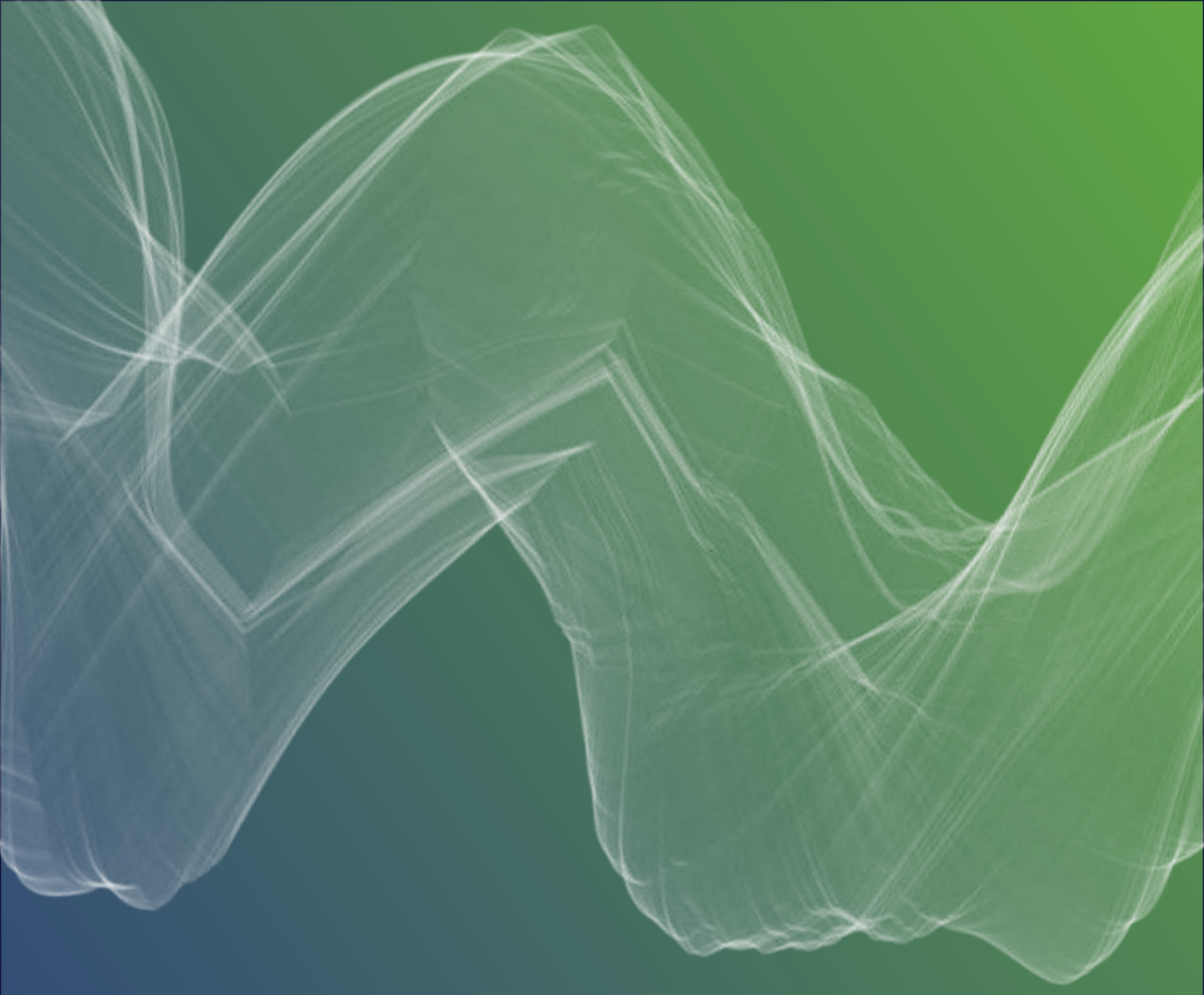


kainos®

Modernise & Optimise

Service Definition Document

G-Cloud 14

Status: Definitive
Security Commercial – In Confidence
Version no.1/0

We're Kainos

Formed in 1986, we set about finding the best people to tackle the most difficult digital work. We fostered a culture where people truly care for each other and the world around them.

Our reputation for software engineering and problem-solving was quickly established, and our customers started to view us more as their colleagues

We're much bigger now, helping organisations across the globe to navigate change in more ways than ever. But some things never change, like our commitment to our people, delighting our customers, and our technical ability

Some say we're leading a quiet revolution in digital, but if you ask us, we're just doing our bit to make the world a little bit better.

3,139 amazing people

13 consecutive years of growth

38 years of innovation

£374m revenue (FY2023)

23 locations globally

FTSE 250 listed tech company

Our core expertise

The digital revolution is already happening. We're leading from the front to help our clients **seize every digital opportunity** and be future-ready.

- Cloud
- Low Code
- Data and AI
- Managed services
- Digital advisory
- Service and experience design
- Engineering

Workday services and products

- Deploy
- Test
- Extend
- Optimise
- Audit

Application Modernisation

Reimagine applications using our unique transformation approach to better meet user-needs, become more data driven and utilise cloud-native architectures which are scalable, cost-effective and secure.

Identify an optimal modernisation pathway, accelerate transformation using the latest GenAI technologies and enabling rapid transition to a Software-as-a-Service(SaaS) operating model.

