

IBM Consulting



G-Cloud 15 IBM – Migrate and Modernise to Google Cloud Platform

Service Definition Document

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IBM Migrate and Modernise to Google Cloud Platform (GCP)

Service Overview

Features

- Application & Data migration and modernisation full lifecycle delivery services (Day 0, 1, 2) with accelerators aligned to “The 6 Rs”
- Deliver through Project squads or UK, Regional, and Global delivery centres dedicated to performing Cloud migration/modernisations at scale
- Application Portfolio Discovery & Planning enabled with AI-powered tooling
- Architecture services to re-design monolithic applications for cloud native models
- Programme management delivery, with tooling to enable collaboration and drive results across multi-parties and stakeholder groups
- Implementation of secure Google platform configurations, Landing Zones, DevOps pipelines and appropriate Kubernetes Container orchestration management
- Accelerators for common legacy middleware and databases to GCP & hybrid and multi cloud scenarios
- Modernise applications to containers, serverless, microservices and APIs with GCP cloud native services such as APIgee
- Modernise operational and analytics data platforms with Google native services such as BigQuery
- Quality Assurance, Testing and Cut-Over management tailored and automated to match Service Level needs
- FinOps enablement, decommissioning and archiving for IT spend control & Sustainability KPIs
- Change Management and Cloud Centre of Excellence services to achieve your target operating model
- Delivery includes IBM and third party GenAI capabilities such as IBM Watsonx, Azure Vertex AI, Amazon Bedrock, Microsoft Copilot, a range of assistants and developer tools including IBM Sidekick/Consulting Assistant, ChatGPT, Amazon Q and a range of LLMs.

Benefits

- Legacy data and applications enabled for a sustainable Digital future in the Cloud
- Reduced technical debt and operational resilience risks
- Compliance with government security and risk standards
- Enable an Agile culture and skill transformation through ‘co-creation’ processes
- Simplify the management and complexity of large-scale migrations and modernisations with cost effective delivery through global migration factories



Why IBM?

- Unparalleled experience of delivering complex Cloud Transformations and addressing resiliency, security and compliance concerns with hundreds of Clients engaged on a Cloud journey with IBM
- A strong workforce of globally distributed professionals trained on Google Cloud and supported by the strongest suite of market leading tools. Google Certified Migration Specialists with 1000+ GCP Certified Architects & Engineers
- The deepest experience of the challenges of Enterprise Technologies, with solutions to simplify its complexity.

IBM provides the skills, methods and tooling infused with AI to modernise applications, aligns IT with business requirements, reduces operating costs to free up capital for innovation and enhances the overall application security posture.

IBM Migrate and Modernise to Google Cloud Platform (GCP)

Addressing Business Needs

We work in partnership with you to address your business needs, leveraging our deep industry and technical expertise, tools, and approach to deliver Digital ready solutions.

IBM's GCP Migration and Modernisation accelerates the creation of a future-ready business, optimising cost and reducing technical debt.

IBM provides the skills, methods, and tooling to modernise legacy and mainframe applications, aligns IT with business requirements, reduces operating costs to free up capital for innovation and enhances the overall application security and sustainability posture.



How do we Migrate to Cloud from a large complex legacy estate operating highly critical services?

Our clients often struggle with a lack of deep applications knowledge, capabilities and tools which impacts their ability to successfully implement a safe migration and modernisation plan.

IBM can help you to create your journey from legacy to cloud with a range of IBM's AI and market leading application modernisation tools such as ADDI, CAST and DevOps Commander. These tools are used to evaluate the application codebase and validate our client's IT/business to co-create the most suitable Migration and Modernisation strategy.

Our security-enablement for GCP, a Zero-Trust architecture model, is based on industry leading practices, regulations, and compliances.

Speed of modernisation is not keeping up with business objectives.

