

DevOps Engineering

Digital Technology Services





Agenda

SORINT.lab @ a Glance

Overview

Addressing CI/CD

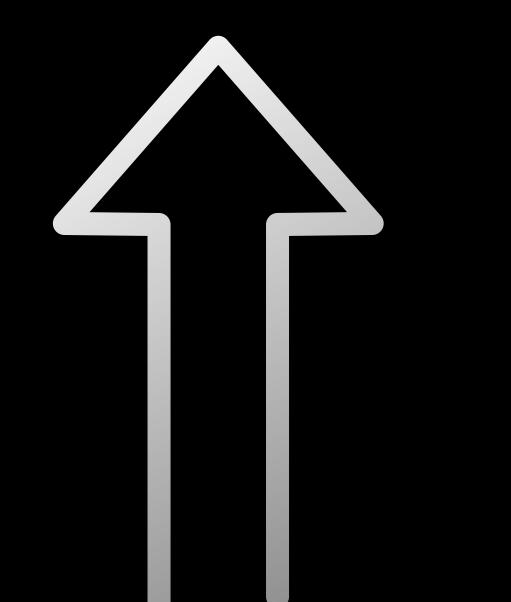
CI/CD

- Pillars of CI/CD
- Sorint's Tailored Journey
- Experts Involved
- Closer Looks

Success Stories

- Testimonials
- Bonus slide Related by Sorintians

Going Forward





Is behind many prominent entities leading their industry. Assured!



Customers

By industry

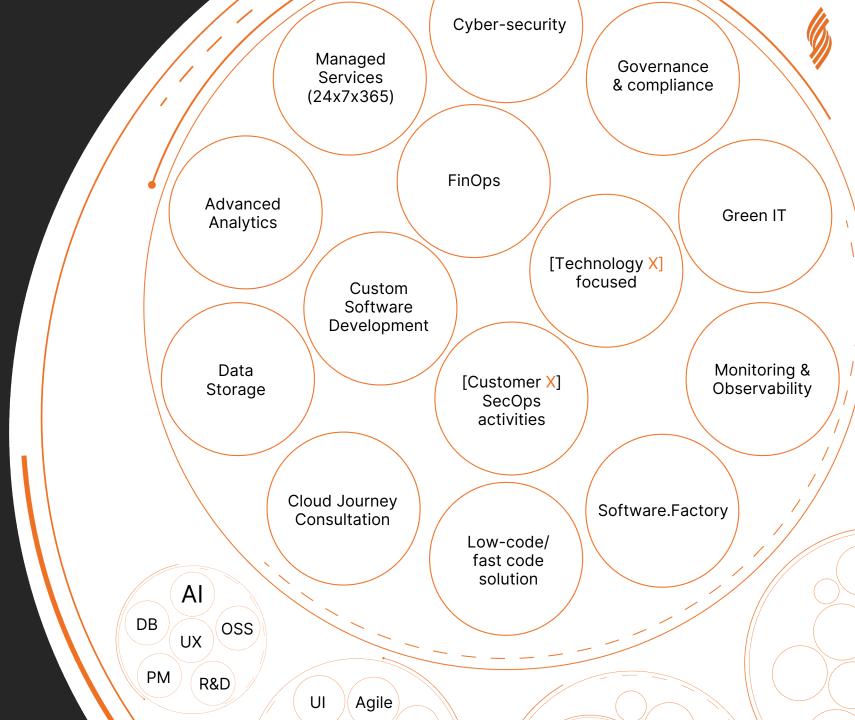


Tackling Challenges Together

A journey characterized by:

- Enabling customers to focus on core business.
- Secured solutions built upon best fitting technologies, practices, & latest findings.
- Quality, & cost optimization.

We harmonize passions!



SORINT.lab – IT Consultancy

We believe in technology that fosters **innovation and human wellness**. Our commitment towards every company, institution or community is to help them run their business and solve their problems through a choice of the best technology.

Providing digital technology services & consultation in fields of software development, cloud solutions, third-party vendor solutions, cybersecurity, data centre management, management of daily IT operations, data, machine learning, IT recruitment and professional education.

Delivering services ranging from **discovery** and implementation to full support.