Features

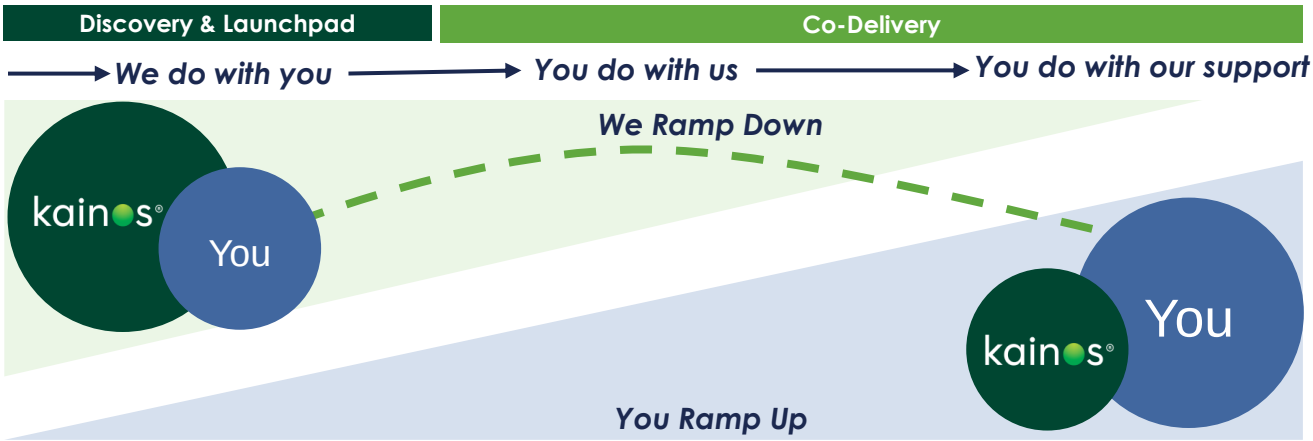
1. Access industry-leading capabilities across data, AI, cloud and product design.
2. Reimagine your application with scalable SaaS delivery model.
3. Cost-optimised solutions with proven well-architected patterns
4. Full CI/CD and Infrastructure-as-Code(IAC) support enabling frictionless push-button deployments.
5. Maintain interoperability with dependent systems and other government services
6. Cloud-Native, PaaS and Serverless-first approaches for built-in non-functionals (e.g. scalability).
7. GDS Technology Code of Practice and Service Standards aligned.
8. Iterate quickly and incrementally modernise using agile methods.
9. Aligned with NCSC security principles e.g. GovAssure ready.
10. Enabling your team through Co-Delivery and upskilling.

Benefits

1. Accelerate migration from legacy code using latest GenAI/LLM technologies.
2. Simplify hosting and reduce maintenance by adopting cloud-native managed services.
3. Mitigate risks associate with legacy or out-of-support software.
4. Generate transparent TCO model to support modernisation business case.
5. Decoupling of monolithic applications into modern micro-service architectures.
6. Embedded of Green Software Practices to reduce carbon/environmental impacts.
7. Evergreen application deployments(patching/features/updates) through Continuous Delivery.
8. Aligned with latest accessibility frameworks including WCAG2.2.
9. Co-Delivery with expert practitioners with multi-disciplinary domain expertise.
10. Foster innovation at speed and scale whilst reducing technical debt.

Application Modernisation

The Kainos application modernisation methodology is a proven process to first identify priority areas for modernisation aligned to your business objectives and then enable rapid execution using agile techniques.



Application Modernisation Methodology

To us, successful application modernisation means working in partnership with you to establish an optimal modernisation path and then enabling your internal teams to pursue this through a period of co-delivery.

Discovery & Launchpad

Through a rapid service-led application discovery we'll learn as much about your application as possible, focusing on what it does and who use/integrates with it in addition to technology concerns such as data stores/programming languages/deployment models.

A holistic process encompassing engineering, platforms, data, service design, product, testing, at the end we will establish a modernisation roadmap for your application starting with a launchpad.

A launchpad is an initially delivered 'thin-slice' of functionality to demonstrate the viability of the recommended approach.

Co-Delivery

We will create, refine, and estimate prioritised user-stories to enable your modernisation. Our preferred method is to work as 'one team' with our engineers and architects working alongside yours to share knowledge, enable, and overcome any challenges together. We are also happy to provide a full team to perform modernisation on your behalf.

Cloud Cost Optimisation (FinOps)

Identify opportunities to optimise your cloud costs through a focused 2-5 week assessment. Applying the FinOps framework, we will provide a roadmap to implement and improve your organisation's maturity level across all domains and capabilities.

Apply unit economics to relate cloud spend to business value and establish continuous cost optimisation.

Features

1. Support for major cloud platforms: Azure, AWS and GCP.
2. Proven methodology to quickly assess cloud consumption and utilisation.
3. Assessment of people, processes and technology to optimise value.
4. Consumption strategy created to guide cloud deployment and on-going savings.
5. Workload uptime and usage aligned to business need.
6. Shift-left cost awareness through dashboards to visualise consumption and usage.
7. Recommendations of cloud-native platform services to reduce cost.
8. Recommendations for improvements in tooling and automation e.g. CloudHealth/Cloudability.
9. Recommendations for improvements in billing metadata e.g. tagging standards.
10. Implementation of cost controls/policies to manage usage e.g. budgets.

Benefits

1. Reduce cloud costs through optimisation of cloud services.
2. Minimise operational management costs by using cloud-native / platform services.
3. Rate reduction optimisations through Reservations, Savings Plans and spot instances.
4. Reduction of licensing and support costs.
5. Budget and forecasting improvements enabling accurate forward planning.
6. A RAG scored actionable set of tasks to maximise savings.
7. Cost allocation improvements through chargeback or showback.
8. Joint teams and knowledge transfer – enablement of your staff.
9. Cost related KPIs to measure and track optimisation initiative progress.
10. Reduction in cloud emissions through intelligent scheduling.

Cloud Cost Optimisation (FinOps)

A structured 2-5 week process with clear deliverables, identifying cloud cost optimisation opportunities, assessing the size of the opportunities and categorising these in terms of ease of delivering the benefits.

