# Cloud Native Platform Engineering

## Why Platform Engineering?

Platform Engineering is a discipline of designing and building toolchains and workflows that provides self-service capabilities for teams and organizations developing software in a cloud-native model. Platform engineers provide an integrated product that covers the operational needs of the entire application lifecycle.

The adoption of these new practices is not without some challenges to be met, especially on the topics of security, talent acquisition and retention. However, the real challenge is the transformation of business applications to ensure their standardization to allow their portability between the different types of Clouds (public, private, trusted, native or Edge).

It is therefore necessary to have a solid and industrial platform engineering base to support the development and delivery of these new applications.

## How to adopt Platform Engineering?

The implementation of a "Platform Engineering" practice is based on 6 main pillars:

1. Provisioning and configuration
2. Health and performance management
3. Life cycle management
4. Platform capacity management
5. Availability and resilience
6. Security and Compliance

One of the basic paradigms is the complete automation of platform lifecycle management activities. Whether it's first deployments ("Day 1"), run activities ("Day 2") or upgrade ("Day 3"), all actions are carried out through Infrastructure-as-a-Code practices.

This approach requires the ability to fully automate the platform and associated life-cycle toolchains.

Devoteam has chosen to partner with HashiCorp as a strategic partner for the technological realization of this vision.

## Our strategic partner: HashiCorp

**Nomad**  **Terraform**  **Boundary**

**Vault**  **Consul**

## The different areas of Platform Engineering

A platform is a manufactured product made available to developers to facilitate the creation of new applications, we speak of the "Platform-as-a-Product" approach. As a result, this platform will not only interact with business lines but also with corporate functions.
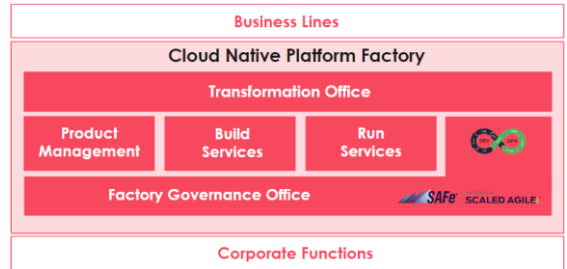


5 fundamental areas must be implemented to deliver this "Platform Engineering" function.

### 1. Factory Governance Office
This area of governance covers several topics such as compliance, risk, service levels and demand management. It also covers supplier relationship management (HashiCorp), continuity management activities, customer relations and financial management.

### 2. Product Management
The platforms make products available and therefore, it is necessary to manage this product portfolio with strategy, catalog management, marketing, design authority. To support the professions, an innovation unit (the "booster") is also included.

### 3. Build Services
This domain includes the functions of development, testing and provision of services. On the quality assurance and deployment part, modern practices such as "Chaos Engineering" or "Progressive Delivery" are included.

### 4. Run Services
These services cover all management activities of the platform, its components and especially the products made available. In particular, there are classic "Incident-Problem-Change" functions but above all advanced observability capabilities to understand precisely the internal workings.

### 5. Transformation Office
This domain supports the relationship with business lines to support the adoption of these new methods. These include functions for defining the adoption plan, accompanying changes, "consulting" services and program management.

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## Why HashiCorp and Devoteam?

**5+ Years**
Partnership with HashiCorp

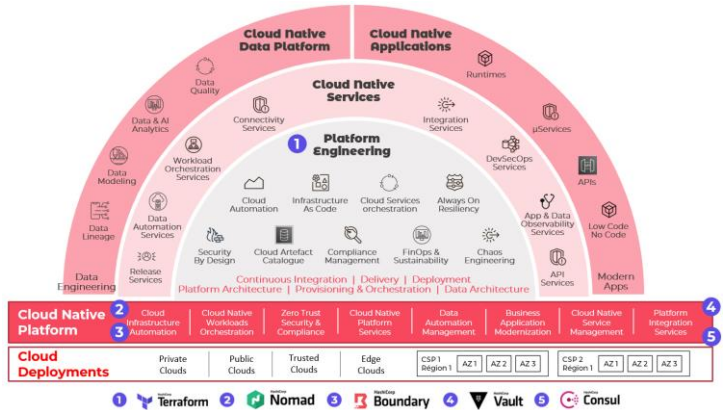**10+ Years**
Experience in Cloud Engineering

**100+**
Certified Consultants on HashiCorp

**100+**
Training delivered on Terraform

**devoteam**
Innovative Tech

**devoteam**
Cyber Trust

**devoteam**
A Cloud

**devoteam**
G Cloud

**Partners of HashiCorp and its technologies**

## « Thrive in the Platform Way with HashiCorp »



HashiCorp technologies are the foundation of this platform approach. Their technologies provide all the necessary components for component deployment, end-to-end security as well as connectivity in a hybrid mode.

These capabilities are particularly important in hybrid and multi-Cloud environments by ensuring consistency of deployments regardless of the targets envisaged (private, public, trust, edge, etc.).

## Why Cloud Native with Devoteam?

Blog : Cloud Native Platform Engineering

Devoteam launched Cloud Native Labs at the end of 2022. This is an approach to help our customers on this journey, an approach that brings together many of our existing know-how. On the technological side, we support the implementation of solutions necessary for any Cloud Native base, starting with Kubernetes technology.

On the "Platform Engineering" part, the adoption of the new methods mentioned above is at the heart of our approach. Not only do we co-build with our customers but we support the scaling up with the implementation of "Cloud Native Boosters" to facilitate team learning. All operational aspects are covered.

Finally, Cloud Native Advisory teams help define the vision, associated strategy, and delivery plan to ensure tailored adoption of Cloud Native technologies and practices.

We have also developed a Cloud maturity evolution model according to the 5 CMMI levels.

## What is the value brought to our customers?

✓ **Unique know-how on the adoption of the "Platform Engineering" approach**

✓ **An à la carte support to help your teams acquire the necessary know-how**

✓ **In-depth expertise on all HashiCorp technologies to help you in their deployments**

✓ **Training services allowing the skills development of your teams via academies**

✓ **Our skills on the 3 main hyperscalers allow to include modernization with their services**

✓ **Our approach is intended to work closely with your teams to help build skills with a "Cloud (Native) Center of Excellence"**

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