SORINT provides IT services to prominent entities in Europe, USA, and Africa. Through a workforce of **1.5K professionals** and a presence spanning **17 offices** located in Italy, Spain, United Kingdom, Germany, France, Romania, Poland, United States, and Cameroon.



IT Consultancy



Advanced Analytics Cybersecurity Solutions

SORINTSEC

Business Process Outsourcing

Let's Tackle Your Next Challenge Together

66 SORINT.lab is a company that's easy to do business with....

A well-known testimonial from a customer

Education		Methodology			Experience		VH G PHINHOS	
>40K	130+ entities	Vendor independent	Project management	ISO compliance	250+ large enterprises	>1K case studies	ELITE AEURONEXT COMPANY	The Make IT Model
Training hours per year	Certification. Foundation to trainer level	Unbiased transparent consultancy	Prince2, PMI, Agile, SCRUM/UX	27001, 20000 9001, 14001	Prominent entities in Europe, US, and Africa	Tailored journeys documented	Euronext Group's ELITE SME network	Our philosophy towards journeys

SORINT

CI/CD Continuous Integration and Deployment



Advanced set of practices, tools, and technologies that power automation throughout the development, testing, and deployment phases.

When implemented correctly, it enables efficiency and optimization across various IT processes.

Processes that include:

- Continuous Integration & Deployment. CI/CD
- Configuration management
- Infrastructure as Code (IaC)
- Monitoring and logging
- Incident management and response
- Collaboration and communication
- Agile and Lean practices



Of DevOps initiatives will faill to meet expectations due to issues around oraginzational learning and change. Through 2022.

*Gartner predicts 2019



Slow and inefficient development and deployment



Communication issues between development and operations teams





A lot of manual and error-prone processes



Challenges in managing the Infrastructure



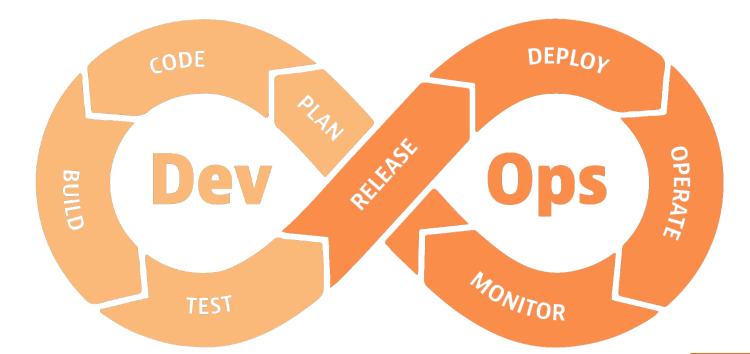
Limited monitoring and control



Lack of flexibility

CI/CD Diagram





Pipeline key components:

- Source code management
- Continuous integration (CI)
- Continuous delivery (CD)
- Deployment
- Testing and quality assurance
- Monitoring and feedback

Pillars of CI/CD



Agility and speed in software development and deployment processes



Automation of SDLC. Automation reduces manual errors, increases efficiency, and enables rapid iteration and delivery

Security. Protecting sensitive data. 🎁



Governance, risk, and compliance 👔

Communication and culture 📋

P





Customer-Centricity and business value. Improve customer experience, responsiveness, and satisfaction



Continuous Improvement

2 Inline with

Inline with Agile methodologies

35.9%

DevOps/DevSecOps most practised software development methodology globally used by software development teams. Respondents reasons:

- Faster time to market.
- Security, code quality.
- Improved communication and collaboration among developers.

*Statista 2022

SORINT.lab's Tailored Journey

Instantiated from

Every journey is a unique challenge, but our know-how:





Adopted DevOps practices.

Implemented complex CI & CD pipelines to automate workflow from development, to delivering a solid ecosystem.

To prominent market entities in Europe and US



Day x

+5K

Configured, maintained, and

managed pipelines.