IBM provides the right skills and new ways of working by co-creating, co-executing and co-operating with client teams for agendas such as Sustainability, Digital and AI powered Open Government. Our modernisation approach can efficiently transform applications and data to enable customer-centric innovation and deliver exceptional client experiences.

IBM Migrate and Modernise to Google Cloud Platform (GCP)

Service Definition

We provide a full migration and modernisation service that drives value from your journey to the cloud.

IBM Cloud Modernisation

In-depth analysis of applications at the code level reveals application dependences and level of remediation needed. The results of this analysis along with any new business requirements is used by the team to develop a detailed design of the modernised application. This is followed by required code conversion, remediation, and new development.

Together this information is used to create detailed blueprints for the modernised application and detailed execution plans.

IBM GCP Migration

Migrating applications to GCP consists of:

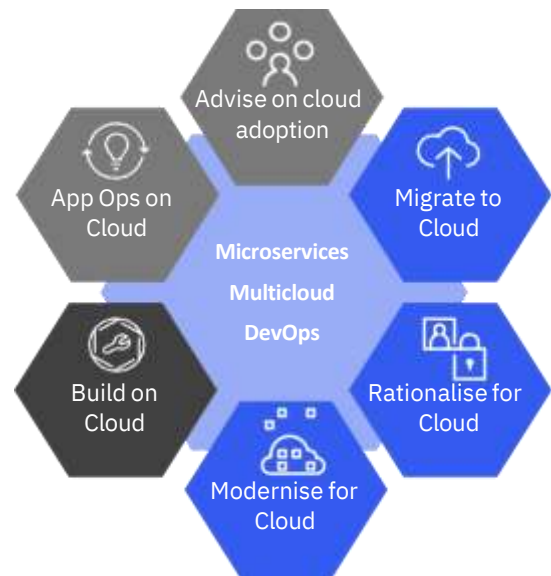
- Enabling them to run on current and supported operating platforms, middleware, and databases
- Redeploying them to the target cloud using a deployment pattern providing targeted performance

Each application is assessed in detail to determine changes that need to be made to prepare them for the new platform. An efficient factory approach is used to accelerate the migration execution using the IBM Garage Method for Cloud and the associated automation toolsets.

IBM Cloud Rationalisation

Rationalise for Cloud is the simplification of the application estate including data migration, archive and decommission at end of life, with an approach based on repeatable and scalable methods, tools and accelerators.

- Data migration – Moving the required data from source systems and securing this in the archive solution. This includes all ETL actions in addition to making the data and associated schema available for search and reporting capabilities.
- Archive and decommission at end of life – Defining the right archive strategy and solution in line with policies on Information Lifecycle Management to deliver cost benefits through application decommission and ending both licenses and contracts.



IBM Migrate and Modernise to Google Cloud Platform (GCP)

IBM Approach

We bring the benefit of having worked with the world's largest organisations, transforming complex, critical services. Our approach is based on robust methods, processes and personalised engagement.

We focus on your business needs and developing trusted long-term relationships, underpinned by industry-leading experience and capabilities. We want you to get the best out of every engagement and to deliver outcomes that matter for your organisation. Our enhanced experience of GCP migrations combined with our deep technical expertise in a multi-industry context enables us to offer a tailored delivery service model to match your organisation needs. Our staff are experienced in Waterfall, Iterative and Agile Delivery at Scale delivery models. We can provide Project Services, As-A-Service delivery models and Factory based models.

