

# G-Cloud 10 Framework Service Definition

## BlackBox Hosting Managed Cloud Service

### Lot 1 Cloud Hosting

#### IF YOU NEED US, WE'RE ON HAND TO HELP!

If you have any questions about this service definition, please do not hesitate to get in touch with us.

You can call 0203 740 7840 or email [James.wick@blackboxhosting.net](mailto:James.wick@blackboxhosting.net) and we will be glad to help.

#### CLIENT CONFIDENTIAL

##### Confidentiality Statement

This document is strictly private and confidential. It is neither to be copied, reproduced or its contents disclosed to any other company without the consent of BlackBox Hosting Limited.

The information included in this document has been prepared and included for the purpose of this document only and shall not be used as a model or precedence or used in any other situation.

## Table of Contents

<b>Introduction.....</b>	<b>3</b>
Company Overview .....	3
Value Proposition .....	3
What the Service Provides .....	3
Overview of the G-Cloud Service.....	4
<b>Data Protection .....</b>	<b>5</b>
Information Assurance.....	5
Data Back-Up, Data Restoration and Disaster Recovery.....	5
Back Up & Restores .....	5
Data Processing and Storage Location .....	6
Data Restoration .....	6
Migration.....	7
Privacy by Design.....	7
<b>Using the Service.....</b>	<b>8</b>
Ordering and Invoicing .....	8
Availability of Trial Service .....	8
On-Boarding, Off-Boarding, Service Migration, Scope etc .....	9
On-Boarding.....	9
Off-Boarding.....	9
Training.....	9
Service Management .....	10
Service Levels.....	11
<b>Provision Of Service.....</b>	<b>12</b>
Customers' Requirements and Responsibilities.....	12
Technical Requirements and Client-Side Requirements.....	12
Termination process.....	13
<b>Our Experience.....</b>	<b>14</b>
Client Testimonials.....	14
Contact Details .....	15
Gcloud Representative:.....	15

## Introduction

### Company Overview

BlackBox Hosting is a forward-thinking and innovative company committed to solving your computing needs. We don't just sell rack space; our passion is technology and how we can help our customers to build systems and innovate their businesses.

We have expertise across a wide spectrum of services, offering our clients a complete IT portfolio. Whether you require managed cloud hosting services, security, consultancy, connectivity or backups, our enterprise level architects will work with you to develop an efficient and better performing Infrastructure.

All BlackBox Hosting's solutions are bespoke and tailored to your requirements. We combine exceptional value for money with superfast, robust and reliable systems, integrating everything with outstanding technical expertise and experience.

IT services are constantly evolving, so we offer flexible rolling contracts without tying you into a long-term plan. This allows you to move across different environments such as co-location to cloud without incurring any financial penalties. Our network design and facilities have enabled us to provide 100% uptime for our clients.

### Value Proposition

Blackbox Hosting have identified that the public sector is facing potential problems when it comes to delivering essential services with ever decreasing budgets and the need to save more money. In addition, there is always the concern of data safety and security when using a cloud provider.

Blackbox Hosting aim to solve these problems by providing a secure and transparent service to all its cloud customers. Key benefits include:

1. Complete Migration Services: A dedicated Project manager will be assigned to you to manage your transition and migration to the Blackbox Hosting cloud.
2. This will include a full Technical breakdown of the migration process, so any problems can be solved, and risks mitigated before they can cause a problem.
3. Simplicity: Only pay for the services you use with no long-term contracts.
4. Scalability and Agile: Flexible IT solutions are deployed to meet ever changing requirements.
5. Security: Take the worry out of IT security by allowing Blackbox Hosting to manage the security of your cloud services.

### What the Service Provides

BlackBox Hosting's managed cloud services are aimed at customers who expect a high-performance solution that simply works and can keep pace with their evolving business need

## Overview of the G-Cloud Service

BlackBox Hosting's managed cloud services are aimed at customers who expect a high- performance solution that simply works and can keep pace with their evolving business needs.

