FindlaCBug



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# Integrating Infrastructure as Code with SODALITE

The increased usage of DevOps makes software development more agile and with a higher quality. One of the main practices is Infrastructure as Code (IaC), where infrastructure is treated in the same way as the application code does. However, this is not an easy job as misconfiguration is one of the major causes of cloud incidents on enterprises due to the high amount of insecure IaC templates used.

## IaC for DevOps Unified Infrastructures

In order to manage IaC there is no need to learn programming languages but follow a development approach to manage them. However, the main difficulty relies on providing trusted IaC templates to prevent bugs and smells.

## IaC Quality

XLAB

**ADAPTANT**\*

The lack of unified best practices and recommendations guidelines limit the development of high-quality IaC artifacts, as errors, smells or bugs can be introduced inadvertently while developing the scripts.

#### IaC Taxonomies

Current available tools for quality assurance lack of data-driven techniques and taxonomies. Thus, detection of linguistic anti-patterns and misconfigurations are not supported.

### How It Works

FindIaCBug allows users to develop high-quality defect-free error-free IaC codes. This is done by the provided tool, able to detect main quality issues using data-driven techniques for detecting antipatterns and misconfigurations, as well as semantic reasoning and rule-based models for detecting smells. Thanks to a unified catalog of IaC best/bad practices, smells and bugs, the users can fix detected ones systematically with ease. These allow users to secure even more IaC templates avoiding cloud incidents and their associated costs.



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