

DevOps Engineering

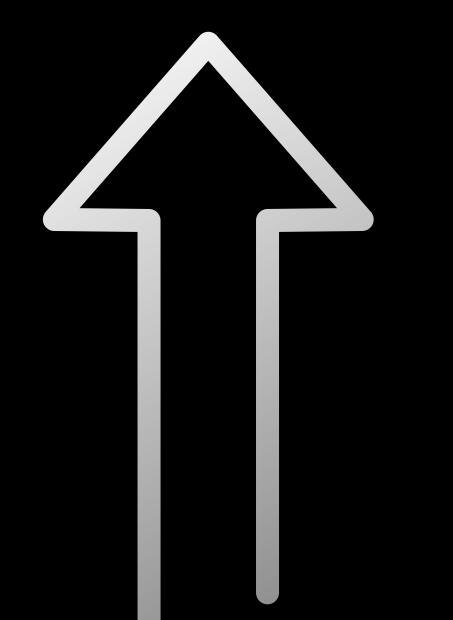
Digital Technology Services



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!



Clients

By industry

















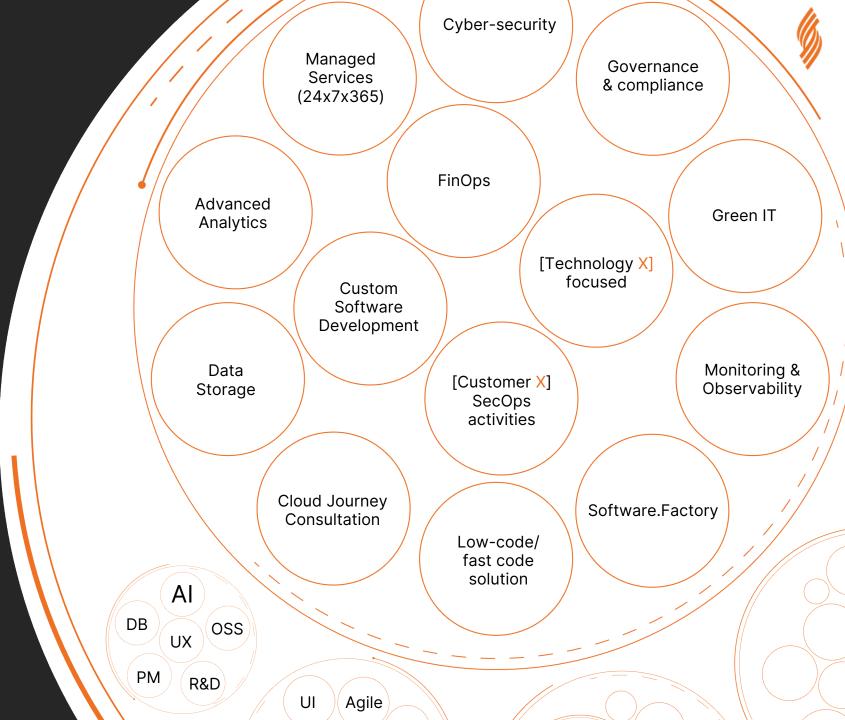


Tackling Challenges Together

A journey characterized by:

- Enabling clients 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 center management, management of daily IT operations, data, machine learning, IT recruitment and professional education.

Delivering services ranging from **discovery** and implementation to full support 24x7x365.

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.





Advanced Analytics Solutions



Cybersecurity



Let's Tackle Your Next Challenge Together

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

A well-known testimonial from a client



>40K 130+ entities

Training hours per year Certification. Foundation to trainer level Vendor independent

Unbiased transparent consultancy

Project management

Prince2, PMI, Agile, SCRUM/UX ISO compliance

27001, 20000 9001, 14001 Experience

250+ large enterprises

Prominent entities in Europe, US, and Africa

>1K case studies

Tailored journeys documented



SORINTS

SORINT

Euronext Group's ELITE SME network The Make

Our philosophy towards journeys

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







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

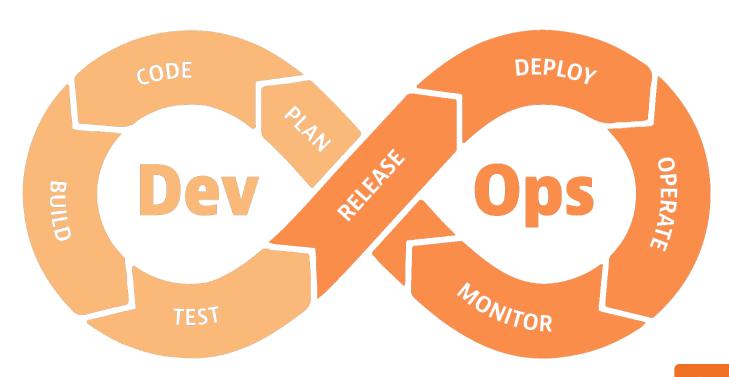


Lack of flexibility

Addressing

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 📫





Scalable and resilient software/infrastructure



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



Continuous Improvement



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:



