

G-Cloud 9 CLOUD SUPPORT SERVICE DEFINITION

April 2017

Introduction

The world is changing faster than ever with new threats and opportunities emerging all the time.

Organisations, both inside and outside of the public sector, are finding it increasingly difficult to stay ahead of the game and deliver excellent digital services to their customers.

Truly customer-focused organisations are pro-actively taking advantage of this changing world by:

- Building a better understanding of their customers' behaviour
- Anticipating and pre-empting both technology and market changes
- Responding rapidly to changing customer demand
- Providing online services that are always available when their customers need them

The technology enablers for this are routed in Cloud-computing, Data Analytics and Machine Learning, all of which must be underpinned by secure technology, innovation and an agile, DevOps Service Delivery model.

To leverage this technology in a fast moving world, organisations need a trusted partner with specialist expertise in Cloud based services and a track record of customer focused delivery.

With our specialist Cloud expertise, Deep Sky Blue can help your business harness the power of the cloud and transform the way you provide digital services to your customers. To this end, we are pleased to offer a Secure cloud-native application development and cloud migration service under the G-Cloud Framework.

At Deep Sky Blue, all of the services we provide follow agile principles and our teams have extensive experience of delivering projects using Scrum and Kanban. Our teams provide support, maintenance and on-going development services that are underpinned by both the technical and organisational aspects of a DevOps Service Delivery model.

Services underpinned by secure and rigorous data handling

Complementary to our specialist Cloud expertise, Deep Sky Blue have a track record of working in highly secure environments, processing data and delivering systems that operate to the highest levels of Government security classification.

From our work in the Security, Intelligence and Cyber sector, our security cleared engineers have extensive experience of building Cloud based systems that conform to rigorous data protection policies and are fully compliant with a range of data handling legislation.

The specialist services we provide under the G-Cloud framework will all benefit from this expertise.

Our Service

Service description

Under our service Deep Sky Blue provide customers with experienced engineers that can:

- Design, plan and implement secure software applications to run in the Cloud
- Design, plan and implement legally compliant data processing services that run in the Cloud
- Migrate existing software applications to run in the Cloud
- Design, plan and implement Software Containerisation in the Cloud
- Support, maintain and enhance Cloud based software systems using a DevOps Service Delivery model

Deep Sky Blue's expertise helps organisations realise the benefits of utility computing. By enabling compute resource on-demand, our customers enjoy scalable solutions whereby they only pay for what they use, when they use it.

Our experience of leveraging Cloud-computing platforms includes the use of:

- Public Cloud e.g. Amazon EC2, DigitalOcean
- Private Clouds and utility computing within customers' own networks
- Software Containerisation e.g. Docker, Kubernetes, OpenShift

Our extensive experience of developing Cloud-ready applications includes features such as:

- Horizontally scalable solutions in line with user demand (Cloud bursting)
- Twelve-Factor app methodology for building software as a service applications
- Cloud solutions based on Microservice architectural patterns
- PKI Security, 2-factor authentication, role based access and Fine-Grained Security
- Processing high-volume data with rigorous security and legal constraints
- Insider threat protection through user event auditing and non-repudiation
- Experience of working with highly sensitive and classified data

Under our Cloud-native application development and Cloud migration service, Deep Sky Blue will provide Software and System Engineers experienced in designing, planning, implementing and embedding software solutions that will run in the Cloud,

be that, on public, private or hybrid Clouds.

Deep Sky Blue understand the benefits of being able to build, deploy and run applications, on any infrastructure in any type of environment, in a consistent and repeatable way. As part of this service our experienced Engineers will bring their knowledge of Software Containerisation, both in terms of expert advice and hands-on technical implementation, in order to realise this benefit for our customers.

Our knowledge of legacy middleware platforms as well as our experience of working in complex environments with cross platform integration issues, enables us to design, plan and implement successful Cloud migration strategies for our customers. Building on our work in the Security, Intelligence and Cyber sector, our security cleared engineers are able to design and implement highly secure solutions that conform to rigorous data protection policies and are fully compliant with the relevant data handling legislation.

Through this service our customers benefit from:

- Secure digital services that can scale on demand
- Cloud based services that are easier to enhance and maintain
- Reduced risk in migrating legacy services to the Cloud
- Compliance with rigorous security standards
- Compliance with rigorous data protection policies and legislation
- Insider threat protection

Planning a migration or implementation in the Cloud

At Deep Sky Blue we provide highly experienced Business Analysts who work in close collaboration with customers to identify and understand the business objectives and benefits that will be realised by implementing or migrating services to the Cloud and from that derive a backlog of requirements.