What the service can offer:

- ✓ Our services operate in two highly secure Tier 3+ UK data centres with enterprise grade superfast networks.
- ✓ Private cloud, hosting and co-location services backed by managed SLAs
- ✓ Cisco 40GB core network infrastructure.
- ✓ 24/7 support and a dedicated team of expert engineers resolving 99% of issues within the hour.
- ✓ 99.99% network up-time guarantee.
- ✓ Backup, full disaster recovery and business contingency planning.
- ✓ High bandwidth and redundant connectivity backed by multiple Tier 1 ISPs
- ✓ Firewall grade DDOS protection
- ✓ Superfast fibre storage with the latest SSDs.
- ✓ Upgrades of RAM and CPU in real-time.
- ✓ Microsoft licensing rental model meaning you only pay for the licenses you require.
- ✓ N+3 power redundancy.
- ✓ ISO27001 Accredited.
- ✓ Expertise in a variety of technologies including VMware, Cisco, Microsoft, Open Stack, Kemp, Fortigate, BigIP, Linux and HP solutions
- ✓ A scalable and highly resilient platform that you can rely on
- ✓ Cyber Essentials Plus Accredited
- ✓ Template Creation for quick deployment of VMs
  
- ✓ Multiple proactive monitoring tools to keep your services running at all times.
- ✓ Complete flexibility, allowing you to use only the resources you need and to increase them as necessary with real-time upgrades

## Partnerships and Accreditations







## Data Protection

### Information Assurance

Blackbox Hosting are accredited to ISO27001 and Cyber Essentials plus, these two accreditations form the basis of the Information Security Policies and processes that are implemented at Blackbox Hosting.

All policies are reviewed bi-annually at internal management reviews and independently audited every year by a UKAS accredited company to ensure they continue to meet our compliance and business requirements.

Staff are introduced and trained on all policies and procedures from their induction period and these are continually discussed and reviewed at quarterly staff meetings.

If policies are not being followed then staff will go through a disciplinary procedure, more serious breaches are reported to the ICO in accordance with our data protection policies that comply to the General Data Protection regulation (GDPR).

Examples of other policies that are followed by Blackbox Hosting include: Email Usage, Firewall Policy, Internet Usage, Logging Policy, Server Security Policy, Social Media Policy, Data classification and Audit policy.

All policies are created in accordance with the Information Security Objectives agreed by the board of directors and the approaches are documented in the Information and Security Management system

## Data Back-Up, Data Restoration and Disaster Recovery

### Back Up & Restores

We only use HP enterprise level storage allowing for superfast I/O performance together with a complete fault tolerant solution.

Storage devices are covered by a supplier four-hour hardware replacement SLA. In conjunction with the monitoring provided by BlackBox Hosting, the vendor itself also provides an additional layer of 24/7/365 monitoring.

We offer a variety of backup options so that you can choose the right solution for you:

- Daily snapshots of VMs

- Weekly, differential and reverse incremental backup plans
- Varying retention periods from 14 days to 6 years
- Backup copy and real-time replication between our data centers using a dedicated point-to-point link and encrypted traffic
- Secondary data center outside of the primary London Blast Zone
- De-duplication technologies to enable quicker backup and restore times
- Backup tests can be performed as required
- Backup reporting and analysis
- 3-2-1 backup strategies involving onsite, offsite and archiving of data
- Offsite encrypted tape storage

Restore times are confirmed once your environment has been deployed. Typical times are:

- Restoration of a file: Up to 1 hour
- Restoration of a VM: Up to 4 hours
- Restoration from offsite data: Up to 8 hours
- Complete environment restoration in the event of a disaster at the primary data center: Up to 48 hours

In conjunction with the backup and disaster recovery plans, the cloud services platform runs on VMware vSphere technology enabling the use of Fault Tolerance (FT) and Distributed Resource Scheduler (DRS) to ensure VMs are kept running during physical host failures.

The following features are also deployed as standard:

- All network routes are multipath providing 40 GB throughputs
- All storage routes are fiber multipath providing 32 GB throughputs
- Backup, production and migration networks are segregated to ensure efficient bandwidth management

## Data Processing and Storage Location

All customer data in the BlackBox Hosting cloud platform will only reside in our two UK Tier 3+ data centers in Canary Wharf and Slough. Both data centers adhere to multiple governance standards including ISO27001 and SSAE 16.

Data is transferred between these data centers via a private, layer 2 point-to-point link. All data is encrypted during transfer.

## Data Restoration

BlackBox Hosting understands that a reliable data restoration service is a vital part of any cloud hosting platform.

Our experts in the managed backup team regard restorations as high-priority; they are always initiated within an hour of the request being made.

It is not possible to accurately state the time it takes to restore data as it will vary depending on the backup service chosen, backup schedule, the amount of data to be restored and the data restoration location, amongst other factors.