Methodology

We use a tried and tested 3 stage process:

1. **Workshop with sponsor:** Understand the key drivers, agree high-level objectives, current cost base and saving targets, and the timeline to achieve the expected savings.
2. **Data Collection:** This stage may include -
    - Discussions with key stakeholders in technology, IT operations, finance, and commercial to identify opportunities and understand existing constraints such as business readiness, licensing, contracts etc.
    - Run cloud-specific cost optimisation tooling on the IT estate.
    - Cloud Costs Review
    - Reviews of existing policies, processes and solutions in place.
3. **Produce the report:** a RAG status for each cost optimisation opportunity, detailing the next actions to realise the savings.

Service Outputs

The outputs will vary based on the agreed objectives; however, it will address several cost optimisation areas:

- **Technology:** Server retirement, re-architect to rationalise, right sizing, best cloud service for the workload, consolidation, waste reduction, tooling improvements, cost monitoring dashboards etc.
- **Operational:** Best consumption model for workloads, workload and environment scheduling, leverage geographical cost differences, reduction of internal effort by use of managed services, optimisation of DR and BCP consumption, automation and use of cloud-native services such as remote desktops etc.
- **Commercial:** Licensing rationalisation, reservations/commitments, using cloud partners to purchase compute, storage etc.
- **Enablement:** Cost management processes, Governance recommendations

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This service can be applied at any stage in your organisations' cloud journey. The process will be tailored to ensure it is relevant to what the current requirement is and is designed to be applicable at any maturity level. This service can be used to assess your organisations' maturity in Cost Optimisation and provide actionable insights to facilitate improvements. We can perform this function for you, or work with your staff to upskill them to build an internal capability which will allow you to take control of your own cloud costs going forwards.

Where possible, we will also identify opportunities to improve the sustainability of your cloud platform and provide hight level recommendations as to how you can start to include related metrics in your organisations cloud operating model.

Cloud Cyber Security Services

Kainos provide solution assessment against industry best practices such as CIS and OWASP ASVS. Delivery of secure-by-design, GovAssure ready, new solutions. Compliance with GDPR/NCSC Cyber Assessment Framework (CAF)/NIST Cyber Security Framework (CSF)/ISO 2700. Implementation of secure development practices including STRIDE threat modelling, DevSecOps and Vulnerability Management.

Features

1. Defines effective Cyber Security strategy including policy, standards, and procedures.
2. Integrates ISO27001, NCSC CAF, Gov Assure, NIST CSF, SOC 2.
3. Shift-left assurance, including secure supply chain, automating SCA, SAST, DAST.
4. Creating security-aware culture through Security champions, red team/blue team.
5. Secure by Design, Privacy by Design, Threat Modelling minimise vulnerabilities/issues.
6. Zero-trust architecture achieved through defence in depth application/platform controls
7. Provide teams with tools/ information to prioritise/resolve issues (e.g. SBOM).
8. Supports agile delivery, secure software development lifecycle (SSDLC) practices.
9. IT Health Checks/ Penetration Tests and QA, supported by GenAI
10. NCSC, AWS, GCP, and Azure certified security architects and engineers.

Benefits

1. Cloud Scale Cyber Security practices for your organisation.
2. Higher software quality and faster security sign off (ATO).
3. Better collaboration between development, operation, and security teams.
4. Faster and more secure development and release cycle through automation.
5. Reduce impact of security issues through defence in depth.
6. Fix security defects and vulnerabilities faster and with less cost.
7. Improve security risk and vulnerabilities visibility, monitored with SIEM (Sentinel)
8. Address the root causes of vulnerabilities to prevent recurrences.
9. Realise the benefits of a Zero Trust Architecture.
10. Deliver more with the same people by removing manual effort.

Cloud Cyber Security Services

Kainos offers a broad range of security services for cloud-based solutions, processing OFFICIAL and OFFICIAL SENSITIVE data.

Kainos's Cloud Cyber Security Services include:

1. Risk identification, assessment and management.
2. Accreditation support.
3. Secure design, implementation and delivery of digital solutions.
4. Integration with third party security solutions.
5. Security hardening of Cloud platforms and software.
6. Vulnerability management standards, processes, and technology implementation.
7. Facilitating IT Health Checks/ Penetration Tests and prioritising/implementing mitigations.
8. Ongoing monitoring and support of security solutions.

Kainos's Cloud Cyber Security services are not tied to specific cloud providers, leaving our customers free to use the underlying cloud platform that best fits their needs. We make it easy to consume only those services required by offering flexible engagement terms.

We have a proven track record of building excellent working relationships with our customers in central and local Government, NHS Digital and NHS Trusts, and financial institutions – an important consideration when selecting a supplier to help secure sensitive or business critical data.

Kainos holds ISO 9001, 20000 and 27001 certifications which evidence our understanding and implementation of the controls and governance required to ensure that data is secured appropriately.

Many of the cloud solutions we support for our customers are securely administered via the Internet. Kainos has a Code of Connection and associated Code of Practice to enable the administration and support of environments with PSN Protected connectivity. Similarly, for health customers we have a direct connection to the NHS N3 / HSCN network.

Cloud Native Modernisation

We use cloud-native practices and technologies to transform how your applications meet user needs.

With our established methodology, we modernise heritage, legacy and problematic applications, boosting **scalability**, **reliability**, **cost-effectiveness**, **performance**, and **security**.

After evaluating needs, we outline a tailored modernisation roadmap. Our co-delivery approach ensures seamless transition to in-house ownership.

Features

1. Proven agile methodology pairing rapid assessment/early prototyping for maximum value.
2. Adopt modern technologies including serverless, containers, PaaS, Kubernetes and LLM's.
3. Reimagine legacy applications/monoliths through microservices and event-driven architectures.
4. Full Infrastructure-as-Code(IAC) support with end-to-end automation through CI/CD pipelines.
5. Benchmark and improve green software practices to reduce carbon impact.
6. Improve security through implementing DevSecOps and well-architected frameworks.
7. Adopt optimal deployment models across private, public and hybrid cloud.
8. Minimise disruption for users through continuous delivery, zero downtime/canary releases.
9. Transform legacy application code through GenAI enablement
10. Provider Agnostic: AWS, Azure, GCP, Tanzu, RedHat, Hybrid.

