



Trust. Value. Velocity

G-Cloud 15

Server and Platform Administration Service

Contents

1.	About Mastek	3
	Mastek's global presence	4
	Mastek and Technology in the Public Sector	12
2.	Summary	13
3.	Masteks Service.....	14
3.1	Server Consolidation	14
3.2	Performance Tuning.....	14
3.3	Proactive Monitoring	14
3.4	Virtualisation.....	14
3.5	System Integration	14
3.6	User Management.....	14
3.7	Cloud Management.....	14
3.8	Backup and Restore Management	15
3.9	Disaster Recovery	15
3.10	Patch Management	15
3.11	Problem and Incident Management	15
4.	Key Features.....	16
5.	Business Benefits	17
6.	Technologies, Tools, Best Practice and Standards.....	18

1. About Mastek

Mastek has been delivering Critical National Infrastructure programmes in the UK Public Sector for over a decade now. We are trusted with multiple contracts for the UK Government across Central Government, Health, Local Government, Policing, Public Protection and Defence. The majority of our national services are delivered in a context of high uncertainty and complexity while collaborating in multi-supplier environments.

While working for these large and complex public sector organisations, we have continuously refined our management, delivery and underlying processes to reflect key learnings from the sector:

Working through a complex stakeholder landscape: We understand the importance of establishing effective communication channels, building trust and fostering a collaborative working environment that empowers stakeholders to contribute meaningfully to the project's success. Our approach is based on a deep understanding of stakeholder needs and requirements. We leverage our experience and expertise to design governance structures that promote transparency and accountability and use data-driven reporting mechanisms to ensure stakeholders have real-time visibility into project status and progress. At the Home Office, GDS, Ministry of Defence and NHS, we have a proven track record of working seamlessly with large stakeholder groups, including civil servants.

Standards, compliances: We comply with >20 policies and standards, including Government Digital Standards and Government CDDO Service Toolkit covering service standards, service manuals, TCoP, API technical and data standards. Our stringent governance, methods, playbooks and processes (manual and automated) span across service delivery phases, ensuring continuous compliance.

Policy-driven: Policies and procedures largely drive Public Sector organisations. We need to be Agile and flexible to meet demands for policy/regulatory changes, geopolitical events and ministerial commitments.

Culture: We adhere to the Civil Service core values of integrity, honesty, objectivity and impartiality. Key behaviours we promote stem from a combination of Civil Service and Mastek values. These include being passionate, accountable, sustaining predictable and repeatable outcomes, not transferring risk, transparent, leading to enable, acting with transparency, practising a no-blame culture and being flexible.

Mastek's global presence



Australia

Austria

Bahrain

Belgium

Brunei

Canada

Denmark

Egypt

Estonia

Finland

France

Germany

Hungary

Iceland

India

Indonesia

Ireland

Italy

Japan

Jordan

Kenya

Kingdom of Saudi Arabia
(KSA)

Kuwait

Latvia

Luxembourg

Malaysia

Netherlands

New Zealand

Norway

Oman

Philippines

Poland

Romania

Singapore

Slovakia

Spain

Sri Lanka

Sweden

Switzerland

United Arab Emirates (UAE)

United Kingdom

USA

Did you know?

75%

Around three quarters of Local Authorities in the UK who run Oracle have worked with Mastek on their digital transformation journey.

300,000 Users

Supported managing up to 750,000 logins per month to MOD through Identity and Access Management

Crime reduction

We designed, built and manage the UK's Strategic National DNA Database that helps Forensics and Law Enforcement Authorities investigate and stop crime

90% faster

We enabled the National Health Service (NHS) to drive 90% faster response times with a billion pharmacy prescriptions a year.

Technical Service Desk

We provide level 2 and ITSM support for the One Login service at Government Digital Service

22k

Our systems enable 22,000 schools to function efficiently every day of the year.

Healthcare and manufacturing

We delivered Finance, HCM and Supply Chain transformations for clients across health and manufacturing globally powered by Oracle Cloud

Transformation of trade

Transforming UK's trade with the EU and rest of the World by supporting Customs Declarations Services and its trade users.

