Jean-Baptiste Lasselle Devops Terraform SME

I am a Devops, I do infrastructure management, the Infrastructure as code way.
I everyday use git, terraform, terraform modules, terraform providers.
I run terraform in pipelines, I am a **Gitops** guy.

My interests today are:

- Designing and implementing **Infrastructure As Code** the gitops way (eg https://runatlantis.io)
- I most of the time work with **Kubernetes**

Professional Experiences

> Limagrain

Devops, terraform SME

09/2023 - 02/2024

Project Context: At Limagrain, a business critical, internally developed app, had only one environment, and no production env. I was in charge of building the missing production environment.

In charge of building the production environment, I was first assigned the task of auditing the whole project, both in terms of infrastructure, and CI/CD.

I produced a first executive summary, providing opinionated recommendations.

My two main recommendations were:

- to automate "everything": both the infrastructure management with terraform, and the dev CI/CD
- to spin up isolated environments to promote releases from dev, to staging, UAT, up to the production.

Duties and achievements

- Implementing my recommendations, working with the Dev Team (5 developers), on one end, and the core infrastructure teams (compute, identity, network, security teams), on the other hand.
- Talk on terraform and infrastructure as code concepts.
- I was required to attend the validation gates meetings, required to allow the app to go to production. My role was to answer the question about infrastructure and automation design choices details.
- Terraform **evangelist**: Terraform was not used at all in the project, and I **convinced** the management, and the core infrastructure teams, **to start using terraform for infrastructure management**, especially in **production**.

- Devops stack: Terraform, Helm, kubectl, Docker, Azure AKS / App Gateway Ingress Controller (AGIC), Azure Functions, Azure CosmoDB, Azure EventHub, Azure Devops (Pipelines), Azure Managed identities / Service Principals, Azure networking - vnet, subnets, private endpoints, Artifactory, shell scripting (sh, bash).
- OS: Windows Server, many dockerized Linux distros for CI/CD.
- Dev stack: I mainly used terraform and did only Infra As Code. I only had once to dive into code, to be able to shell script the full build from source of the Dotnet Azure Functions.

> Michelin

Devops Lead

11/2022 - 09/2023

Project Context: At Michelin, Data Engineering / Al Project

I was in charge of managing all Azure resources with **terraform** (Azure Storage Accounts, vnet/sbnets, VMs, managed identities, service principals, etc...).

I was involved with 2 Data engineer SMEs, to **re-design and implement** the whole **Data Engineering platform**. I was working on the CI/CD scope. The new design involved a **migration from** an **{Azure Data Factory / ADF Pipelines} stack**, to a much more advanced, **Python**-based, **{Databricks + Snowflake} Stack**.

The new data engineering platform processed data by executing Python code, and therefore needed a fully fledged Python CI/CD.

Duties and achievements

- Managing of **Azure** resources with terraform: Databricks workspaces, Azure Account Storage, networks, Azure Key Vaults, Managed Identities, R-Studio VMs, MongoDB clusters, etc...
- **Modularization of terraform code**, management of terraform state: **terraform modules**, terraform private registry, terraform state into Azure Account storage container
- Design of **CI/CD Modules**, **CI/CD runners** Docker images (Python code)
- Design of **CI/CD Pipelines**: **Git workflows**, **Gitlab** release automation with gitlab-cli, python packages deployment to databricks (**databricks scheduled jobs**), snowflake (with liquibase).
- Design of **Documentation**: astro/hugo documentation repo with automation based on Gitlab CI/CD pipelines.

- *Devops stack*: Databricks, dbx, Snowflake, dbt, Terraform, Helm, Docker, Kubernetes, Azure, azcopy, Gitlab, Artifactory, shell scripting (sh, bash), make.
- OS: Windows Server, CentOS, many dockerized Linux distros for CI/CD.
- Dev stack: Python, Python setuptools, NodeJS TypeScript, Astro, Hugo.

> Gravitee Source

Devops Engineer, Kubernetes Team

07/2020 - 03/2022

Devops at Gravitee, Kubernetes SME, I competely re-designed i re-implemented the whole Gravitee CI CD, migrating from Jenkins to Circle CI on the way. At https://gravitee.io, I was the first devops, I there introduced infrastructure as code.

Duties and Achievements

- Full design, implementation, and migration of the whole of the Gravitee CICD System.
- Implementation of all standard operations using pure infra as code of gravitee hosted offers (deployment, backup, restore, upgrades, downgrades, cloud provider migrations, etc.).
- Design of hosted saas offers fo the Gravitee API Gateway,
- Kubernetes SME

Tech

- Devops stack: Pulumi, Terraform, Helm, Docker, Kubernetes, K3D, Azure AKS, AWS EKS, FluxCD.
- OS: Debian, alpine, and many dockerized Linux distros
- Dev stack: NodeJS/TypeScript, Python, bash /sh shell, Golang.

> CRESH.EU

Devops Engineer

05/2020 - 08/2019

At https://cresh.eu, a small french Startup, I worked on designing and implementing the entire Cloud Infrastruture, 100 % Kubernetes based. AWS EKS, Helm deployment of dev's work, Gravitee API Gateway. https://gravitee.io founders heard of me because of the work I did there at cresh.