Benefits

1. Reduce change friction to encourage increased application innovation.
2. Executed by expert practitioners with cross-cutting cloud and modernisation expertise.
3. Reduce carbon impact through adopting green software practices.
4. Mitigate risks with out-of-support or legacy/heritage applications/platforms.
5. Optimise cloud costs through FinOps practices e.g. intelligent scheduling/right-sizing.
6. Reduce unexpected downtime through improved availability, observability and automation.
7. Increase development productivity improve staff morale, developer experience and productivity.
8. Co-Delivery approach upskills your people in cloud-native technologies and approaches.
9. "Evergreen" continuous delivery approach de-risks future change
10. Reduce operational overhead through adoption of cloud managed services.

Cloud Native Modernisation

Many organisations are realising that to unlock the true benefits of cloud e.g. cost, elasticity, reliability and improved development velocity, a better approach is needed.

Traditional thinking around 'building a datacentre in the cloud' is increasingly not enough as it significantly constrains possible value and tends to lead to disappointment. With proven cloud-native practices, architectures, accelerators, and having applied these to build and transform some of the highest profile services in government with years of experience, we can help you unleash the true power of cloud and accelerate your business like a "digital native"

Our cloud-native offerings span across 3 different areas:

1. **Strategise & Enable**: We always start with businesses problems and understanding what we can do to help you, we don't start with technology. Using a rapid discovery activity or a vision workshop to better understand your challenges, we build roadmaps indicate how we can enable across people, process and technology.
2. **Migrate & Integrate**: Working collaboratively, we help identify the optimal modernisation path to help you adopt and integrate with cloud native technologies/approaches. We do this using a technology agnostic approach to understand how we can best solve the challenges you face which minimising business impact.
3. **Modernise & Optimise**: Cloud moves fast, and you can't stand still. We practice continuous or 'evergreen' modernisation, continuously learning, iterating and innovating for how we can make things better. This includes looking at enabling your teams for independent operations, optimising costs, reducing carbon impact.

Our Experience

Kainos has significant experience in rapidly delivering robust cloud landing zones. Our specialists have delivered some of the highest profile citizen-facing platforms in Government following a risk-based approach to design and implement landing zones aligned with NCSC guidance for use with OFFICIAL-SENSITIVE workloads.

Our Expertise

We invest heavily in developing our people, our cloud capabilities, and our technology accelerators – we have over 500 cloud certified individuals within the organisation. We also leverage our independence to provide objective, agnostic advice – we recommend the most appropriate tools and platforms which will enable you to achieve the right results.

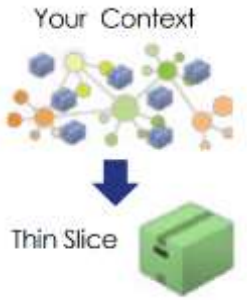
Our modernisation process

Working towards achieving your business needs identified in vision and discovery workshops, we apply our tried-and-tested modernisation process and cloud native accelerators, to help you work out what you need to do and how we help you get there.

Discover & Plan

Vision, Discovery & Planning

Our Cloud Native experts work with your architects, service owners, and engineers to understand the business problem, user needs, and current architecture to determine an optimal modernisation pathway. We'll use these insights to determine how Cloud Native technologies and approaches can deliver more than just operational improvements and rapidly create a backlog of work to address this.



1. Kick-off Workshop

We'll rapidly build an understanding of user needs, challenges, and the current problem domain subject to modernisation. We'll help you break down the requirements, prioritise needs, and identify the first end-to-end "thin slice" of value to deliver.

2. Collaborative Exploration

We'll schedule a collaborative design session lead by our Cloud Native Experts, where we'll transpose your application to a Cloud Native Architecture and agree a modernisation pathway.

3. Build Roadmap & Backlog

We'll generate a roadmap to deliver your modernisation pathway and an estimated backlog of work with clear acceptance criteria. If required, we can help with any investment case.

Migrate & Modernise

Co-Delivery

Using the roadmap and epic backlog in planning, we will create, refine, and estimate user-stories representing an end-to-end thin slice of your application. Our preferred method is to work as 'one team' with our engineers and architects working alongside yours to share knowledge, enable, and overcome any challenges together. We are also happy to provide a full team to perform modernisation on your behalf.

Thin Slice

In refining the features in-scope for the first co-delivery sprint, we will focus on touching as many of the potentially challenging or complex areas of the modernisation – top-to-bottom. We do this to accelerate early proof-of- concept and to build confidence.

One Team Approach

Our preference is not to 'do the modernisation to you', it's to support your team(s), generate interest in cloud- native technologies and help build longer-term momentum. We do this either by working as one virtual team or by embedding a Kainos team to work alongside yours in partnership.

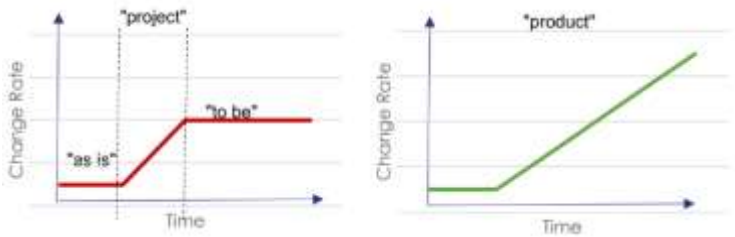
Manage & Optimise

Enablement

Enablement is about ensuring you maintain momentum from the iteration and feedback loops generated while delivering the initial modernisation slice. Digital natives who embrace cloud- native techniques recognize that modernisation is truly never done, there is always more to do. Rather than as a discreet project, they see modernisation as a continuous process which requires a product-led mentality. Products require continual improvement and care until such time they are retired.

