Scientific research and development to bring applications into the cloud

Six ongoing research initiatives for continuous access to leading edge findings

Microservices, APIs, containers, lambda functions, things and robots: Application developers are increasingly embracing cloud technologies.

Before betting everything on unsuitable stacks, they can now consult with SPLab to prototype their cloud applications and see how they would work.

Our research staff has the experience, the tools and the testbeds to quickly reach a prototypical solution for any hard problem.

Our Expertise

Experimental comparison of stacks and frameworks. Provocation and emulation of live conditions, e.g. popularity spikes, failures and malicious interruptions. Decomposition of existing applications. Cloud-aware designs for new applications. Connectivity between services and devices. Multi-cloud applications. Continuous development and deployment of bundled microservices.

The Service Prototyping Lab (SPLab) shares its website with the Cloud Computing Lab (ICCLab) at
http://blog.zhaw.ch/icclab
Contact us for project proposals at
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CLOUD applications are supposedly distributed, service-oriented, resilient, scalable and micro-billable for multiple tenants. In practice, many applications are just moved to the cloud without considering these expectations. Subsequently, they do not gain momentum, popularity and eventually revenue.

THE Service Prototyping Lab's initiatives combines software development, service engineering and cloud computing knowledge to work on better applications.

❑ Service Tooling.
❑ Cloud Application Development Tooling.
❑ Service Operation.
❑ Cloud Native Applications.
❑ Active Service Management.
❑ Cloud Robotics.

SPLAB primarily produces open-access scientific publications, open source software, and open specifications, but also works on transfer projects with Swiss companies. Some of our software highlights include:

❑ Push2Cloud, a framework to easily deploy complex cloud native microservice applications onto Cloud Foundry.
❑ KubeGUI, a user-friendly interface to manage pods in Kubernetes.
❑ MC-EMU, a multi-cloud emulation and fault injection framework.
❑ The CNA seed project to demonstrate how to run a business application (Zurmo CRM) as orchestrated and self-managed/autoscaling microservices on top of CoreOS (etcd/fleet) or Kubernetes.

FOR the next wave of cloud applications and services, SPLab is offering to conduct joint research and development with SMEs from all over Switzerland. Benefit from our internal cloud infrastructure and our tools to connect to public cloud providers. Do not hesitate to contact us for a discussion of your cloud ambitions.