99.99% Availability

We support the Home Office Biometrics (HOB) Platform, Having migrated it to an AWS platform.

Our digital and cloud services portfolio

Powered by Glide 4.0 and value-based delivery

Industry-aligned approach with business outcomes

Digital engineering and experience	• Cloud engineering and migration • Legacy modernisation • Low code / no code App Dev • DevSecOps • Enterprise integration	• MACH • Digital commerce • UX and CX • Platform engineering • Gen AI software development.
Oracle Cloud and enterprise apps	• Oracle Cloud applications • Oracle consulting • Oracle Cloud infrastructure	• Value-based delivery • Glide 4.0.
Data, automation and AI	• Cloud data modernisation • Business Intelligence and Analytics	• Data management • Intelligent automation • Data Governance.
Salesforce	• Sales Cloud • Service Cloud • Marketing Cloud • Industry Cloud	• Experience Cloud • Mulesoft.
Innovation labs and platforms	• Enterprise workforce scheduler • Connected enterprise • icx-Pro – intelligent part assistant	• iLeaseFinPro.
Cloud enhancement managed services	• Oracle managed services • Digital managed services • Commerce managed services	• Salesforce managed services.

Home Office Biometrics (HOB)

Public sector platform modelled 24x7 with 99.99% availability

Problem

- Transition business-critical Platform services from incumbent supplier with minimal risk
- Migration from private cloud to AWS Cloud.

Solution

- Migrated the infrastructure from private cloud to AWS
- Embedding Kubernetes Containerisation
- Introduced Docker and fully-baked AMIs
- Supporting the platform's self-service functionality using Jenkins Jobs
- Applying security updates to the OS base images through pipelines
- Instituting automated patching and testing for infrastructure images
- Support of configuration, test and releasable artefacts through the pipeline.

Outcome

- **Zero impact** on live service
- **80% automation** of SIT
- Environment Provision **2 days to 1 hour**
- **5x scalability** in handling student BRPs
- Cost saving the authority circa **£9.5m/year.**
- Won the '**Best Use of Cloud Services**' award
- **35%** Incident Volume Reduction.



Government Digital Service

Problem

GDS initiated the One Login programme to create a single front door for identity verification and authentication, which could be adopted and scaled across all government departments. This would improve the user experience by providing the public with a single identification and verification service for the government, reduce costs as each department no longer required its own identity service and reduce identity fraud and identity-enabled crime.

GDS released a tender in June 2023 to provide a Technical Service Desk (TSD) managed service for the One Login service. This service would provide a single point of contact for level 1 and 2 service support as part of the wider support ecosystem. It would be provided in the UK and replace the incumbent's scaled-down non-ITIL-aligned break-fix service.

Solution

In September 2023, Mastek were successfully awarded the TSD contract to deliver TSD on behalf of GDS. GDS had an extremely aggressive programme driven by the onboarding of HMRC as a user, which was a major milestone planned for February 2024, migrating new and existing HMRC users to the One Login platform. The TSD service was expected to go live in November 2023. This was an extremely complex programme which, within this timescale, would deliver:

- The contact centre provider for level 0 directly facing the public
- The TSD supplier in place directly facing all government departments
- The TSD supplier in place providing L1 and L2 engineering support and monitoring
- Continued delivery on the One Login backlog of features
- Continued migration of smaller government departments to the platform.
- Delivery of a new ITSM toolset to be configured for use by GDS and the One Login programme, integrating level 0 to level 3 support
- Working as one team, Mastek quickly integrated into the programme, appointing the leadership team early in the engagement. We collaborated with GDS from the outset, ensuring we tailored the service to their expectations rather than delivering what was written in the contract.

Our leadership team consisted of:

- Service Management Vice President
- Programme Director
- Chief Technology Officer
- Programme Management office lead.

Outcome

At its height, the programme team was circa 15 strong, covering programme/project delivery, PMO, architecture, fraud, security, support, omni-channel and quality assurance. The service team is currently in place providing circa 21 resources now covering end-to-end service management, service delivery and L1 and 2 engineering roles.