Project vs Product

We help you transition from the co-delivery phase of modernisation and adopt a product-led approach to continuous improvement. We can help you minimise overheads and maximise business value through the life of the product as it matures, evolves and changes.



Continuous Improvement & Support

Using modern practices, we can either provide an ongoing service, or enable your teams to continue evolving the products and solutions. Continual cost optimisation, continual security & vulnerability compliance, combined with modern service management ensure your new cloud native benefits remain embedded.

Greener Software Accelerator

Establishes baseline carbon emissions (CO2E) for a service. We evaluate Green Software maturity, providing recommendations to implement sustainable development practices, covering technology, people, and processes.

A tailored report provides insight to enhance digital sustainability metrics and support carbon reduction in line with Net Zero or Science Based Targets (SBTi).

Features

1. Carbon Emissions calculation based on SCI standard for selected workloads.
2. Suitable for Azure/AWS and Google Cloud Platform (GCP) based workloads
3. Migration Sustainability assessment
4. Data quality assessment and remediation recommendations
5. Maturity Assessment leveraging our GreenGauge Framework
6. Technology recommendations to improve cloud sustainability, aligned to FinOps principles
7. Repeatable process to calculate service level emissions
8. Roadmap to improve Sustainable development approach
9. Development of GreenOps operating model improving carbon awareness
10. Staff enablement in sustainable software development practices

Benefits

1. GHG emissions value for your nominated service, covering scopes 1, 2 & 3
2. Sustainability related data improvements
3. Deeper insight into your cloud services.
4. Facilitates sustainability reporting requirements.
5. Reduced cloud waste
6. Cloud cost savings identified
7. Raised awareness of sustainable development practices.
8. Sustainability related technology optimisations
9. Actionable recommendations to improve Green Software development practices
10. Apply intelligent scheduling and carbon shifting to reduce carbon impact.

Greener Software Accelerator

A structured process with clear deliverables to improve your organisations sustainable development practices. We work with you to first identify a suitable service to calculate emissions. We also assess your organisation's current sustainable development maturity and provide clear, actionable insights and recommendations on how to improve your sustainability metrics and development practices.

Service scope
Delivery of a tried and tested process:

Workshop with sponsor: Understand the key drivers, agree high-level objectives, identify the service in scope and the SMEs required to facilitate the work.

Data Collection:

1. Discussions with the Service SMEs to identify the software boundary, functional unit and time period in scope for the calculation.
2. Assess the available data to help identify and agree a suitable calculation approach.
3. Leverage GreenGauge framework to gather sustainable development assessment data through workshops with existing software delivery teams
4. Assess existing collateral for sustainability within the organisation. This includes policies, KPIs and any existing reporting

Benchmarking and Improvement plan:

1. Calculate emissions for service in scope
2. Calculate sustainable development maturity score from GreenGauge framework assessment
3. Review architecture and outline recommendations to improve service specific emissions
4. Review Maturity Assessment and create opinionated improvement plan, with roadmap and high-level stories.

Provide report – A report detailing the baselined emissions for the service in scope, outlining the methodology followed, as well as the Sustainable Development assessment score.

The report outputs will be tailored to your requirements however it will address the following areas:

1. **Technology:** Recommendations to improve sustainability metrics through service choice, service placement and architectural changes. May also include right sizing and other waste reduction strategies.
2. **Enablement:** Sustainable development practices, Governance recommendations.
3. **Operational:** KPIs, dashboards,

This service can be applied at any stage in your organisations' cloud journey. The process will be tailored to ensure it is relevant to what the current requirement is and is designed to be applicable at any maturity level. This service can be used to assess your organisations' maturity in sustainable development and provide actionable insights to facilitate improvements.

We can perform this function for you, or work with your staff to upskill them to build an internal capability which will allow you to take control of your own cloud costs going forwards.

Where possible, we will also identify opportunities to optimise costs for your cloud platform and provide hight level recommendations as to how you can start to include related metrics in your organisation's cloud operating model.

This approach can also be used to baseline services within an existing data centre, and then calculate cloud-based emissions to highlight the improvement from migrating to cloud.

Legacy Code Transformation

We transform and modernise legacy code to **contemporary languages**, enabling **strategic portability** and **enhancing security**. Our proven transformation process uses **provider-agnostic GenAI technologies**, to accelerate code transformation and auto-generate tests, assuring functional and non-functional parity.

This mitigates out-of-support language risk, reduces patching overheads and costs by adopting modern technologies.

Features

1. AI-Augmented Agile, using Amazon Q Code Transformer, GitHub Copilot etc.
2. Accelerated upgrade paths using GenAI code analysis and refactoring recommendations
3. Improve documentation by embedding multi-lingual descriptive comments within code.
4. Reimagine legacy applications/monoliths through microservices and event-driven architectures.
5. Apply strangler pattern to incrementally decouple/replace legacy systems.
6. Automated dependency mapping of legacy systems interactions to maintain interoperability.
7. Full Infrastructure-as-Code(IAC) support with end-to-end automation through CI/CD pipelines.
8. Adopt modern technologies including serverless, containers, PaaS, Kubernetes and LLM's.
9. Full Infrastructure-as-Code(IAC) support with end-to-end automation through CI/CD pipelines.
10. Adopt optimal deployment models across private, public and hybrid cloud.

Benefits

1. Proven approach for rapid upgrades, switching to new language frameworks(Java/.NET/Python)
2. Resolves technical debt and other barriers to innovation.
3. Enables cloud migration of legacy, improving analytics and security services
4. Sidestep vendor lock-in reducing/removing punitive end of life support fees.
5. Remove vulnerabilities from unsupported legacy through DevSecOps and well-architected frameworks.
6. Achievement/ maintenance of regulatory compliance to extend application support life.
7. Improve application, reliability, availability, performance, and supportability.
8. Bridge enablement gaps reducing dependency on legacy programming language skills.
9. Automatically generate tests; Unit, Functional, Non-Functional'.
10. Applying Green software to legacy enhances sustainability, reducing environmental/carbon impact.