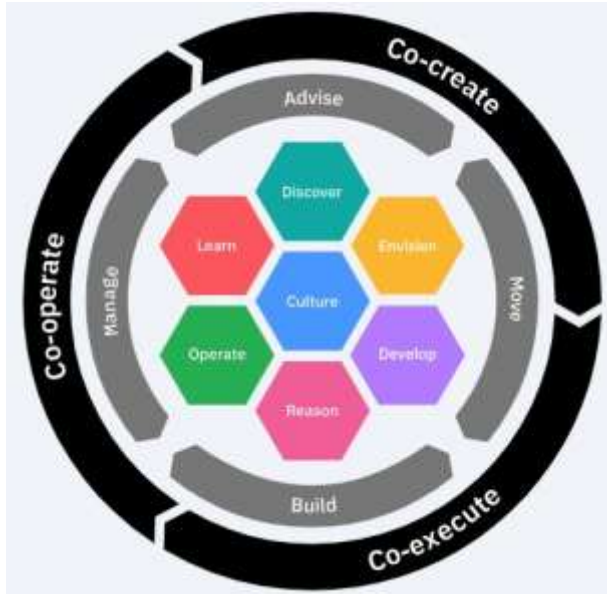


Through our IBM Migration Factory, we can modernise workloads at scale safely and securely, with automation to accelerate and reduce risk.

- Continuous discovery – Monitors for changes and schedule impacts and prioritisation
- Applying the best of Google Cloud Platform Services – Integrated cloud provider toolkits and services
- Automation and orchestration – Accelerate and reduces risk, integrates DevSecOps
- Migration squads – Teams scale up to drive end to end migrations following a consistent method

IBM Migrate and Modernise to Google Cloud Platform (GCP)

Scaled Agility



Experience

Major transformations to different cloud platforms for Fortune 500 Companies migrating to GCP.

Manage Complexity

Significant migrations performed with thousands of applications.

Expertise

Cloud consultants and experts globally with certified GCP expertise.

The principles of how we think and act in our delivery to clients include:

- Building stakeholder relationships based on innovation, trust, and service excellence
- Using Design Thinking and agile approaches to help frame and execute our client's change programs
- Infusing cognition and emerging technologies into our clients' enterprises and core processes
- Exploiting hybrid multi-cloud-based solutions to underpin evolving client processes
- Developing and deploying world-class talent
- Using consistent, modern methods and tools – constantly reviewing and refining to accelerate the value we deliver

The ability to thrive and succeed in engagements driven by globally dispersed, multi-disciplined teams using our suite of collaboration tools is at our core.



IBM Migrate and Modernise to Google Cloud Platform (GCP)

Cloud Innovation

Innovation Management

The IBM Garage Method for Cloud™ is the core technique we employ to bring innovation at scale to Application Migrations and Modernisation initiatives.

Our methods include Enterprise Design Thinking, Lean Startup, and agile DevOps concepts to enable continuous design, delivery, and validation of new functionality.

Our applied approaches and toolkits bring benefits such as:

- Up to 40% reduction in time and effort to process new sources of information.
- Up to 25% reduction in errors from manual activities related to migration.
- Up to 25% reduction in time and effort required for migration activities.

Cloud Native Architecture

Our cloud native architecture experiences enable migration programmes to progress beyond Lift & Shift agendas, to reposition the legacy for the future at the right TCO points.

Containerisation, for example, enables the agility, scalability, and portability of workloads, resulting in speed and efficiency in the cloud transformation.

This innovation has delivered the following quantifiable benefits during a cloud migration for a leading UK Bank:

- Reduced remediation effort of application layer components – Reducing end-to-end migration timelines by up to 35%.
- Rapid application infrastructure scalability – Adding containers with minimal effort by replicating the application image across new VMs.

Modernisation Hubs

Our Global Delivery model provides a comprehensive design and delivery engine to drive GCP adoption at scale for accelerated business outcomes.

These services include:

- A core set of services that help clients transform their applications and infrastructure to cloud.
- Patterns to accelerate estimating and planning
- “Common” services such as solution design, architecture, design thinking etc. are leveraged as appropriate for client delivery.
- Factory operations services such as Environments and DevOps as a Service

IBM Migrate and Modernise to Google Cloud Platform (GCP)

Value from Migration and Modernisation

GCP migration can modernise your workflows, improve performance and reduce work for your system administrators. If you are undecided about moving your applications to the cloud, consider these benefits.