We bring our knowledge and understanding of data protection policies and can ensure the solutions we design are fully compliant with the relevant data handling legislation.

Working in an agile way, our Architects and Lead Engineers bring their experience of developing cloud-native systems in some of the most secure and sensitive areas of government to ensure the solution design delivers on these benefits and meets the

requirements. Continuing to work collaboratively with our customers, we then apply agile practices to forecast the delivery and produce a roadmap/plan which can be costed and clearly communicated to stakeholders as required.

We understand how moving services and data to the Cloud can introduce risk. Throughout the planning process we will identify and quantify risks both from a technical and business change perspective and work with customers to agree treatment plans.

Performance and Quality Assurance Testing

Our Deep Sky Blue service provides a team of highly experienced ISTQB qualified Test Engineers who offer an independent and impartial test service spanning the full testing lifecycle.

We are committed to working closely with customers to understand their business and technical risks, which we use to underpin a risk based Test Plan. This testing model, coupled with our structured and methodical approach, provides a high level of IT assurance to ensure systems delivered fully meet their requirements.

Our agile team of Test Engineers has a wealth of Test Automation experience. Our DevOps delivery model follows an automation by default approach and ensures continuous testing is undertaken throughout the lifecycle to help improve the quality and speed of software delivery.

We bring experience across all aspects of Performance Testing in large and complex Cloud environments, using a range of industry recognised tooling, often processing extremely high volumes of data. We also have engineers who have experience of Data Migration and Performance Testing of legacy application and server migrations to the Cloud.

The key features offered by the DSB Test Service are:

- Performance Testing (Load, Stress & Soak)
- Test Automation
- Functional Testing (test design and execution)
- Application and Server Migration Testing
- Test Management (test strategy, reporting & defect management)
- UAT Planning

• Operational Readiness Testing

Through this service our customers benefit from:

- On demand and flexible testing
- Dedicated and experienced Cloud based test service
- Expert knowledge of Test Automation
- Security Cleared Test Professionals

Support Levels

The levels of support we provide cover incident/issue response and incident/issue resolution, with resolution timescales based on the priority or severity of the incident.

Area	Definition	Service Level	Target
Incident Response	 Acknowledging receipt of an incident Confirming priority Initial triage and assignment to team member 	30 minutes	90%
Incident Resolution - Priority 1 (Critical)	 Resolution of the incident and restoration of the service 	4 hours*	90%
Incident Resolution - Priority 2 (High)	- Resolution of the incident and restoration of the service	8 hours*	90%
Incident Resolution - Priority 3 (Medium)	 Resolution of the incident and restoration of the service 	24 hours*	90%
Incident Resolution - Priority 4 (Low)	- Resolution of the incident and restoration of the service	40 hours*	90%

^{*}within the agreed service hours e.g. 9am-5pm

For all our Cloud support engagements we will provide a Technical Account Manager who will have overall responsibility within Deep Sky Blue for delivering the service in line with the agreed service levels.

Our agile approach

On-boarding

The on-boarding process for our Specialist Cloud Services typically takes 2 weeks (elapsed time) and includes the following steps needed to start the engagement:

- Working with the customer to define the scope and timescales for the engagement
- Agreeing the success criteria and any specific deliverables for the engagement
- Agreeing the specific ways of working for the engagement
- Defining and agreeing the team size/resourcing required
- Putting the commercials in place in line with the G-Cloud framework

Service Delivery / Operation

The specific ways of working for the delivery our Specialist Cloud Services can be tailored to best meet the needs of the customer, however, all of our engagements will include the following aspects:

- Deep Sky Blue (DSB) will provide a Technical Account Manager who will take ownership for the provision of the service and will be the primary point of contact including escalations
- We will deliver our services working collaboratively with the customer and following agile ways of working
- Our default methodology is to follow Scrum with Kanban for the visualisation of work through the delivery lifecycle. The specifics of our agile ways of working (e.g. length of sprints, etc.) will be agreed on a case by case basis with the customer
- Through our agile ways of working we will keep customers informed of progress at Sprint Reviews
- We will be open throughout the engagement including sharing actions from our Sprint retrospectives
- Deliverables will be produced in line with the agreement made during the on-boarding stage. In line with our agile ways of working, review and acceptance of deliverables will be performed on a sprint by sprint basis
- For long term engagements (> 6 months) DSB will run a quarterly review board with the customer to assess progress against success criteria and act as a further escalation point
- At the start and throughout the engagement DSB will identify and proactively monitor Risks and Customer Dependencies

Off-boarding

At the end of the engagement, Deep Sky Blue will conduct a final Sprint Review and Retrospective to ensure all necessary handover activities, deliverables and reviews have taken place.