Enable developers fast protyping

- CI/CD pipeline for each microservice
- Deployment automation in Azure to achieve GitOps approach
- Multi environment deployment

Assignment : Internal API integration

- Business analysis and tranduction of need
- API limitation analysis
- Integration POC and validation

Technical environment : Azure, Azure Containers App, Gitlab, Azure functions, SQL server, Postgresql, Graphql, Terraform, Azure Data Explorer, Event hub, Cosmosdb

Client: **Alayacare** - October 2022 to March 2023

Assignment : Cost optimization of Kubernetes workloads

- Setup of CPU based autoscaling for microservices
- Analysis of historical metrics to define appropriate thresholds
- 10% cost decrease on Kubernetes nodes infrastructure

Assignment : Application stability issue analysis

- CPU throttling analysis of Kubernetes apps
- Analysis of resource allocated for Kubernetes nodes
- Recommendation on quotas and resources usage

Assignment : Application deployments

- Self hosted onetimesecret deployment
- Logging stack upgrade
- IAM role integration with avec Kubernetes service accounts

Technical environment : Aws, Kubernetes, argocd, falco, helm, github actions, cloudformation, ruby, python, secret management

Client: **Erudit** - March 2022 to July 2022

Assignment: Platform Migration

- Business apps containerization with Podman
- CI/CD architecture
- Packaging and Deployment Automation

Technical environment : Podman, Ansible, Gitlab, Openstack

Client: **Bell** - June 2020 to June 2022

Assignment: Node migration in a Kubernetes cluster

- Cluster node addition
- Reinstall of physical nodes
- Maintain cluster operation while migrating

Technical environment : Linux, RKE, Ansible, Helm

Assignment: Tooling and pipeline improvemnts

- Add, update and deploy charts

- Configuration deployment automation with ArgoCD
- Template standard configuration for new clusters

Technical environment : Gitlab, Helm, Openshift, ArgoCD, ELK, Kafka

Assignment: Support of new tenants on Openshift environments

- Tenant onboarding
- Teach Kubernetes best ptractices
- Business configuration setup

Technical environment : Openshift, BGP, Envoy, Helm, ArgoCD

Assignment: Public cloud strategy adoption

- Proof of concept in various cloud provider
- Roles and responsibility definition within internal teams
- Support strategy based on tenant expertise

Technical environment : AWS, GCP, Rosa

Customer: Axceta - February 2020 to May 2020

Assignment: Kubernetes-based stack Audit and Helm setup

- Audit of existing architecture in Google Cloud
- Detection and fixes of design and security issues
- CI/CD pipeline improvement with Helm

Technical environment : Google Cloud Platform, GKE, Cloud Endpoint, Helm

Customer: Numigi - December 2019 to February 2020

Assignment: Stack migration from a Docker based architecture to a Kubernetes one

- Audit of existing architecture
- Proof of concept with Kubernetes architecture
- Packaging and Deployment Automation

Technical environment : Kubernetes, Docker, DigitalOcean, Helm, Ansible

Customer: Nokia - November 2019 to February 2020

Assignment: Scaling Platform

- Migration of business application from ECS to Kubernetes
- Packaging and Deployment Automation
- Platform support and coaching

Technical environment : EKS, Helm, Gitlab, Openstack, Terraform

Fon
(previously XCellAir)

Senior Devops Engineer

May 2017 - November 2019

Assignment: Private cloud platform

- Setup and configuration of Openstack server
- Design of private cloud architecture
- Deployment and Configuration of Openstack with Chef
- Contribution to Openstack Chef cookbooks to support last Openstack versions

Assignment: CI/CD pipeline

- Migration of repositories to Gitlab Cloud and user training
- Design and implementation of CI and CD using GitlabCI
- Team velocity improvement with a faster feedback loop
- Deployment of an internal artifacts manager (Nexus)

Assignment: Scaling plateform

- Introduction of Docker technology in the company and user training
- Lead containerization of business applications and technology adoption
- Introduction of Kubernetes as next generation scaling solution
- Deployment of containerized stack in AWS and Openstack (ECS, K8s, docker compose)

Technical environment : Kubernetes, Docker, AWS, Terraform, Gitlab, Openstack, Chef, Bitbucket, Jenkins, Python, Linux

Nuance Communications

Devops Engineer

April 2016 - May 2017

Assignment: Provide a cloud based platform for other team to setup in-house app

- Setup and configuration of a Kubernetes cluster
- Development of patch to Kubernetes to add new features
- Development of a tool to automate installation, with continuous intergration and test in cloud
- CI pipeline and unit tests of the setup tool
- Setup, configuration, monitoring and maintenance of a docker registry for locals apps
- Proxy architecture to replicate docker images
- Coaching of new Kubernetes users
- Integration of latest Kubernetes / Docker version to get the very last features

Technical environment : Linux, Python, Kubernetes, Docker, Azure, Go, Portus, Gitlab, DigitalOcean, Ruby

Nuance Communications

Release and Continuous Integration Engineer

November 2015 - April 2016

Assignment: Sustain CI pipeline and improve reliability

- Setup of a in-house monitoring system to detect server issues
- Use of container approach in CI to have stateless agent
- Unification of agent setup to get a homogenous infrastructure
- Deployment automation with configuration management tool from scratch

Technical environment : Linux, Python, Salt, Docker, Bamboo, Sensu, Graphite, Grafana, Ruby

Savoir-faire Linux

Free Software Consultant

April 2013 - November 2015

Customer: Société de transport de Montréal

Assignment : Setup of a monitoring tool in a huge environnemnt

- Setup the monitoring tool in dev env
- Development of tool generating configuration
- Monitoring plugins development
- Production support deployment
- Continuous integration tests
- Benchmarks, functional testing

Technical environment : Linux, Python, Shinken, Graphite, WMI, Talend, Ossec, Collectd, SNMP

Customer: Société de développement de la Baie-James

Assignment : Monitoring software update and hardware addition

- Keep the software up to date with latest features
- Monitor new hardwares, servers, softwares.
- Custimization

Technical environment: Linux, Python, Shinken, Thruk, Nagvis, Windows Server, WMI, VmWare, SNMP

Customer: Société québécoise des infrastructures

Assignment : Setup of a monitoring tool

- Setup and customization (alerting, theshold)
- Custom development of monitoring plugins
- Formation materials

Technical environment : Linux, Python, Shinken, Centreon, MySQL, PHP, Windows Server, WMI, VmWare

Education

Polytech'Grenoble

Computer Science Engineer
Major : Networks and Systems

2009 - 2012

Key modules : Algorithms, Systems architecture, Cryptography, Databases, Software engineering, Operating Systems, Networks, Communication, Management.

Projects

L'Atelier Candide

lateliercandide.ca

Business Process Engineering

2018 - 2024

Inventory operations automation

- Product additions and updates
- Delays detection on shippings
- Product quantity sync between multiple website
- Detect inventory difference and protuct to order again

Technical environment : Python, Google Analytics, Shopify, GraphQL

Alignak

Main developer

2015 - 2018

Open-source monitoring framework

Major refactoring to make code compliant to Python rules

- PEP8 and Pylint compliance over the code
- Functional and unit test additions
- Setup of development best practices (continuous integration, code review, code quality analysis)
- Packaging automation

Technical environment : Python, Travis, Docker, Dpkg

Sébastien Coavoux - contact@azoplee.com