The Server Labs G-Cloud 14 Service Description

G-Cloud 14 Service Definition - Cloud Services

	Ref: TSL/GCLOUD14/SERVICE_DESC
	Issue : 1.0
	Date: April 2024 For: **G-Cloud-14**

Table of Contents

1 Introduction

This document provides you with a description of each of The Server Labs' Cloud Services .

If you wish to receive further information please contact sales@theserverlabs.com

2 Service Definition

Cloud Assessment & Adoption Strategy

- Application Assessment - Application Health Check

  Are you ready to move to the Cloud?

  Not all scenarios are apt for the cloud. We can assess the case and analyse its technical and economic viability.

  Our architects can re-engineer the software application in order for it to be migrated to the Cloud. We will analyze questions such as:

  Loose coupling – Cloud architecture must be loosely coupled

  Security – Security in the Cloud is more complex and must be managed adequately

  Load balancing and **auto scaling**

  Availability – what happens if the server (or the entire data centre) are not available?

- System & Infrastructure Assessment

  We will analyse your needs and work out what systems and infrastructure you need, whether it is for public or private cloud.

- Security Assessment

  See Cloud Security Services

- Cloud Architecture design

  We will design your cloud architecture to be robust and scalable, using auto-scaling and self-healing techniques where-ever possible

- Cloud Adoption Strategy

  TCO evaluation when using the Cloud infrastructure

  Consulting services in order to identify the most suitable solution and technologies in the Cloud, based on the elasticity parameters of the project

Cloud Deployment & Migration

- Cloud Infrastructure configuration and deployment
- Private Cloud Deployment

  This is a comprehensive service to analyze, design and implement a Hybrid

.

Cloud solution within your organisation.

- Consultancy for architecture evolutions
- Cloud Interoperation
- Application refactoring for the Cloud
- Application Migration to the Cloud
- Rapid Cloud Transition

  Standardised service

  Fixed scope and price

  Hands-on support to transition your application to the Cloud
- Cloud Fast Track Framework
  - web-based solution
  - Customized and fully functioning environments in the Cloud in minutes
  - Off-the-shelf service
  - Deploy test and development environments that match production

Cloud Management

- Cloud Infrastructure Administration and Support
- Cloud Incident Management
- Cloud system & Application Management and Support
- Cloud Cost & Use Management

Cloud provisioning & Reselling Services

- Reselling of Cloud infrastructure
- On Demand Cloud Disaster recovery Platforms
- Big Data Analytics solution
- Cloud Backup
- Development Environment on the Cloud
- HPC on Cloud
- Cloud Outsourcing

Cloud Security Services

- Cloud Security Assessment

  We can advise on many aspects of Cloud Security , including Intrusion detection, firewall management, identity management, key management, encryption and tokenisation
- Cloud Security Compliance Assessment

.

We can advise on many legal aspects of Cloud Security and provide recommendations as to actions to take to protect yourself.

- Cloud Security implementation

  As well as designing your Cloud security, we can help you implement it as we have extensive experience in public and private cloud security implementations

- Cloud Security as a Service

  We offer a number of security services from our partners in a cloud model including

  - DDoS protection
  - Web Security Gateway
  - IDS/IPS
  - Identity Management
  - Firewall Management
  - Auditing
  - Vulnerability & patch management
  - Encryption and Tokenisation
  - Penetration testing

Cloud Financial Optimisation Services

TSL provides a FinOps audit service to identify changes in systems, practices and culture that can save considerable OpEx budget and restore financial control.:

Measure usage:

Usage isn't simply a count of the number of services a company uses, each service uses different metrics to measure usage. For example, AWS EC2 instances are charged by the second, what matters is how long you run the instance. On GCP, PostgreSQL is charged by GB/month, so charged according to both quantity and time.

Identify realistic cost avoidance activities:

Two of the most common cost avoidance activities are rightsizing and automating.

- **Rightsizing** is making sure that your cloud infrastructure uses resources that are "just right." The infrastructure is neither over- nor under-provisioned.

- **Automating** takes advantage of the cloud's elasticity by programmatically handling repetitive or hygiene tasks, such as shutting down resources that aren't actively used. For example, a company might write a script that turns off instances that aren't used over the weekend.

- **Serverless implementation** moving to serverless can make considerable savings to the overall OpEx of the cloud ecosystem.

Defining the metrics to measure success:

TSL will work with the budget owners to define metrics that make sure cost avoidance and cost optimization activities are successful. For example are the RIs you have in place being used?

