

Managed AWS

G-Cloud Service Definition

1 Summary

Amazon Web Services (AWS) provides a market leading suite of compute, storage and associated services that allows you to dynamically provision infrastructure in the cloud. The services are designed to make web-scale computing easier for developers and service providers.

Jisc is an AWS Consulting Partner and AWS Government Reseller with extensive expertise in the AWS platform allowing us to become your strategic business partner at any stage of cloud maturity. We can assist and facilitate procurement, design and delivery of AWS with a support wrapper and ongoing full life-cycle management.

For clarity, flexibility and ease of consumption we have designed our AWS Managed offering around a 'core' support service. Whilst this core service is designed for customers wishing to largely manage AWS environments for themselves, our pricing includes many additional benefits including patching, monitoring and consolidated billing. A key benefit is that the Jisc core support service costs no more than if you were to buy services directly from AWS.

If you wish to extend the service further, we offer a range of service options that can be added at any time throughout the service period.

2 Features and Benefits

The following are all features of our core offering. While this service description relates to AWS, we also have expertise in Microsoft Azure and Google Cloud Platform and can offer a multi-cloud managed service if required.

Our Managed AWS service includes:

2.1 Features

- ITIL aligned service management
- ISO27001 compliance
- Access to call management system for logging and tracking incidents and requests
- Incident, service request and change request handling
- Consolidated and itemised monthly billing
- Core cloud support wrapper with a range of service options
- Included consultancy resource
- Patching and anti-malware services
- Monitoring of your critical systems and alerting when O/S and infrastructure thresholds are met
- Reporting includes monthly reports on service availability, service incidents, patching and anti-malware.
- Standard AWS list price, billed in UK pounds
- Highly resilient solutions across multiple AWS availability zones

2.2 Benefits

The benefits associated with this service include:

- Not for profit organisation with extensive experience in education, research and the public sector
- Jisc Cloud Solutions team members are highly certified in AWS, Azure, GCP and cloud security so giving you access to extensive expertise and experience in cloud and digital transformation
- Flexible approach to service offering allowing you to find your 'fit'
- Long lasting relationships through collaborative working and knowledge sharing
- Allows you to focus on your core priorities and business whilst we manage your AWS environment
- Clear and consolidated billing reducing administration overhead
- Charged on a monthly basis in arrears

- Efficient administration with a single point of contact for billing
- Patching and anti-malware updates included in the service providing peace of mind
- Monthly reporting allowing you to evaluate usage and run efficiently within the cloud
- Upskilling your staff as we share our knowledge and findings relating to security and best practice
- Confidence that solutions are 'best of breed' and technically current as the pace of technology changes
- Jisc can help identify how you can increase technical agility to the organisation, leveraging the AWS platform to deliver more capability than traditionally available
- Automated deployments ensuring consistency, repeatability and minimising support issues
- Jisc can help you architect failure resilient solutions to underpin all your critical workloads
- Jisc can help design and implement DR capability to meet business needs
- Managed, secure and highly flexible hybrid solutions
- Connectivity via the Internet, AWS Direct Connect, Janet, PSN and N3
- Direct route to AWS consultants to discuss requirements and scope of future projects.

3 Service Description

The Jisc Managed AWS service allows organisations to procure and use technologies and services from the vast and increasing AWS catalogue, designed, implemented and supported with the expertise and experience of Jisc.

The full list of resources which can be procured is listed at <https://aws.amazon.com/products/>

3.1 Core Service Offering

The Managed AWS service primarily provides support for the compute, storage, database, networking, security, identity management and compliance features of AWS. We can also manage many of the other services provided by AWS, however pricing will be based on our SFIA rate card.

Our managed service is typically bought in conjunction with buying AWS services through us. However, if you have an alternative procurement route for AWS, e.g. by buying direct from AWS, you can buy our managed service in isolation. In this case, see Appendix 1 for pricing details and note the comments below about access to AWS Business Support.

Further details of what is included in our core service offering are provided below. It may be that you already have some of these items in place and that they are therefore not required. In these cases, we are happy to provide a review of what you have where we have knowledge of the systems you are using.