As the One Login migrations continue, Mastek is supporting Government departments onboarding to the platform as they transition into the new service and provide One Login a secure Technical Service Desk managed service with:

- Omni channel access for other government departments via telephony, email and web form
- Provision of L1 and L2 engineering support
- 24x7, 365 days a week cover
- 24x7x365 eyes on monitoring service
- Fraud detection and security, GDPR compliant
- End-to-end (L0-3) incident and problem management
- End-to-end 24x7 Major incident management (MIM)
- On-call/call-out engineering support, incident and MI management
- Adherence to stringent SLAs on incident response, call handling and fix times
- End-to-end monthly service reporting alongside TSD KPI and SLA reporting.
- A shift left culture and mindset, reducing the impact of service on product teams (L3)
- Support with service maturity in the programme, preparing GDS to run critical national infrastructure.



Internet-facing platform and applications for Army Digital Services

Developed mobile app and web app with 24*7 high availability

Problem

- New Defence Gateway Portal
- Combine all internet-facing applications into one
- Easy to use
- Enable easier access to the MySeries portfolio of products.

Solution

Designed and developed the following easy-use Progressive Web Apps:

- Defence Gateway Landing Page
- My Leave App
- My Expenses App
- My Health App
- My Details App
- My Appraisal App
- My Admin App
- COVID-19 Reporting Tool
- Commanders' COVID-19 Tool.

Outcome

- Delivered 20+ successful projects
- Deployment Automation
- £7.5m in savings annually
- Zero Downtime
- Environment creation in hours.



Delivered a platform for the Department for Health and Social Care

Delivered capability supporting 200k+ tests in a day,
traced millions of COVID-19 infections

Problem

- Leveraging DevOps platform based on reusable GitHub, AWS and Azure DevOps Pipelines
- Introduce more flexible, scalable and reusable IaC capabilities
- Implement CI/CD pipelines.

Solution

- Uplifted from Cloud Formation into Terraform (IaC)
- Pre-built the AMIs using Packer, with automated security checks
- Immutable infrastructure, thus eliminating the risks of partial upgrades and patches
- Continual Cost Optimisation processes and other service functions, such as Change and Risk management
- Migrated into an organisation-wide collaboration toolset. This included Jira, Confluence, Trello, Miro, Teams, SharePoint, O365, Slack, etc.

Outcome

- 75% reduction in lead time due to pre-built AMIs
- Zero Downtime Deployments
- Delivered a Platform - Secured, multi-tenanted hosted on Azure and AWS in 5 weeks
- Cost reduction achieved through close monitoring of resource utilisation.



Mastek and Technology in the Public Sector

Technical Capabilities	Relevant Technology Capability	Mastek Scale
Software Development Continuous Integration, Platform - Other Products, Cloud Collaboration Tools		Software Engineering 2354 FTE
QA and Test: API, Automated Functional and Compatibility, Accessibility & Performance		QA and Testing 774 FTE
Cloud Platforms Amazon Web Services AWS Microsoft Azure		Cloud Platforms 1046 FTE
Data BI/MI Components, Integration		BI and Visualisation 725 FTE
User-Centered Design		UCD 25 FTE
Office Automation Tools		Collaboration 4565 FTE

2. Summary

Mastek has over a decade of experience in managed hosting and systems maintenance for customers worldwide.

We offer both on-premise and cloud-integrated solutions for physical and virtual environments, including cloud computing, user management, data warehousing, web hosting and data centre management.

3. Masteks Service

Mastek's server Management and maintenance include proactive support, server monitoring, hardware and data centre reporting, hardware restoration, operating system patch management and monitoring, alerting and installation services. Our expert technical teams work around the clock to monitor, diagnose and support servers from the hardware level up to the operating system.

We have experience in the following areas:

3.1 Server Consolidation

Slow or fast server sprawl, reduce costs, improve utilisation and help regain control of your IT by consolidating servers. Designed and deployed server builds using standardised build templates and installation instructions.

3.2 Performance Tuning

Our experience shows that correct configuration and settings tailored to the client's specific needs enhance server performance and help utilise its resources most efficiently. Our administrators know how to handle high-load servers and systems. For every project, they optimise at all levels, from web apps to system kernel and web stack, lowering the risk of failure due to peak load.

