

# Whitepaper



2023

# About Our Company



A Brief Story About enclave GmbH

**Headquartered in Berlin** and based around the world, enclave is a deep-tech high-growth technology company that serves a robust and passionate community of developers & devops around the world. **Our mission is to enable the cloud for the remaining 80% of the workload.** We are working on solving some of the most challenging and interesting technology projects around confidential computing. We strongly believe **confidential computing is a game-changing technology** that is key to cloud computing mass adoption. Enclave answers the essential question: **“Why should I trust a cloud.”** Our clients do not need to trust the cloud. Data, microservices or AI models in use at any moment in time are shielded from unauthorized disclosure. That’s the magic the entire team works on very hard and wants to see sparkling.

# Introducing Confidential Computing

Turn a public cloud into a private cloud with confidence and confidential containers.

Cloud Computing has transformed the way organizations store and access their information, providing them with new ways to elevate the value of their data and conduct their business.

From startups to large corporations, every organization can leverage the cloud to seamlessly upscale their service delivery and productivity, while saving a lot of time and money. While the pandemic has accelerated cloud adoption, the move from on-premise to the cloud is set to continue in the coming years. So, whether an organization is already using the cloud or is planning to start its digital transformation, it is imperative to put this new IT infrastructure under a high data privacy shield.

Enclave is a leading provider of revolutionary confidential containers that establish the highest level of security and put your infrastructure under a data privacy shield.

We help companies transform their business infrastructure into a confidential computing environment.



# Vision

enclaive makes the benefits of confidential computing easily accessible for businesses, allowing them to keep their information and intellectual property private while deploying applications in a hybrid multi-cloud environment.



# Mission

01

Our mission is to enable the cloud for the remaining 80% of workloads.

02

We provide fully-encrypted container by leveraging **state-of-the-art technology** with confidential computing.

03

Enclave delivers a comprehensive multi-cloud OS, enabling Zero Trust, shielding the application and data against the infrastructure provider and solution provider by encrypting data in use.

04

We aim to provide a universal, cloud-independent technology, enabling the enclavation of sophisticated multi-cloud applications.





# Key Factors

## 01 Infrastructure Shielding

Shield your data and services against cyberattacks and espionage, curious cloud providers, outsourced programming agencies and business partners.

## 03 Simple Migration

With 30+ ready-to-use encrypted docker containers (incl. NodeJS, MongoDB, Redis, Postgres, Nginx), a migration is as easy as starting a docker container.

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## 02 GDPR Compliance

Store and share customer data in a GDPR-compliant way between different stakeholders and avoid security and data privacy fines.

## 04 World-class service

Your goals matter, so when you need support or customized containers tailored towards your business, get technical support that's free for all customers.

# Problems



## Businesses Are Reluctant When It Comes To Processing Data

Current applications and data centers have grown to become a bottomless pit. Complexity, skill shortage, and the lack of trust significantly restrain harnessing cloud benefits across industries and governments. Among the key reasons why decision-makers are hesitating to embrace the cloud are the lack of expertise and resources, and perceived complexity, as well as security/ legal/ compliance concerns.

### **GDPR/ Schrems II**

Is storing / sharing data compliant and lawful?

### **Security**

Is the data protected against cyberattacks, espionage, and insiders?

### **Data Ownership**

Who owns the data shared with 3rd party services?

### **Zero Trust for Cloud**

Is my cloud provider accessing business critical data?

# Our Solution



## Pioneering The Confidential Multi-Cloud of Choice

The enclave multi-cloud Operating System enables Confidential Cloud Computing and Data Sovereignty across providers and technology stacks. With confidence, security, and ease, you can now build, deploy, and scale applications on Europe's most complete ecosystem. Innovative and confidential applications without infrastructure complexity allow you to transform your business and deliver exceptional experiences, without the fear of data protection.



### Cost effective

Scale your business and not your billing. enclave offers the best price/performance ratio on the market.



### Confidential by default

All environments are confidential by design, leveraging cutting-edge hardware-graded security.



### Simple

You don't have to be a cloud native genius. With few clicks you configure the environment of choice.



### Fully compliant

Select the infrastructure of choice meeting the compliance requirements of your business and customers.



# The Magic Spice

## CloudOps, DevOps, and FinOps embedded and out-of-the-box

Confidential computing is a new computing paradigm safeguarding customer data and sensitive data at any moment in time, while it is stored, looked up, edited, or processed, remains encrypted, and shielded against data breaches. Only legitimate users may access the data. Start building, deploying, and scaling compute environments with just a few clicks in our confidential environment.

### Confidential Apps

Focus on growing your business. Choose from a portfolio of well-curated, confidential-by-design applications. Don't waste time and precious business resources with application management.

### Confidential Databases

Hosting your customers' data with data-in-use encryption by default has never been easier. Get the scalability, resiliency & flexibility you need to deliver an excellent customer experience and the trust you deserve.

### Confidential, Serverless Functions

Pay only for the utilized resources and stay assured your functions and inputs are confidential. Build your application and don't worry about maintaining the servers. Activate the flexibility you need to deliver an excellent customer experience and the trust you deserve.

### Confidential Containers

Ready to scale? Deploy, manage, and scale your containerized applications. We'll make sure your workload runs in the latest confidential Kubernetes environment.

### Confidential Virtual Machines

The right instance to begin with. Create a high-performance backbone for your infrastructure, or control it when you need it most. And the good news is. You do not need to change your code.





# Great Performance Combined With Great Confidentiality

Enclave delivers all requirements needed for running confidential multi-cloud applications:



# Benefits

Enclave delivers a comprehensive confidentiality layer for the cloud, shielding the microservice and data against the infrastructure provider and solution provider. We aim to provide a universal, cloud independent technology, enabling also the enclavation of sophisticated multi-cloud applications.



## Technological Edge

Protect data in use from any:

- **External threats** (hacker), **internal threats** (employee) and **3rd parties** (external dev, and cloud providers e.g. AWS, Azure, GCS)
- Protects **intellectual property** (like advanced data models, and algorithms)
- Enables **value creation** without data disclosing
- Enables **real-time auditability**



## Business Opportunities

- **Shield data** from ecosystem service providers and attain the necessary security compliance
- **Run GDPR-compliant services** and avoid security & data breach fines
- Migrate to public clouds with confidence and the **trust** of private clouds
- **Reduce** cybersecurity **insurance costs** through a comprehensive data protection approach in the cloud

# Our Founding Team

**Prof. Dr. Sebastian Gajek**  
Chief Technology Officer  
& Founder



**Andreas Walbrodt**  
Managing Director &  
Founder

# Contact Us

## Because, we're here to help

Discover how **enclave** can help you leverage the full potential of your data-driven business through digital trust. Start your unique experience with **enclave** today and join us!

### TEST

Get your confidential cloud with just a few clicks. Join our Beta Testing Group and be part of the change!

### PARTICIPATE

Join our open source community and let's thrive together

### BUILD

Develop, manage, and protect your applications with enclave's compute, storage, and networking solutions.

### SUBSCRIBE

Join our Social Media channels so you never miss any updates.



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