General
We will create and configure your AWS account(s), including the provision of a hardware MFA to protect the root user. We will provide you with access to an 'administrator' username if you require it.
Monitoring and alerting
<p>We will configure monitoring of both the underlying AWS infrastructure services and any EC2 instances that have been deployed by us and will send alerts when agreed thresholds are exceeded including:</p> <ul style="list-style-type: none">• Memory• CPU• Storage• Network traffic <p>The alerts will be sent by email to a distribution group you specify during setup of the managed service.</p> <p>We will provide you with access to AWS CloudWatch and will work with you to configure appropriate dashboards.</p>
Incident handling, service requests and change requests
<p>You will be provided with access to our service desk (see below) to log and track incidents and raise service requests and change requests. Telephone and email support are also provided. Our service desk team is all UK-based.</p> <p>Where AWS is being bought through us, we require you to also buy AWS Business Support. Where we are unable to resolve an incident or service request, our team will act as an intermediary between you and the AWS Business Support team.</p> <p>Service requests and change requests are typically undertaken on a T&M basis.</p> <p>Working hours for the core service are 08:00-18:00 Mon-Fri.</p>

Named technical contact

We will provide you with a named contact for technical and other queries.

Reporting

Reporting in the core service includes the following. All reports are provided monthly:

- Patching – A report detailing the status of patching across your estate
- Incident management – A report detailing the number of incidents raised against SLAs
- Security and compliance – A report detailing recommendations against AWS best practice
- Cost optimisation – A report detailing how cost savings could be made across your estate

Access to our cloud consultants, architects and engineers

If you have an in-house IT team, you may wish to take our core service with additional consultancy that you can call on when required. Our extensive experience in AWS and other leading cloud providers and technologies can provide that support when required, whether that be for advice, design or hands-on working with your team.

Patching

The setup and configuration of patching of your EC2 instances is included as part of on boarding into the managed service. We will provide monthly reports as to whether the patching has been successful or not. As part of the core offering, we do not fix the issues, we advise you of them. However, change requests can be raised to request changes.

In cases where we have built your environment, we will work with you to agree the patching configuration and schedule. If you have an already established an environment and a patching schedule, we can provide a review of what you have in place during the managed service onboarding process, if required.

Anti-malware (AV) – Windows servers only

We include the setup and configuration of Windows Defender as part of our core service offering for your Windows servers. Whilst this is a robust and stable service it may not offer everything required for all customers such as ongoing monitoring, alerting or support of Linux or other operating systems. A comprehensive Enhanced Anti-malware solution is offered as an add-on.

In cases where we have built your environment, we will have worked with you to agree the anti-malware configuration and update schedule. If you already have an established environment and update-schedule we can provide a review of what you have in place during the managed service onboarding if requested.

Automated billing

You will get access to our billing portal, providing near real-time overviews of your AWS spend. You will also receive a consolidated monthly billing report, broken down by AWS service and clearly identifying our managed service costs. An example report can be provided on request.

Please see Annex 1 for pricing details.

3.2 Service Options

Building on the core support offering, you can select some, or all, of the following service options:

3.2.1 Enhanced Support

Our core offering is suitable for many education and public sector organisations. However, there are certain circumstances and critical systems that require an additional level of support.

Our Enhanced Support provides:

- Enhanced 24/7 monitoring, proactive alerting and reactive support for designated systems
- Two days free consultancy annually with our AWS Solution Architects or Cloud Consultants, consumed in up to four half-day sessions if desired¹
- Automated power on/off scheduling for selected EC2 instances according to your requirements to help minimise your AWS costs
- Pro-active alerts if your public-facing web services hosted on AWS become unavailable and a monthly report detailing their overall availability
- A free annual security review (see below).

3.2.2 Annual Security Review

We will undertake an annual security review of your infrastructure, including an automated check against CIS Benchmark Level 1 followed by a more thorough architectural review. We will deliver a report with recommendations. We will agree with you what remediation actions are required, how quickly they need to be made and who will make them. Any remediation actions done by us will be undertaken as change requests on a T&M basis.