However typical times for data restores are as follows:

1. Restoration of a file: Up to 1 hour
2. Restoration of a VM: Up to 4 hours
3. Restoration from offsite data: Up to 8 hours
4. Complete environment restoration in the event of a disaster at the primary data center: Up to 48 hours

The cost of the backup service follows the BlackBox Hosting standard consultancy rate and is pre-defined with you upon start of service.

## Migration

Data migration is an important part of a seamless customer transition onto the BlackBox Hosting cloud. We use a variety of tools to assist with this process.

During the on-boarding process your account manager and dedicated solution architect will scope out your current environment migration requirements and outline them as part of the overall solution design.

In summary, the stages are:

- Identify the data and applications to be migrated and outline the findings in a migration and cutover plan
- Migrate all services to the BlackBox Hosting cloud
- Test all services for performance, accessibility and security
- Provide documentation and a handover to you

## Privacy by Design

The following provides an outline of how we plan to adhere to GDPR:

- Independent GDPR assessment – This was carried out by a recognised company: the British Assessment Bureau.
- Complete and internal Data Assessment: Controller Function
- Complete and Internal Data Assessment: Processor function
- Complete and Information audit and asset register
- Make necessary contractual changes for both Processor and Controller functions. These changes are reviewed and agreed with each of our cloud customers as they are bespoke agreements.
- Make necessary changes to our privacy agreements
- Create a Subject Access Request Procedure
- Create a Data Breach Process and register with the ICO
- Creation of Records Management and Retention policies.
- Analyse current Data Protection Policy and make any changes required as part of GDPR



- Carry out Privacy Impact Assessments (PIAs) where required and offer this as a service to all new clients that are coming on board to confirm their data protection requirements.

In addition, Blackbox Hosting already have processes in place for encryption, proactive monitoring, methods for secure destruction together with access control and logging policies.

These all provide our customers with peace of mind that their data is handled securely and safely.

## Using the Service

### Ordering and Invoicing

BlackBox Hosting use a clear and simple pricing model. Each bespoke solution is priced to include all the individual components within it, as well as the support options and value-added services. We will then provide the client with an itemised breakdown of the costs.

Invoices are categorised into the following areas:

- Managed hosting: Billed one month in advance
- Backup: Billed one month in advance
- Connectivity: Billed one month in advance
- Additional services, e.g. Web Filter: Billed one month in advance
- One off setup fees: Billed one month in arrears
- Licensing: Billed one month in arrears

Services must be ordered with an accompanying purchase order (PO). The standard payment terms are 30 days and payment can be made direct Bank transfer.

### Availability of Trial Service

We are very confident that our cloud platform will meet your requirements and exceed all expectations.

However, we are aware of the importance of choosing a trusted cloud partner to operate your business services and the concerns that you may have regarding the workloads of your applications.

To ease these concerns, we offer a complete 'trial before you buy' service with the following benefits:

- Your dedicated solution architect will discuss your requirements and create the bespoke environment.
- Complete environment testing from connectivity to firewalls and VMs.
- Trials are available for 30 days; longer periods can be discussed.
- Available to new and existing customers.
- Seamless transition from trial to production environments.

At the end of your trial, your account manager will contact you for feedback on the cloud platform.



## On-Boarding, Off-Boarding, Service Migration, Scope etc.

### On-Boarding

At BlackBox Hosting we are committed to working alongside you to deliver a solution that is transparent, scalable and cost-efficient without compromising on quality.

Before we begin you will be assigned a dedicated account manager and solution architect. They will meet with you to discuss your cloud hosting requirements.

A detailed report will then be provided outlining the overall solution and design followed by a final Q&A session to confirm exactly what is to be deployed.

Once agreed, the solution architect will then deploy the cloud resources required. This includes the creation of VMs, storage, networks (virtual routing and VLANs), firewalls and load balancers. If data migration is required, we will work with you to identify which of our migration tools will be most suitable.

A handover of the network is then completed and signed off by you and your dedicated account manager. This handover session will include access to self-service portals, training, passwords and details of the support process.

### Off-Boarding

We pride ourselves in the transparency of our services, which include no long-term contracts or penalty fees. The reason you'll stay with us is because our solutions are the best.

In the unlikely event that you do have to leave us, we will work with you to make this process as efficient as possible.

Firstly, your account manager will confirm the date that our services will cease and the date of your last invoice. Notice periods vary depending on the scale of the cloud services provided, with the minimum notice period being one month.

