Using OpenShift, Jenkins and GitHub to Industrialize a Cloud-Native Application Lifecycle

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Kiratech helps Enterprises in the DIGITAL TRANSFORMATION JOURNEY through:

HIGH LEVEL CONSULTING

TRAINING

RESALE OF THE BEST TOOL

#RedHatOSD
For more than 10 years Kiratech has been selecting the **best technologies** and **methodologies** in the following fields:

### DevOps
- Automation, Orchestration & Monitoring
- Container Deployment & Management
- Continuous Integration, Delivery & Pipeline
- Log Analytics & Continuous Monitoring

### Cloud Transformation
- Software Defined Data Center
- Cloud Data Protection
- Hybrid Cloud deployment
- IoT & Machine Learning

### Security
- Penetration Test & Vulnerability Assessment
- Anomaly Detection & User Behaviour Analytics
- DevSecOps
- 0-Days and APT Detection
OUR CUSTOMERS

OUR OFFICES

VERONA

MILAN

ROME

PARADISO (Switzerland)
• KIRATECH BECOMES RED HAT PARTNER
• STARTS THE DATA ANALYTICS BUSINESS

KIRATECH IS EMEA PRELERT PARTNER OF THE YEAR (now part of Elastic)

KIRATECH IS GITHUB TOP EMEA PARTNER OF THE YEAR
OUR TECHNOLOGICAL EVOLUTION:

DEVOPS REVENUE

+ 421% over the last 3 years

Presence on 4 of the 5 Top Italian Banks

Presence on 2 of the 3 Top Italian insurances

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>550 K</td>
</tr>
<tr>
<td>2016</td>
<td>950 K</td>
</tr>
<tr>
<td>2017</td>
<td>1.4 M</td>
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<tr>
<td>2018 (YTD 30.09)</td>
<td>3 M</td>
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#RedHatOSD
DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality.

The DevOps approach is to include automation and event monitoring at all steps of the software build.
Goals

- Reducing *Time to market*
- Reducing time for changes
- Maintain stability and predictability
- Resource optimization through automation
- Hybrid cloud / Cloud / Self provisioning
State of DevOps Report 2018: Key Findings

Comparing the elite group against the low performers, we find that elite performers have...

- 46 times more frequent code deployments
- 2,555 times faster lead time from commit to deploy
- 7 times lower change failure rate (changes are 1/7 as likely to fail)
- 2,604 times faster time to recover from incidents

#RedHatOSD
DevOps = People + Tools
GitHub

- Code hosting
- Documentation
- Social coding
- Team management
- Integrations
- Collaborative code review
- Project Management
Unified platform for social coding and collaboration

- Simple compliance
- Centralized permissions and RBAC
- Out of the box monitoring and dashboards
- Technical support
- Flexible hosting options: On-premises / Cloud
- Clustering and HA
GitHub Actions

Focus on what matters: code

- Actions are small bits of code that can be run off of various GitHub events, the most common of which is pushing to master
- Directly integrated with GitHub
- They’re containers all the way down, so you could quite literally do pretty much anything
- You can connect up to 100 actions to create a Workflow
Jenkins

- Continuous Integration and Continuous Delivery
- Easy installation and configuration
- Jenkins can be extended via its plugin architecture
- Distributed architecture

Jenkins is the most popular continuous integration and continuous delivery system that increases your productivity and deliver more quality to your applications.
• Enterprise Jenkins
• Built for Kubernetes and OpenShift
• Enable Security and Compliance
• Scale to many teams
• Simplify management of admin tasks
• Work with modern and legacy applications
• High availability
• Flexible Deployment Options
TRANSFORM: organizations are transforming software delivery, adopting DevOps and returning business value to their organization from DevOps initiatives

- New CloudBees Core
- CloudBees DevOptics
- CloudBees CodeShip
- CloudBees Starter Kit
- CloudBees Apps
Everything as code – Enable GitOps

Operations by Pull Request

- GitHub as a single source of truth
- CloudBees Pipeline fully integrated
- Standard workflow from code to management extended by KiraBOT
- Works great in a cloud native or multi cloud environment
- Manage configurations, automation and legacy infrastructure
- Documentation, markdown, notifications on Slack
- Easy recovery from a total wipeout
Use Case: ChatOps with Kirabot

- Deployed on OpenShift
- Allows to interact with a Jenkins pipeline and a GitHub repo using commands in Slack
NEXT EVENTS

November 6th

WEBINAR – Misura e ottimizza le performance devops con Cloudbees DevOptics

November 28th

WORKSHOP DOCKER & KUBERNETES – ROMA + 1st JENKINS OFFICIAL MEETUP

Roma, 28 Novembre 2018

- 14:30 - 18.30 WORKSHOP DOCKER & KUBERNETES (half-day)
- 19:00 - 21.30 Primo JENKINS MEETUP, ROMA
A DevOps Engineer

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