Continues support

Continues support





Day y



Less pipelines, more effective deployments

SORINT.lab's Tailored Journey

Instantiated from



Experts Involved



Senior masterminds



Head of DevOps - Software Architect

Luigi Leoni

+18 years of experience in software development. +9 years of experience in DevOps practices. DevOps evangelist and Opensource passionate



Mateus Pavei

DevOps Architect Engineer

+8 years of experience in DevOps practices and CI/CD solution delivery



Alessio Carmazzi

Senior Solution - Architect Consultant

+10 years of experience in enterprise IT infrastructure and application architecture

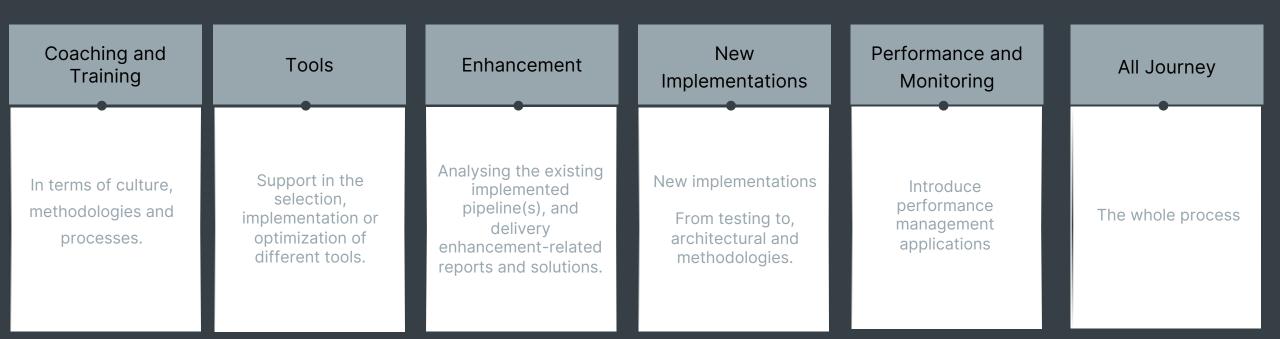


Some prestigious certifications

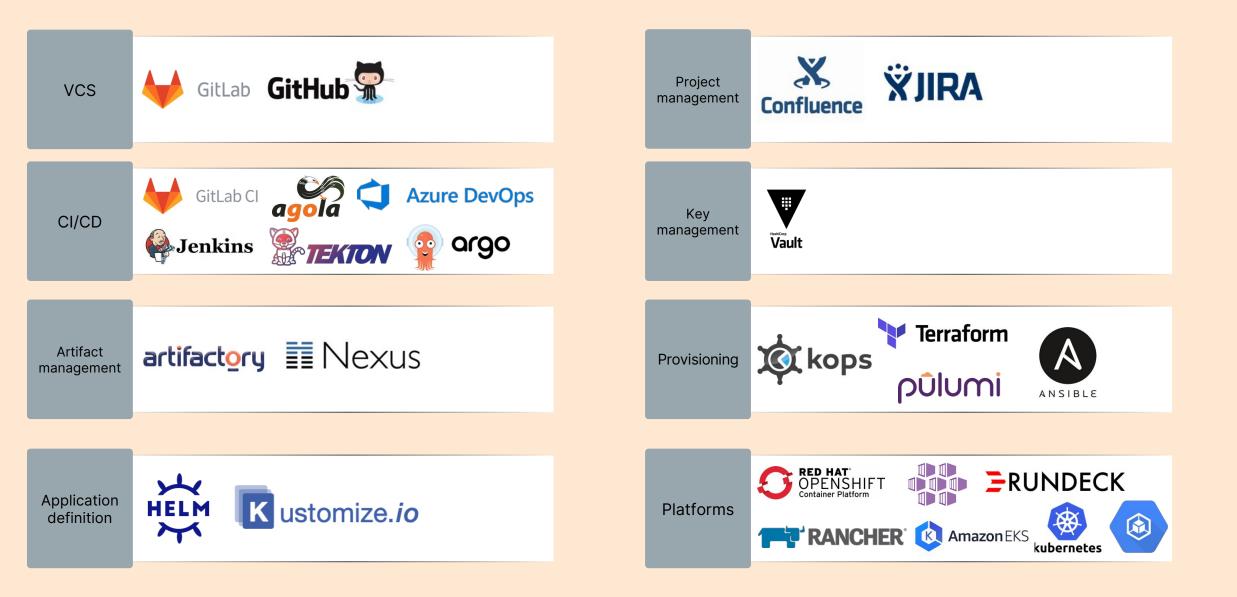


Closer Look

Areas and field of focus



Some common tools



Technology Landscape



Success stories

Delivered by: SORINTians

Confidential

A Well-known Corporate and Investment Bank

Initiate a DevOps Practice

Challenge

Used by core banking offices. Client's requirement included:

- Adapt a DevOps practice.
- Accelerate software development & delivery.
- Guarantee a robust software.