After the end of service date, all VMs and data will be retained free of charge for one month. During this time, you can request a copy of the VMs and data if required to a device that you provide.

After one month has passed the VMs and data will be deleted in accordance with our secure data destruction process.

### Training

BlackBox Hosting provide all new customers with an introduction guide to using the platform. This is normally presented either onsite or via videoconference. The guide demonstrates how to use the platform as well as processes such as logging a ticket and escalations.

A member of the BlackBox support team will be provided as a dedicated remote resource to assist you during the first month of service. After this time, an account review meeting will be scheduled to ensure that you are satisfied with, and understand the service provided. If everyone is happy then

the service can be transferred to the BAU team, otherwise further support and training can be provided.

## Service Management

BlackBox Hosting's head office is based in Canary Wharf, London. All our support staff are also based at this location. The primary data center is also based in Canary Wharf with disaster recovery services running from our Slough data center in Berkshire.

Blackbox Hosting follow an ITIL and ISO2000 framework for providing their services. We are currently at Phase 1 of our ISO20000 accreditation and plan to have this on place by the end of 2018 together with ISO9001.

In addition, our incident management process forms part of our ISO27001 accreditation that is independently audited yearly. This includes:

- Problem Management
- Change Management
- Incident Management and escalation process

BlackBox Hosting offers a complete managed services support package with the following benefits as standard:

- Monitoring and management of the underlying infrastructure of the cloud platform
- Full support of the online self-service portal
- Full support of the VM provisioning process
- Complete 24/7/365 monitoring of all platforms including physical hosts, storage, network, etc.
- A proactive response to any issues
- Four-hour hardware replacements
- Regular backup checks

In addition, clients have the option of adding additional services to their support package. These can include:

- The support of base operating systems
- The choice of 24/7/365 support hours OR business hours only support
- Solution consultancy hours
- Web services and applications monitoring

All support packages are tailor-made to meet your individual requirements.

Please note that although BlackBox Hosting can provide multiple support packages, you are ultimately responsible for the deployment, configuration and management of any software, applications or services running on top of the VM provided on the cloud platform.

## Service Levels

BlackBox Hosting's Service Level Agreements (SLAs) cover various categories within the cloud platform as described below.

We are so confident in keeping to our SLAs that we back all of them with service credits, giving you complete confidence that we will fulfill our promises.

## DATA CENTRE INFRASTRUCTURE

This includes power and HVAC (including UPS equipment and cabling), but excludes server hardware, software, and power supply units (PSUs).

- **Downtime:** Occurs when the cloud platform is unavailable due to heat and power problems with the data center.
- **SLA:** 100% excluding emergency maintenance.
- **Credits:** 10% of Monthly Spend.

## INTERNAL NETWORK

The internal network includes cables, switches, routers and firewalls within our network perimeter.

- **Downtime:** Exists when two servers provided at the same hosting location cannot communicate with each other for a consecutive period more than 15 minutes due to a fault within the internal network.  
It does not cover any other reason for communication difficulties, e.g. an incorrect configuration at a server level or a firewall restriction.
- **SLA:** 100% excluding emergency maintenance.
- **Credits:** 10% of Monthly Spend.

## EXTERNAL NETWORK/INTERNET

The Internet (external network) includes third-party networks between the internal network and end user Internet connections.

It excludes end client Internet connections and their respective provider networks, as these are the exclusive remit of the respective end user connectivity provider.

- **Downtime:** External network downtime exists when a server cannot send and receive data to and from the Internet for a consecutive period more than 15 minutes due to a fault within the external network.
- **SLA:** 99.99% excluding maintenance windows.
- **Credits:** 10% of Monthly Spend

## PHYSICAL CLOUD PLATFORM

This comprises all the physical hardware required within the cloud platform. These include:



- Switches
  - Physical hosts
  - Firewalls
  - Storage fabric
  - HP Blades
- 
- **Downtime:** All hardware is covered by a four-hour replacement SLA. In addition, the platform is configured with High Availability (HA) enabling failover in the case of failure.
  - **SLA:** 99.99% excluding maintenance windows.
  - **Credits:** 10% of Monthly Spend

## Provision Of Service

### Customers' Requirements and Responsibilities

The following outlines the responsibilities of the customer:

- Customers will require appropriate network connectivity such as Internet access or accredited connectivity such as a government secure network to our platforms.
- Customers are responsible for the management and administration of layers above the hypervisor. This includes aspects such as OS patching and application updates together with application performance monitoring and user administration.
- BlackBox Hosting can offer a variety of support packages that can assist you in these operations, however the ultimate responsible for the deployment, configuration and management of any software, applications and services running on top of the VM provided on the BlackBox Hosting platform lies with you.
- Customers are responsible for managing end user access to the environment.
- Customers are responsible for ensuring only appropriate data is stored on the environment.