Create a closed loop FinOps lifecycle

Just running an audit and identifying savings is not enough. What's required is the creation of a closed loop, whereby FinOps becomes part of the DNA of the organisation. TSL works across all functions to build this closed loop integrating systems, people and processes . The FinOps lifecycle we promote covers the following phases:

.

1. **The Inform phase**: Gives visibility of usage and createst shared accountability, by showing teams what they're spending and why. This enables individuals to view the impact of their actions on the OpEx budget.
2. **The Optimise phase**: Empower client teams to identify and measure efficiency optimis ations. Goals are set upon the optimis ations identified which align with each team's responsibility.
3. **The Operate phase**: Defines processes which enable the goals of technology, finance and business functions . Automation can be deployed which enables these processes to be performed in a reliable and repeatable manner.

Achieving tangible FinOpsbenefits for our clients:
The following are examples of how one of our clients benefited directly from our Cloud FinOps services.

Finops techniques TSL have implemented:

- Moving to the latest instance types, storage types and reducing cluster sizes
- De duplication of data
- Using Graviton processors to provide additional cost savings.
- Moving to Aurora Serverless in lower level environments
- Automating the Stop/Start of workloads in non-production environments reduced costs by up to 60%.

TSL helped one client save over $400k/yr by implementing targeted, automated scheduling to stop/start environments out of hours. In addition, implementing right sizing of instance types, number of instances and storage types, provided a combined reduction in cost of over 90%. This was implemented from a baseline cost in just two months.

Example reductions in cost per month per environment - £20,071/month reduced to $908/month.

Cloud Centre of Excellence

A full range of services to support you in building out your Cloud Centre of Excellence (CCOE). Bring together experts from across your organisation to develop Cloud best practices for the rest of your organisation to follow. Utilising our expertise in Governance, Controls, Policies, Standards and Guardrails, we help get your CCOE off the ground, working effectively with your engineering, infrastructure and support teams, and if necessary, fulfil roles within the CCOE.

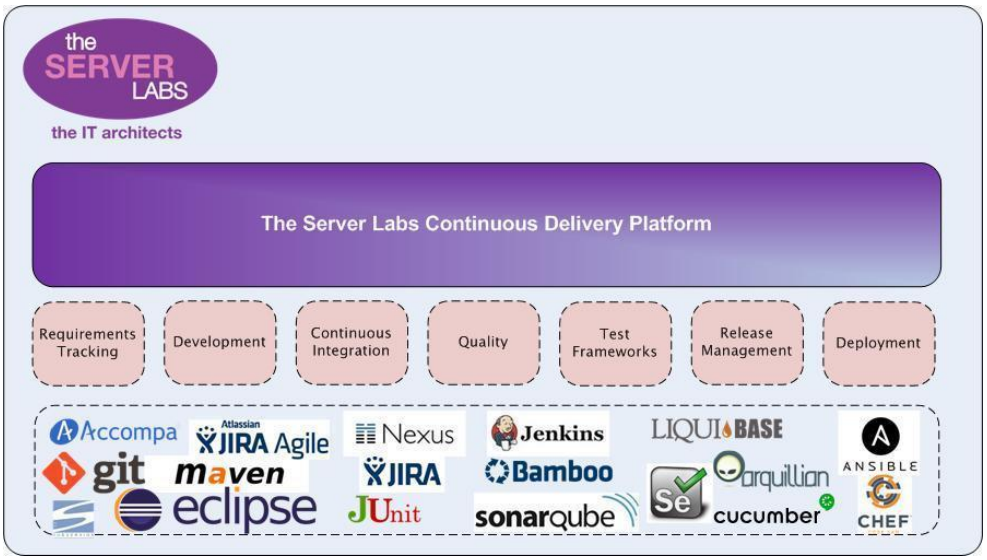
- Features
    - Expertise to help scope, build & grow your CCOE
    - Augment teams with proven, accredited Cloud expertise
    - Build reusable patterns and reference architectures
    - Development and Implementation of Self-Service Portal & Artefacts
    - Options to have The Server Labs specialists act as your CCOE
    - Cloud Training and awareness to upskill your existing staff
    - Define metrics or KPIs for the CCoE and measure progress
    - Partnership approach to improve your capability and support digital skills

.