Legacy Code Transformation

We follow a 3-step Legacy code transformation process built on Kainos managed workshops and accelerators as needed:

1. **Discovery**: We always start by establishing and agreeing the business problem being solved. Applications rarely function without reliance on other services, so our legacy code transformation assessment isn't limited by technology alone and includes discovery of people, process, tools, dependencies, integration interfaces, and code / knowledge repositories.
2. **Launchpad**: Building from the assembled baseline and aligned against our GenAI assisted WAF approach we will create a cloud-based code transformation design for the components identified in the discovery phase.
3. **Iterative Transformation**: Using industry leading AI tooling the code is analysed and a transformation plan listing the Transformation upgrade steps is created. This includes updating dependencies, transforming the code, and then iteratively fixing any build errors encountered during the upgrade.

Our Experience

Kainos has significant experience in Legacy Modernisation and code transformation. Our specialists have delivered digital transformations for some of the highest profile citizen-facing platforms in Government following an open and collaborative risk-based design approach. We never work in isolation and will work as closely as you need to identify operational, commercial, sustainable, and security needs aligned with NCSC guidance for use with OFFICIAL-SENSITIVE Applications / Services.

Our Expertise

We invest heavily in developing our people, our cloud capabilities and our cloud partnership relationships to create demand focussed maximum yield technology accelerators.

We value and safeguard our independence to ensure our opinion provides problem hinged and supplier agnostic advice. This allows us to pick and recommend the most appropriate GenAI Legacy Code Transformation tools and platforms to enable you to achieve the right results.

Platform Engineering / Developer Velocity

Accelerate product delivery by applying platform engineering techniques, increasing developer experience and productivity. Amplify speed, quality, consistency, and reduced time-to-market. Reusable self-service tools and components enhance autonomy reducing friction, whilst improving cost efficiency and security. Reducing effort by 5 minutes per engineer per day totals many thousands across developer teams.

Features

1. Developer velocity assessment based on DevOps/DORA/SPACE/DevEx frameworks
2. Internal Developer Platform(IDP) enhances developer productivity.
3. Well-architected centralised enablement of secure, scalable, resilient self-service features
4. Cost-optimisation, observability, autoscaling, resilience by default, even with microservices
5. Standard Golden path(s) to live, without hindering developer innovation
6. Organisational compliance (e.g. security, regulatory requirements) baked into the platform
7. Automation, CICD cloud-native, Infrastructure-as-code as standard
8. Collaborative code sharing (inner-sourcing) & Platform APIs vs ticketing
9. Platform as a Product approach focused on developers as customers
10. Secure/Ethical Generative AI tooling and enablement by the platform

Benefits

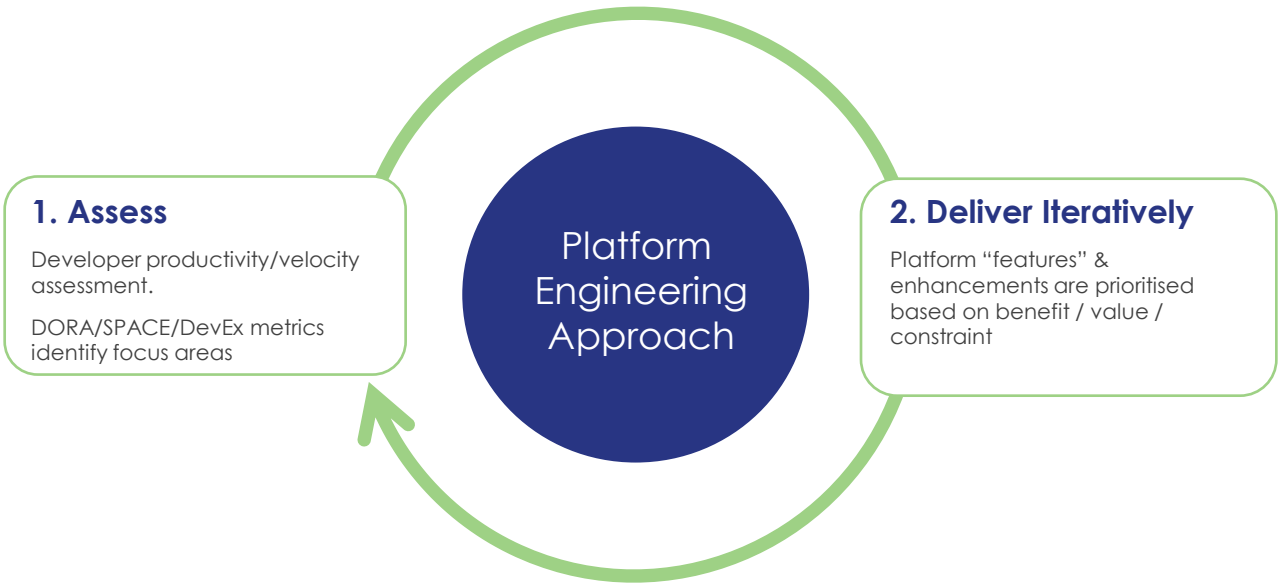
1. Baseline metrics to assess DevSecOps maturity, identifying areas for improvement
2. IDP / Developer Portal based on need (Humanitec, Tanzu, Backstage)
3. Reduced cognitive load, improved DevEx through autonomy and reduced friction
4. Organisational expansion unconstrained by platform. Non-linear cost of scaling
5. "Paved road" provides least resistance, innovate "off path" where needed.
6. Enhanced security, secret management via centralised guardrails, protecting services consistently
7. Software engineering best practices applied to platform development
8. Accelerate and reduce BAU effort and Developer tickets over time.
9. User-centred design focuses on increasing "value per developer".
10. Enable engineers to build faster and innovative solutions through GenAI

Platform Engineering / Developer Velocity

Many organisations are realising that DevOps is not a magic bullet and has introduced new problems such as repeated work across teams and developer cognitive overload.