### Technical Requirements and Client-Side Requirements

The BlackBox Hosting cloud self-service portal has the following requirements:

#### MICROSOFT WINDOWS PLATFORMS

Platform	Google Chrome	Mozilla Firefox	Internet Explorer 8.x	Internet Explorer 9.x	Internet Explorer 10.x	Internet Explorer 11.x
Windows XP Pro	Yes	Yes	Yes	No	No	Yes
Windows Server 2003 Enterprise Edition	Yes	Yes	Yes	No	No	Yes
Windows Server 2008	Yes	Yes	Yes	Yes	Yes	Yes

Windows Server 2008 R2	Yes	Yes	Yes	Yes	Yes	Yes
Windows Server 2012 R2	Yes	Yes	N/a	N/a	Yes	Yes
Windows Vista	Yes	Yes	Yes	Yes	Yes	Yes
Windows 7	Yes	Yes	Yes	Yes	Yes	Yes
Windows 8, 8.1	Yes	Yes	No	No	Yes	Yes
Windows 10	Yes	Yes	N/a	N/a	Yes	Yes (Edge)

## LINUX PLATFORMS

Platform	Google Chrome	Mozilla Firefox
CentOS 6.x	Yes	Yes
Red Hat Enterprise Linux 6.x	Yes	Yes
Ubuntu 12.x	Yes	Yes

Macintosh Platforms: Latest versions of Firefox and Chrome supported JAVA: JRE 1.6.0 update 10 or later Adobe Flash: 11.2 or later.

If the self-service portal is not used, then access to your servers could be provided through private dedicated networks between you and the BlackBox Hosting datacenter, secure VPNs, HTTPS and locked down access to your site only.

It is presumed that you have suitable network connectivity such as fiber Internet to be able to connect to your cloud services.

BlackBox Hosting can provide connectivity services your current services are inadequate.

## Termination process

You can terminate your services by providing written notice to the BlackBox Hosting technical operations team at any time.

The notice period is dependent on the number of services provided by BlackBox Hosting. This will be clearly defined when you sign off your service. This can also be reviewed at an account management meeting, which usually take place every 6 months.

The shortest notice period is one month and the longest is 12 months.

## Our Experience

### Client Testimonials

PS Financials - [www.psfinancials.com](http://www.psfinancials.com)



Two and a half years ago we launched the prototype for our new hosted service in conjunction with BlackBox, which was comprised of six servers with about 40 users. Today we are running over 300 servers with over 2000 direct access users and around 5000 web users.

BlackBox have taken this growth in their stride and delivered exemplary support and advice. New servers are deployed from our pre-configured templates within hours and our monthly billing is broken down to our own analysis requirements.

We are so pleased and confident in their resilience and business continuity capabilities, that we have just moved our own in-house servers to their environment.”

Howell Jones – Director

Ethical IT [www.ethicalit.net](http://www.ethicalit.net)



Ethical IT have been clients of BlackBox Hosting since day one. We make use of Blackbox’s Hosting platform as an extension of our own private cloud environment as BlackBox are able to provide the flexible and high-performance IaaS platform that is critical to our business.

We find BlackBox Hosting to be an extremely technically proficient, responsive and efficient partner in line with our own culture and ethos.



We could not operate in the way that we do without the services that BlackBox Hosting provide to us. BlackBox Hosting helps Ethical IT to provide solid private cloud environments to our charity clients across the UK.

Jim Druce – Chief Technical Officer (CTO)

### Contact Details

BlackBox Hosting  
Level 33, 25 Canada Square,  
Canary Wharf  
London  
E14 5LQ  
02037407840  
[www.blackboxhosting.net](http://www.blackboxhosting.net)

### Gcloud Representative:

**Name:** James Wick  
**Position:** Operations Director  
**Email:** [James.Wick@blackboxhosting.net](mailto:James.Wick@blackboxhosting.net)  
**Tel:** 0203 740 7840  
**Mobile:** 07790408424