DevOps philosophy and GitOps practices



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



Hands-on knowledge on all trending tools

SORINT.lab's Tailored Journey



Instantiated from

Less pipelines, more effective deployments

+5K

Configured, maintained, and managed pipelines.





Day x — Continues support

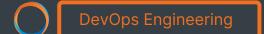
Continues support

Continues support

Day y

Experts Involved





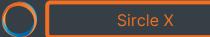




Full Application Management



NGMS







Application Performance



Platform Innovation

Senior masterminds



Head of DevOps - Software Architect

+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

Coaching and Training	Tools	Enhancement	New Implementations	Performance and Monitoring	All Journey
In terms of culture, methodologies and processes.	Support in the selection, implementation or optimization of different tools.	Analysing the existing implemented pipeline(s), and delivery enhancement-related reports and solutions.	New implementations From testing to, architectural and methodologies.	Introduce performance management applications	The whole process

Some common tools



VCS





CI/CD















Artifact management





Application definition





Project management





Key management



Provisioning





Platforms















Technology Landscape













by Broadcom

Enterprise Backup & Recovery **Software Solutions**

Cloud

Infrastructure

& Platform

Services















DevOps Platforms

















by Broadcom

Distributed File & Object Storage



















Enterprise

Container **Management**



















Application Performance **Monitoring**













Cybersecurity

















Database Management **Systems**











Microsoft









Data Streaming











Red Hat



Primary Storage









Development Platform

Internal



nethopper







Success stories



Delivered by: SORINTians



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



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



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.

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

☆ Star 1.3k



SSL – Shift Security Left

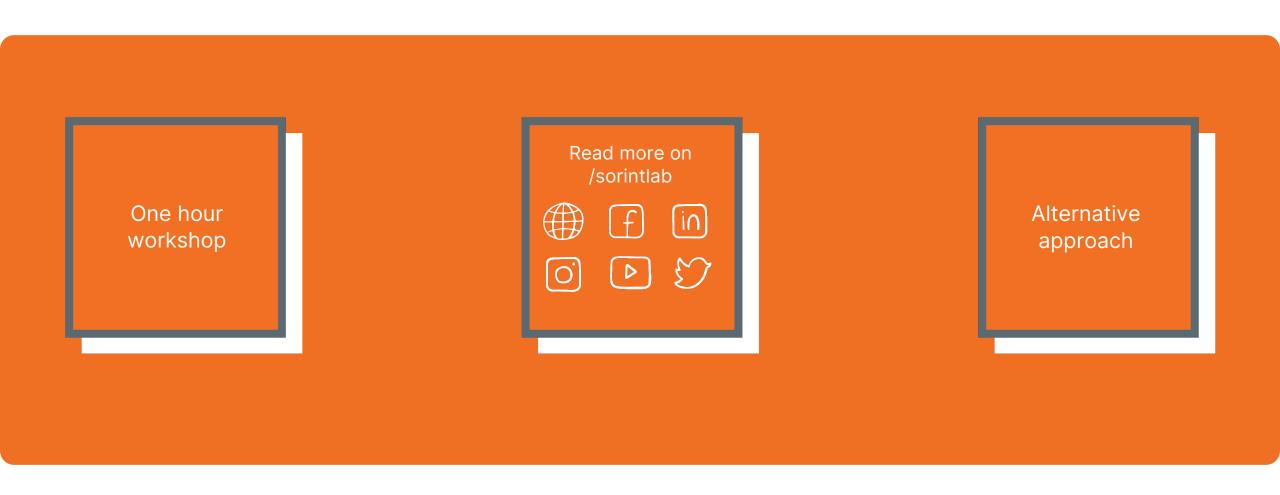
Digital Technology Services

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





BUILDING GREAT TECHNOLOGY



www.sorint.com