As part of moving to cloud, some organisations may have created "Centres of Excellence" that haven't fulfilled the promise of increasing developer autonomy, velocity and productivity through cloud enablement.

Platform Engineering is the practice that addresses these issues by adopting a "developer as customer", Platform-as-a-Product approach, providing centralised tooling and services to remove friction and enable.



Our Platform Engineering approach is based around Platform as a Product thinking. We start by assessing the current maturity and areas of developer friction. Outputs of the assessment inform prioritisation of platform features and enhancements. Iterative build following DevSecOps best practices, and continual engagement with the developer community informs the next area of assessment and build. Not all pillars of platform maturity will be able to be worked on simultaneously.

Platform Engineering / Developer Velocity

1. Assess

Our assessment measures maturity against key metrics from frameworks such as DORA / SPACE / DevEx. Tailored to the organisation, examples can include the big four quantitative metrics (delivery velocity, cycle time, mean time to recovery, change failure rate), plus qualitative factors through surveys such as time in flow state, cognitive load, feedback speed, top friction/pain points.

These results can then be benchmarked to provide a maturity assessment and inform areas of improvement. As features and enhancements are made, the metrics / KPIs are reviewed to ensure improvement

2. Deliver Iteratively

We have 5 guiding principles for Platform as a Product delivery (shown below). Prioritisation of improvement areas will be informed by the productivity/velocity assessment and collaboration with developers to ensure we build a platform "for developers, with developers".

Our vision is **to make engineering easier, faster and higher quality**				
Our mission is to build and continuously improve a platform treated as a product, made up of APIs, tools, documentation, education and support				
Educate & Empower	Simplify & Evolve Architecture	Encourage security & best practice	Self-service	Optimise iteration speed, cost & quality
Documentation, education, tutorials and common solutions to problems should be readily available providing a "golden path"	The platform and processes around it should continually look to simplify delivery of solutions to customers balancing local vs global optimisation	The platform and tooling should encourage security by default and best practice by continuously building & maintaining sensible defaults and codified policies	Infrastructure, environments, tooling, documentation, observability should all be available without needing to contact the platform team.	Speed, cost and quality are in constant flux, and need to be continually monitored and adjusted as teams, systems and the platform itself matures

UN International Organization for Migration

*"You are indeed **trailblazers in this space** and have much to teach the rest of the UN community"* **Marietta Muwanga-Ssevume**, CIO, **UN IOM**

The IOM is responsible for the orderly and humane management of migration and to **provide humanitarian assistance** to migrants in need – this **impacts 30 million people** per year

Kainos moved **700 virtual machines** based in data centres on **three continents** to a Microsoft Azure cloud-based environment

Improved the security, availability and resilience of **450 local missions** across **150 countries** including accelerated support for **Kabul and Kyiv missions**

92% reduction in carbon emissions

Employee Document Management (EDM)

"We can be compliant. We can meet all the functional requirements. We can increase the efficiency of our HR teams. We can empower our employees."

Zuzana Rozkosna | **HR Global Project Manager at Hilti**

The Hilti Group has **33,000 team members** in **120 countries**, supplying the construction and energy industries with technologically leading products and systems.

A **Workday customer since 2020**, they struggled with their document management systems – **fragmented, outdated, disconnected** and with different regions using vastly different systems.

By deploying Kainos **EDM, the first end-to-end Workday document management solution**, Hilti achieved:

- ✓ 50% of documents **signed within 24 hours**
- ✓ 50% **reduction** in document creation time
- ✓ **Retired** inefficient document management systems

Innovate UK:

How the uk's innovation engine achieved business transformation with workday and kainos

"Everything is more seamless, slicker, all of our data is in one platform, all of our different departments are able to communicate and collaborate more effectively, and we have these terrific tools from Kainos that save us so much time and effort."

Graeme Petrie | Systems Finance Business Partner at Innovate UK

Innovate UK is the United Kingdom's national innovation agency. A public body with **over 500 employees**, the organisation supports business- led innovation in all sectors, technologies, and UK regions.

Innovate UK chose Kainos as its official Workday partner for a few important reasons. But as Michael sums it up succinctly, the main reason was that "Kainos was the best ever—ever, ever!"

Innovate UK selected Kainos after a selection process during which they reviewed the modules they wanted to deploy, the costs, partners' offerings, and whether each partner met the organisation's procurement framework. Through this rigorous process, Kainos emerged as the clear solution for Innovate UK's Workday needs.

- ✓ Brought many moving parts into a **coordinated, centralised system**
- ✓ Provided Workday **expertise, support, and cost savings** across multiple lines of business
- ✓ Enabled business **transformation** through enhanced teamwork and data utilisation

Where we are

The Americas

Toronto
Atlanta
Indianapolis
Denver
Buenos Aires

UK and Ireland

London
Birmingham
Belfast
Derry
Dublin

Central Europe

Gdansk
Amsterdam
Hamburg
Copenhagen
Helsinki
Stockholm
Antwerp
Frankfurt

What makes us stand out

- Our people
- True collaboration
- Innovation
- Digital know-how
- Common goals
- Trust

Digital Services

We are **engineers**, specialists. We **overcome big challenges** for our clients, through delivery of **intelligent** digital services that use the best in **talent and technology**.