- Benefits
    - Understand the benefits in building a CCOE
    - Ensure cloud adoption is not siloed
    - Faster business innovation through adoption of cloud and DevOps practices
    - Understand use cases for new Cloud technologies
    - Knowledgeable and experienced resources to scale your CCOE
    - Establish self-service solutions with appropriate guardrails in place
    - Scale your CCOE based on impact and success
    - Reduce time to market for cloud initiatives
    - Employs proven Cloud policies, standards and patterns
    - Can offer access to SC or DV cleared staff

DevOps - The Server Labs Continous Delivery Platform

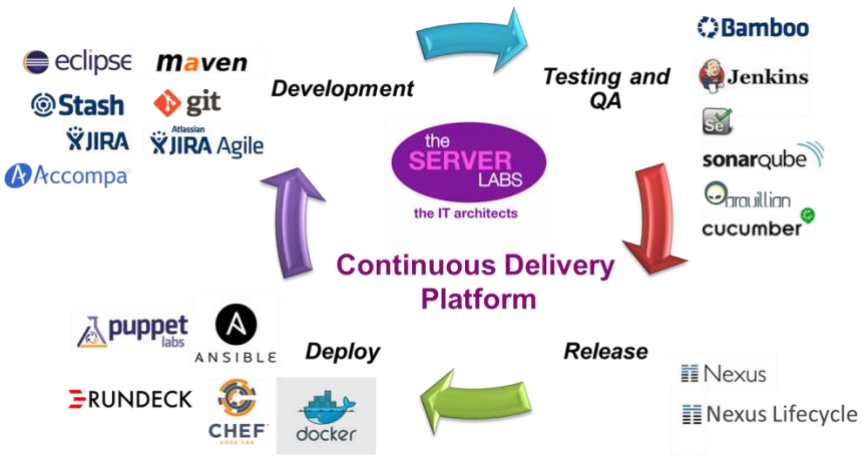
Atlassian products form part of The Server Lab's Continous Delivery Platform, a key tool in the road towards DevOps and achieving continuous delivery.



Benefits for your business

- Formalised development process through entire software lifecycle.
- Mapping software development to business objectives.
- High level of automated testing.
- Objective software quality metrics.
- Efficient integration with process for outsourced software development.
- Highly flexible software release process to respond to changing business needs.
- Integration with existing development methodologies.

.



.

3 The Server Labs

The Server Labs (TSL) is a 100% privately founded IT Consultancy and Software Development Company with headquarters in the UK and offices in Germany and Spain and now established as a leader in Cloud Computing services. The Server Labs focuses on the design and implementation of IT architectures and advanced software engineering projects working with the most advanced technologies to provide its clients cost-effective, scalable and high performance solutions. The Server Labs has been using the Cloud since 2006 and working with its customers in the cloud since 2008 and was one of the first European partner's of Amazon Web Services.

The Server Labs has clients in many different industry areas such as space, finance and telecoms. We collaborate with our clients to obtain success, committed to innovation, enjoying what we do every day and growing with every challenge.

The Company's mission is:

- To provide ***expert services*** in the field of IT architectures and advanced software engineering
- To ***improve radically the software development process***
- **To help organisations achieve better business results through the correct use of latest technologies**
- To have ***100% satisfied clients***
- To create high quality ***innovative software solutions***, providing added value to our customers

The specific value, experience and expertise that The Server Labs can provide for e-LfH are:

1. **Technical excellence** and capability to act as lead on architectural decisions and as technology expert in software and system subjects.
2. **Architecture experience at software and system level.**
3. **Proven experience in HPC and Big Data Projects**
4. **Real cloud computing experience, at IaaS, PaaS and SaaS levels, and for both compute power as well as storage solutions in different clouds.**
5. **Quality control based on ISO9001 for all software systems developed**
6. **Technological excellence**, especially in the main technologies required for the project, including HPC, web services and security technologies.

All our architects and engineers are experts with an average of 10 years' experience in the planning, design and development of complex software systems. Our multinational team has been a pioneer in Java technologies, Object Oriented Analysis and Design and distributed architectures, and has the required hands-on experience in many state of the art technologies. In the last few years, The Server

.

Labs has positioned itself as a leader in Cloud computing services, helping organisations move to the Cloud at all levels. For more information on current projects being undertaken by The Server Labs in Cloud computing, please see Appendix B.

Our experience working across several industries has given us a good understanding of the different requirements so we are able to provide the solution that best suits each particular business and reuse the lessons learnt in the other industry sectors when applicable. Our clients span organisations such as Banks (BNP Paribas, BBVA, Caja Madrid) , the European Space Agency (ESA), Madrid Underground (Metro de Madrid), ICCAT, Amadeus, TRAGSA, TIBCO (a leader in Messaging and Service Bus architecture systems), O2 and Telefonica, Vodafone, ORACLE, several, Sun Microsystems, TUI and Marsans travel, etc.

.