Agility for Business Value

Offer IT resources on demand, providing users and business groups with what they need rapidly, without having to acquire and deploy new hardware.

Scalability

Cloud providers can accommodate unexpected surges or seasonal usage patterns at predictable costs. Google Cloud offers an industry leading, sustainable, IT platform service.

Cost control

Understand how your cloud costs are allocated in switching from a capital expense (CAPEX) to operating expense (OPEX) model for your infrastructure. Greater understanding driven by this “utility” pay structure will increase control and improve the management of your infrastructure costs.

Ease of maintenance

Pushing updates to individual computers, patching servers and provisioning new hardware are expensive and time-consuming tasks. Free your IT administrators to work on bigger projects and leave the infrastructure maintenance to your cloud provider.

Security

Hybrid Cloud security together with state-of-the-art software security measures help safeguard your data. You gain the flexibility to manage security levels and select among a variety of security options.

Sustainability Acceleration

The move to Cloud accelerates the ability to measure the carbon footprint contribution and continuously optimise business unit performance

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About IBM

Supporting Government

We help government organisations in the UK and worldwide deliver and transform essential public services – our teams are passionate and proud about helping you to make a real difference to people's lives.

Government Services Supported by IBM:

	Defence and Intelligence
	Public Safety and Policing
	Healthcare
	Life Sciences
	Tax & Revenue Management
	National Infrastructure
	Social Care
	Education
	Work and Pensions

The problems we solve for clients are complex and cannot be satisfied with technology alone. They require a partner that can also offer deep industry expertise and a relationship of trust.

IBM combines the portfolio, people and sense of purpose necessary to meet today's enterprise demands. Every day, we support and manage complex delivery for government clients where the impact of delivery has wide-reaching impact on citizens and national services.

We bring access to the industry experience, insight and technology capability to deliver and operate secure, scalable, optimised and available services for government.

We support you by bringing:

- Industry expertise – Professionals who understand and are passionate about delivering quality public services and can bring industry insights and apply innovation to your business processes
- Trust and security capabilities – Protecting valuable data and insights and deploying new innovations responsibly
- Innovative technology – Expertise in areas such as AI, blockchain, 5G, Automation, IoT, cybersecurity and quantum, delivered in a Hybrid Cloud environment
- Experienced Services professionals to support strategy, innovation and deliver transformation and change to processes, applications, and cloud infrastructure
- Global alliances – valuable partnerships with the world's leading vendors

This is IBM in the UK

We have worked together with organisations in the UK for over 100 years, with a rich history of joint innovation and achievements, built on trusted relationships.



Cloud

Together, IBM and Red Hat are working to deliver the world's only **next-generation hybrid multicloud platform**



Economy

IBM has been **integral to the UK economy for >100 years**, and is one of its largest tech employers



R&D

In the UK alone, IBM invests **£170 million in R&D** each year



Quantum

IBM Q, the world's most advanced quantum computing initiative for commercial use, is being used by CERN



Environment

IBM's focus on sustainability began in 1971 with our first environmental policy



Artificial Intelligence

IBM develops **watsonx based generative AI solution** for the Austrian federal armed forces to provide **fact-based evaluation and classification** for the ability to remain capable of acting in the light of risk scenarios.



Changing the world

IBM was awarded **World Changing Company of the Year 2019** by Fast Company



Royal recognition

29 UK IBMers received honours from the **Queen** for contributions to tech and society



Diversity

IBM won the **Global Diversity Award 2019** and the ENEI's **Gold Standard**



Graduates

IBM is committed to developing future talent – we are **Target Jobs' Graduate Employer of the Year 2019**



Volunteering

IBM dedicates **>20,000 volunteering hours every year** for a better society



Tech talent

IBM runs P-TECH schools in 18 countries, helping **>100,000 students build skills for careers of the future**



Inventors

IBM UK is home to many Master Inventors, with **>250 patents filed last year alone**