3.3 Proactive Monitoring

Monitoring is performed 24/7. It helps to detect the slightest signs of a problem that may occur, allowing for appropriate measures to be taken in advance. You will be instantly notified about the incident in a way you specify - by email or phone.

3.4 Virtualisation

We can simplify cumbersome tasks such as allocating storage, load balancing, configuring RAID and backing up and restoring data. We can also simplify the process of maintaining, distributing and patching applications, reducing desktop management labour and staffing costs. We can accelerate application deployment, simplify application migration and provide users with access to applications from anywhere without the need for installations.

3.5 System Integration

We have developed various designs and implementations for high-availability, scalable, performant and secure servers. We also address failing components and/or escalate to the Vendor according to the escalation and notification process and the Routing protocol.

3.6 User Management

Mastek IT manages all user activity within the LDAP/Active Directory and any other user management area. Mastek also provides secure and efficient deactivation, removal of user data and archiving of data off the networks. Mastek will also give a formal onboarding procedure to ensure that new staff are assigned to the correct security groups and can work effectively on the system upon joining the company.

3.7 Cloud Management

Mastek provides a service that consolidates events and other performance statistics into customised views, demonstrating how your cloud services and third-party service providers are performing against contracted SLAs. It can provide 24x7 monitoring of most public cloud services, in-house environments and private and hosted cloud services.

3.8 Backup and Restore Management

Mastek defines operational recovery as the process of creating and storing copies of data to protect organisations against data loss.

Mastek creates the backup and restore policy to meet the compliance level agreed upon by the security forum. The backup retention policy is set as agreed by the security and compliance team. Mastek performs periodic restoration drills to test the data backup set and ensure successful restoration.

3.9 Disaster Recovery

Mastek prepares a written plan for recovering systems; the plan is accessible to all stakeholders who need assistance in getting systems back up and running. Mastek ensures a full copy of system data is available at an off-site location. Continuous replication is set to meet the agreed-upon RTO and RPO. Mastek performs DR drills based on the defined timeline or frequency, e.g., Quarterly DR DRILL or half-yearly DR DRILL.

3.10 Patch Management

Mastek can provide version control, management and updates of all applications, patches and associated software as updates become available or required. Mastek will always retain the ability to revert to a previous version of an application or operating system and remove any updates that cause malfunction or degradation in performance. For major upgrades or software replacements, Mastek will follow ITIL's full testing procedures before rollout. Mastek ensures normal operation after the DR drill or Actual DR.

3.11 Problem and Incident Management

Mastek adopts recognised ISO 20000 and ISO 27001 procedures to ensure incident and problem management are correctly addressed. Incident management aims to restore service to the user as quickly as possible, rather than attempting to find a permanent solution, which is the primary objective of problem management. Mastek will proactively take ownership of both roles.

4. Key Features

- Installation and configuration of OS, applications and tools.
- UNIX/Linux and Wintel server administration.
- High uptime, availability and security.
- Monitoring of servers, load balancing, backup and recovery.
- Installation or updates and patching.
- Administration, installation, configuration and replication of databases (Oracle, SQL, MySQL, DB2, etc.).
- Round-the-clock support with various price options.
- Coordination between providers, we take full ownership.
- Exceptional knowledge across all engineers as per the latest technologies.
- Cloud, hardware, virtualisation, Hyper-V, VMware, third-party software and integration.
- Simple to log calls through email, phone, service portal and proactive alerts.

5. Business Benefits

- Protection from loss of service and data.
- Fixing issues before they become problems, which cause system outages.
- Always available when needed, we answer our phones and immediately fix your issues.
- Easy to understand contracts with no limitations and fair charges representing the service delivered.
- Making it our business to understand yours; what's critical to one is insignificant to another.
- Rapid deployment using automation.

6. Technologies, Tools, Best Practice and Standards

All major technologies, the latest toolset, best practices and standards are supported.

--- End of Document ---

Mastek UK Ltd.
100 Brook Drive, Green Park,
Reading, Berkshire
RG2 6UJ
+44 (0)118 903 5700
Email: g-cloud@mastek.com