Duties and Achievements

- Devops SME / Cloud Architect, full infrastructure design
- Kubernetes SME
- Main Kubernetes Cluster Terrfaformation Automation.

- Devops stack: Pulumi, Helm, Docker, Kubernetes, AWS EKS, Gravitee API Gateway.
- *OS*: Debian, Alpine.
- Dev stack: NodeJS TypeScript, bash /sh shell.

Devops Engineer

07/2019 - 10/2019

Devops contractor at SFR (French ISP and phone operator), Cisco NSO project Team (SDN)in charge of datacenter deployment automation and operations.

Duties and Achievements

- I worked on designing and deploying a full devops stack, for developers to git push their Python source code, ending with their code deployment to production Cisco NSO devices.
- I was a CI/CD evangelist on this Cisco NSO project (networks engineers do not have the same culture as Dev Engineers, to say the least). CI/CD pipelines with Gitlab.
- I took a Cisco NSO training session at Cisco, on how to automate bare metal provisioning of Cisco NSO Clusters, in « Issy les Moulineaux » a French city close to Paris.

- *Devops stack*: Ansible, Docker, Gitlab EE, Jenkins Pipelines, LVM, Cisco NSO, Cisco KUBAM pour le PXEless boot, SSH Bastions.
- OS: Windows, Linux CentOS 7
- Dev stack: Python 2 Python 3 PyEnv .

> Bosstek

Devops Engineer

04/2018 - 11/2018

Employee at Bosstek, a french consulting SMB, specialized into infrastructure management, that was my first experience in a « Pure Infra » company, and the first time i took that kind of angle into the devops market.

I took part into 3 projects with Bosstek, for 3 different French Customers. This experience was very interesting, for I worked there with people who never ever worked in software development. I would say they were from the « old style » infrastructure world, and that is why i had a lot to learn with them.

Duties and Achievements

- I worked in the core team of projects for huge companies: SOPRA Steria, ENEDIS, and Carrrefour One Cloud, as Devops SME / Cloud Architect.
- I have been Dev Engineers Team Leader At SOPRA STERIA, where i worked under the authority of David Maurange.
- I also conducted two internal studies about in that company, where i was the only Kubernetes SME:
 - Production grade Kubernetes Cluster Ingress Controller best practices.
 - A proposed solution of system monitoring with Rsyslog/Elastic Stack, (with a focus on CA servers restarts): purpose was to have the company certified as a CA Authority delivering SSL/TLS certificates.
- Working in the Carrefour One Cloud (a project in collaboration with Google), I there discovered for the first time the concept of Headless CMS, with https://strapi.io, and it is the first time I worked on a production grade use of the Gravitee API Gateway.

- Devops stack: Terraform, Ansible, Jenkins, Gitlab, Docker (docker-compose), NGINX, Gravitee.io (API Gateway), Keycloak (avec OpenID explicit flow), Kubernetes, ELK.
- OS: Linux Debian, Ubuntu Server
- *Dev stack*: NODEJS, NPM, Angular 5, ReactJS, MongoDB (dans 2 missions de conseils), Jhipster, Jboss EAP.

Previous life as dev 2008 – 2017

> Vierling Communication

Java Dev Engineer 02/2016 – 12/2017

Java Dev Enginer at Vierling-Communication, an R&D company of the « Laudren Group » . R&D main The product was a cutting edge (optic fiber) network monitoring system, using OTDUs.

I implemented full deployment automation using Gitlab CI/CD pipelines, docker, and PXE-booting. fully automated the deployment went down to a 7 minutes process.

> SPVC Group

IS Architect, IT department founder 06/2013 – 07/2015

SPVC was an SMB of the contruction industry, specialized into fluids. My first experience with real IT infrastructure.

Design n Implement a B.A.M. system (Business Activity Monitoring), with Chef.io, KVM Virtual Manager, CentOS 6.x, Ubuntu server, Java EE, Artifactory, MAVEN3, Activiti BPMN engine, soap web services.

> Michael Page International

Dev Engineer

01/2012 - 11/2012

At the heart of Michael Page's IT Department (EMEA), I took part in the full revamping of Michael Page's Information system (candidate assessment mainly), along with 10 à 15 Java Dev Engineers, 2/3 IT Architects, QA and ten Business Analysts.

{ 2011: I spent one year in a French IT school named « AFCEPF » to get a Software Architect degree}

> Sanofi Aventis

Java Engineer 02/2010 – 12/2010

> CPAM

Java Engineer SME 03/2009 – 11/2009

> Mnémosyne

.NET Developer 10/2008 – 12/2008

Education

2011	Software Architect Engineer Degree	AFCEPF, http://www.afcepf.fr/
2007	2 years Degree in IT engineering	AFPA Paris, https://www.afpa.f r/
2001	DEUG MIAS (Mathematics under graduation)	Paris 6 University, http://www.upmc.fr/e n/
1999	DEUG SCVT, (Biochemistry under graduation)	Paris 6 University, http://www.upmc.fr/e n/

Languages

Fluent English, school level German, a few words of Bulgarian, souvenirs of classic Ancient Greek.

And...

Jogging, trekking, fencing (sword, saber), trout fishing. An Trout Fishing, plus a bit of Trout Fishing (I LOVE Trout fishing:))