NHS | HM Courts & Tribunals Service | AVIVA | NETFLIX | RBS

Home Office | shopify | FBD | Takeaway.com | match

55 million UK citizens

positively impacted by services we've delivered

892 customers

23 locations

And growing

99% of customers

rate our service as good, great or excellent

Key partners

Working closely with Microsoft and AWS to deliver results

Award-winning

80+ industry awards

Workday

Kainos is a Workday **phase one prime status partner** in all European and North American markets. We have worked with industry giants in over **40 countries worldwide**.

aggreko | KION GROUP | Magellan HEALTH | St. Luke's Health | match

Crown Commercial Service | Department for Education | NETFLIX | stripe | Nasdaq

Partner Since 2011

We are the only certified Workday Services, Software and Extend partner globally.

Workday Services

Full range provider from pre-deployment consulting, implementation and support.

580 Customers

We are a Workday customer and have deployed HCM, Financials, Recruitment, Planning and PSA to run our business.

Workday Public Sector

We have implemented and support many UK Public Sector customers.

Kainos Smart

Our product is deployed to 400+ customers globally saving them 1000s of testing hours.

814 Consultants

Hold over 2100 Workday certifications covering all areas of the platform.

Trusted to deliver the UK Governments biggest digital programmes

50 million citizens

use our software to apply for a driving license, renew their car tax, apply for a passport, or register to vote.

25 million people

use the NHS App, developed by us to allow patients easier and quicker access to healthcare services.

10 million employees

benefit from our expertise in deploying, optimising and safeguarding Workday for the world's biggest brands.

10 million transactions

are securely anonymised in under ten minutes by just one of our digital payment solutions.

Our commitment to HM Government policy

Building capability

Delivering a cross-government strategy to help departments recruit, develop and retain the right people and skills needed to transform public services.

Diversity

Maximising service experience for citizens and civil servants by delivering projects with diverse teams, underpinned by our BAME, LGBTQIA+ and female communities.

COVID-19 recovery

Leading the way by applying our expertise in Healthcare and technology to tackle the pandemic and inform critical decision-making.

Accessibility

Ensuring equal access, experiences and outcomes for users with access needs and ensuring compliance with legislation, through our unique Inclusive Design practice.

Sustainability

With a comprehensive sustainability strategy underway, we will be a Carbon Net Zero company by 2030.

Social responsibility

Tackling workforce inequality and ensuring equal access to technical and vocational education, through our Academies, Camps and Earn as you Learn schemes.

The Code of Ethics

We are guided by our 6 ethical principles.

Wellbeing
We protect the wellbeing of our staff, customers and communities.

Equality
We improve access and inclusion and minimise bias.

Transparency
Our decisions are traceable and accountable.

Integrity
We hold ourselves and others to ethical standards.

Environment
We act responsibly towards the Earth and its resources.

Initiative
We take initiative to deliver social value and positive impacts.




Social Values

Climate action

We are committed to act responsibly to protect the natural world around us. Our near-term aim is to be Carbon Net Zero by 2025 whilst helping our people, customers, partners and suppliers to achieve their own low carbon futures.

Good health & wellbeing

Supporting colleagues to bring their best selves to work through initiatives, learning and guidance to safeguard social, emotional, financial, physical and career wellbeing.

Reduced inequalities

Delivering value and innovation, supported by network groups led by LGBTQIA+, neurodiverse, disabled and ethnic diversity colleagues.

XPRESSION

Neurodiversity
a Kainos employee network group

embrace

voice
Ethnically Diverse Network

Gender equality

Improving the gender diversity in Kainos and the tech sector through activities that inspire women to build their careers with us.

INSPIRE

Quality education

Empowering our people through best practice behavioural and technical learning courses and programs and inspiring the next generation of technology leaders through our award-winning Tech Outreach projects and learning Academies.

Kainos Academy

Kainos CodeCamp

Kainos Earn as you Learn

Our Artificial Intelligence Projects

The Journey

2016
Machine Learning and AI identified as an innovation **research topic**

2017
Dedicated AI Team formed to **explore interest** with clients

2019
Data & AI practice launched to **support our clients**

2023
Over **190 professionals** delivering **significant, leading-edge projects**

£10m investment to embed AI skills across all development teams

Supporting 25 clients with **GenAI** and **projects moving to deployment**

Example Projects

Applied advanced NLP to automate the redaction of witness statements for a large UK policing constabulary

Used LLMs to covert over 10m complex Local Authority unstructured data points to help digitise a critical legacy service

GenAI pilot to support rigorous in-location inspection of machinery and NLP to summarise and standardise generated reports

Enabled a large-scale maritime and beach-landing data collection exercise to help develop cutting edge AI products

BCDR and Exit Plan

Business Continuity and Disaster Recovery (BCDR)

A Business Continuity Plan can be provided if required. This shall set out the arrangements to be invoked in the event of an actual or perceived threat to business continuity, to ensure continued operation of the system and continuity of the services provided by Kainos pursuant to the Prime Agreement and shall include: the alternative processes, options and responsibilities that may be adopted in the event of a failure or disruption to the system and/or services provided by Kainos pursuant to the Prime Agreement; and the steps to be taken by Kainos upon resumption of the system and services provided by Kainos pursuant to the Prime Agreement in order to address any prevailing effect of the failure or disruption including a root cause analysis of the failure or disruption.

Exit Plan

An Exit Plan can be provided if required to detail the steps that would be carried out to ensure smooth transition of Kainos services to a new supplier. The steps outlined in the Exit Plan will help mitigate against any disruption to the service during the transition period. It is assumed that any new supplier will themselves have a procedure they wish to follow during the transition period, and as such the steps in this Exit Plan will serve as a checklist for the new supplier to ensure all key areas of the transition have been covered. The Exit Plan will therefore be subject to refinement should it be exercised.

Commercial Statement

Confidentiality and Copyright

Trademarks

Caveats

Kainos has used all reasonable endeavours to ensure that the contents of this document are accurate but is not responsible for any errors or omissions.

All information provided prior to execution of a contract is provided 'as is' and 'subject to contract' without warranty of any kind.

This document does not constitute an offer from Kainos. In the event that the parties elect to work together, they will only be contractually bound to each other upon signature of a contract.