Going forward

Intensive requirement gather sessions, software assessment and product selection.

Accepting the challenge - Solution and Implementation

Proposed a tailor-made CI/CD solution. That included: In a proposal form, an architected CI/CD solution from scratch.

• Customized SWLC with heavy automation tools. Automate new project onboarding, QA onboarding, fully code QA and simplify deployment on OKD/VMs.

- Openshift Origin as container platform.
- Centralized login process on EFK with customized "Fluentd" configuration as a new logging system.
- Pipeline to supported (Java, Python, TS, C/C++)

Result & delivery

- Delivered in several phases. Main phase in 3-4 month.
- +544 projects managed by centralized & extensible CI/CD pipelines.
- Introduction to GitOps principles.
 - Versioning deployment code.
 - Code review for deployment changes.
- Supported the development team to integrate legacy/new software in CI/CD solution.
- Started managing SWLC and QA. (Assigned at later stages)
- Introduced an automated QA badge (by third party)

Success stories

Delivered by: SORINTians

Confidential

Well know Italian Retail - Store Chain

Enhance the CI/CD Practice

Challenge

Issues in DevOps practices.

Client's requirement included:

- Fix legacy CI/CD pipeline.
- Overhaul and refactor CI/CD processes.
- Implement a maintainable workflow. In terms of tech and culture.

Going forward

Intensive requirement gather sessions, software assessment and product selection.

Accepting the challenge - Solution and Implementation

In a proposal form. A re-architected CI/CD solution. That included:

- Introduce several new software and use already effectively installed.
- Introduce GitOps principles:
 - Separate build code from deployment code.
 - Replace imperative pipeline with declarative one.
 - Versioning deployment code.
 - Code review for deployment changes.
- Influence client's team and create a dynamic workflow.

Result & delivery

- Delivered in several phases. Main phase in 1-2 month.
- Solution was executed 100% effectively.
- Implemented generic Jenkins CI pipeline to build and publish application containers.
- Declarative management of Jenkins Jobs (both Cl and CD).
- Drastic changes in culture approach. Lead to a positive workflow.
- Documentation, required alignments.
- Took the learnings and closed the challenge.

Success stories

Delivered by: SORINTians

Confidential

Research and Intelligence Services

Migration and major changes in the CI/CD tools

Challenge

Client's requirement included:

- Migrate from Docker Swarm to K8S.
- Substitute BitBucket/Bamboo to OpenSource alternatives.
- Implement CI/CD with new infrastructure (different VCS and target system).

Going forward

Understanding the environment through round tables.

Accepting the challenge - Solution and Implementation

In a proposal form. An executable timeline for:

- Software selection (Rancher as cluster management tool, GitLab as VCS, Tekton as CI/CD tool).
- Installation and configuration of Rancher and K8s clusters.
- Migrate VCS tool (from BitBucket to Gitlab).
- Introducing GitOps principles.

Result & delivery

- Delivered in several phases. Main phase in 1-2 month.
- Solution was executed 100% effectively.
- Implementated generic tasks (build, push to registry, deploy to k8s...etc) in Tekton..
- Implementated Tekton pipeline for the CI/CD.
- Integrate GitLab and Tekton using Tekton triggers.
- Documentation, required alignments.
- Took the learnings and closed the challenge.

Floatingpoint.sorint.it

Bonus Slide

Related Solutions and Tools by SORINTians



Agola – CI/CD Redefined Software Products



Agola is a CI/CD system with a lot of great features like advanced and reproducible workflows (runs), containerized tasks, fully distributed, high-available and much more. Featured on Cloud Native Landscape.

www.agola.io



SSL – Shift Security Left Digital Technology Services

SSL promotes security as a common responsibility shared by all teams involved in software development. The service follows DevSecOps as a methodology.

inquire

Going Forward

How we can move forward from here



IT | ES | UK | DE | US | FR | PL | CMR | RO



BUILDING GREAT TECHNOLOGY

