



PIACERE

Programming **trustworthy Infrastructure** As Code in a **sEcuRE** framework

piacere-project.eu

PIACERE aims to increase the productivity of DevOps teams in the development and operation of IaC through the provisioning of an integrated DevSecOps framework. DevOps teams can program IaC as if they were programming any software application.



Plan and
create
Infrastructure
as Code



Verify the
trustworthiness
of
Infrastructure
as Code



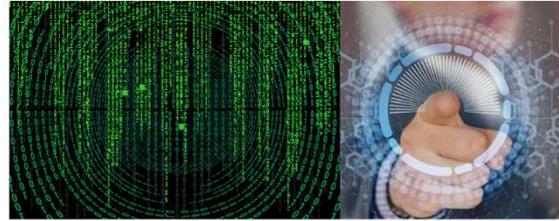
Package,
release and
configure
Infrastructure
as Code



Monitor
plan and
self-heal
runtime of
Infrastructure
as Code



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No: 101000162.



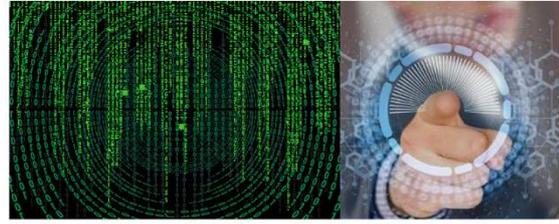
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PIACERE VISION

The **Horizon 2020 PIACERE** project aims to provide means (tools, methods and techniques) to enable most organizations to fully embrace the Infrastructure-as-Code approach, through the DevSecOps philosophy, by making the creation of such infrastructural code more accessible to designers, developers and operators (DevSecOps teams), increasing the **quality, security, trustworthiness and evolvability of infrastructural code** while ensuring its business continuity by providing self-healing mechanisms, anticipation of failures and violations, allowing the system to self-learn from the conditions that triggered such re-adaptations.

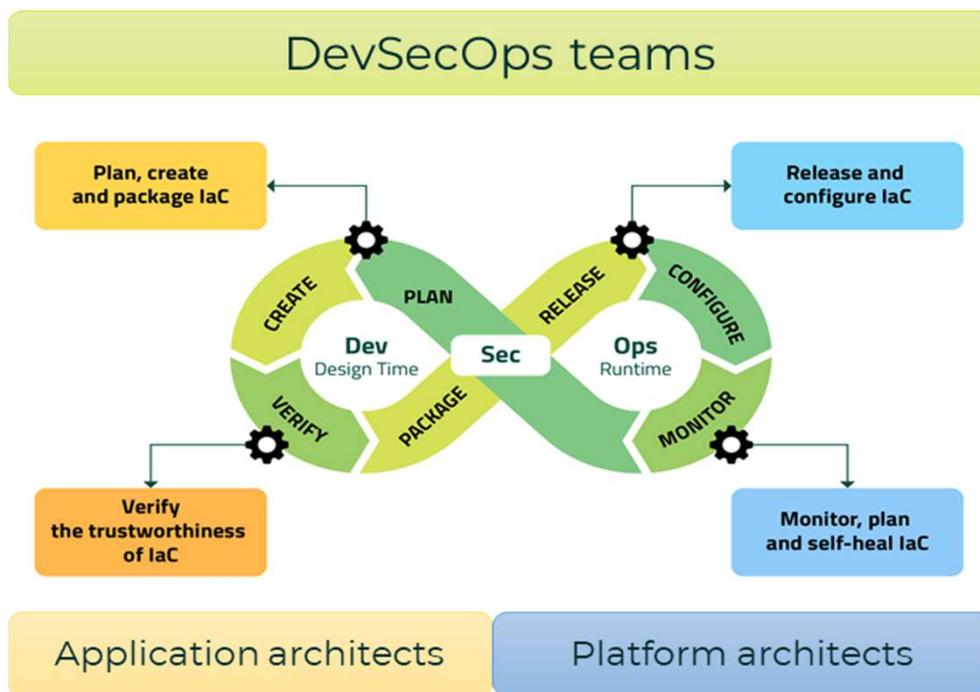
Evolve IaC management with PIACERE

IaC code, as any software, can be versioned and can be written by a collaborating team bringing together multiple expertise. In general, any innovative code management applied in traditional software development is applicable in IaC DevSecOps cycle: security by design, automation, testing, reusability, auditability etc. With PIACERE, **DevSecOps team will be able to work with infrastructural code as they do with traditional application code**, starting from the definition of requirements for the infrastructure – such requirements are expressed in terms of technical capabilities the application level software should offer – to the design, implementation, verification, deployment, testing, operation and monitoring of such infrastructural code.



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PIACERE DevSecOps approach for IaC



Benefits

- 1 **Ease the IaC development** – from the idea to the living application
- 2 **Increasing the quality, security, trustworthiness and evolvability of IaC**
- 3 **Ensuring future-proof application life-cycle management by providing self-healing mechanisms to deal with known failures and violations**
- 4 **Allowing the system to self-learn** from previous conditions that triggered un-expected situations



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First Success Stories

SI-MPA. The Slovenian Ministry of Public Administration for hosting information systems on a centralized infrastructure

"Moving from traditional to agile way of delivering information systems."

Stjepan Pervan

PRODEVELOP. Critical Maritime Infrastructures for fulfilling the management needs of port authorities

"Automate the creation and configuration of the deployments following IaC approach, making deployments independent of the chosen infrastructure."

Ismael Torres Boigues

ERICSSON. Public Safety on IoT in 5G of both human and IoT devices

"IaC modelling/deployment/configuration in multi-CSP environment, while improving automated security inspection of internal/external components."

Cosimo Zotti



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