3.2.3 Managed Backup

Tailored to your needs with ongoing monitoring, reporting and incident resolution, our Managed Backup solution for EC2 and RDS instances has simple, per VM pricing and includes configuration and scheduling of lifecycle and retention policies. Instance and file recoveries are treated as service requests and charged on a T&M basis.

3.2.4 Enhanced Anti-malware (AV)

Enhanced Anti-malware provides peace of mind for critical applications and services. As per other products the pricing is straightforward and per VM. The service is based on a COTS anti-malware solution, configured to your requirements including reporting, monitoring and alerting.

Where you are also buying Managed Backup, we will recover systems to a last known good state in the event of a malware compromise.

3.2.5 Hybrid Solutions

For customers that have requirements to make use of hybrid or multi-cloud solutions (using on-premise or collocated facilities or other cloud providers) we can work with you to procure and manage infrastructure and connectivity (including PSN and Janet) as required. For example, such facilities may be required as a short-term, stop-gap mechanism during a cloud migration exercise or might form part of a longer-term hybrid cloud strategy.

3.2.6 Enhanced Security

Security is key to all our public cloud deployments. However, in some scenarios further enhancements may be necessary in order to meet compliance or assurance requirements. Enhanced Security provides longer log data

¹ Limited to customers that are spending at least £60,000 annually on their AWS consumption

retention, benchmarking to CIS Level 2, configuration of AWS Service Control Policies (SCPs), defence in depth configuration, higher quantity and quality alerting with automation on a 24x7 basis, AWS WAF configuration, and enhanced endpoint protection (including ransomware protection and IDS/IPS configuration). We will review your cloud architecture quarterly, providing security/compliance recommendations and upgrades.

Enhanced Security is only available for customers that also buy Enhanced Support.

3.3 Processing Locations

It is noted that some clients may have need for special data handling and placing a tenant within the UK. Jisc will ensure that details of specific locations are investigated and discussed with our clients as part of any design and provisioning activity.

3.4 Information Assurance

The Managed AWS service is designed to support the secure hosting of OFFICIAL information assets.

Jisc and AWS are both ISO27001 certified organisations and will utilise, as required, appropriately certified management infrastructure, network connectivity, staff security clearance and processes to deliver the service.

3.5 Service On-boarding

Service on-boarding is handled as part of the contract start-up and typically happens at the end of a Jisc Cloud Design & Deployment or Jisc Cloud Migration project. Onboarding covers the configuration of the tenant to ensure ongoing delivery of the managed service.

Where we are taking on the management of an existing AWS estate, we will undertake a security review of your infrastructure. We will agree with you whether any security updates are required, how quickly they need to be made and who will make them. Any updates undertaken by us will be undertaken as change requests on a T&M basis.

Onboarding has several requirements that must be met:

- Commercial and Service requirements:
 - Compliance with G-Cloud (Digital Marketplace) procurement processes, including Account Holder agreement to Jisc Terms and Conditions for Jisc Cloud Services
 - Compliance with the AWS Customer Agreement found at <https://aws.amazon.com/agreement/>
 - Selection of required AWS services
 - Provision of an authorised and validated purchase order
 - Correct handover of ownership on relevant AWS accounts
- Technical requirements:
 - Account holder service registration and service user specification.

3.6 Service Off-boarding

Service termination is defined as end of contract, without transfer of services to a new provider or customer function. In this case, on service termination Jisc will close and delete any AWS accounts, access controls and resources and reconfigure any managed service components that we are using. Off-boarding of EC2 instances, RDS instances and customer data is the customer's responsibility and should be completed prior to termination.

Jisc can provide a managed migration path out from the tenant (working alongside your new provider or function). This is provided as a standalone project and will incur rates and charges per the Jisc Cloud Migration service.

3.7 Customer Responsibilities

Customers have the following responsibilities in relation to the Managed AWS service:

- You must provide accurate contact and payment details on Managed AWS registration.
- You must comply with the Contract Terms and Conditions for Jisc Cloud Solutions and the AWS Customer Agreement at <https://aws.amazon.com/agreement/>
- You must follow designated procedures for logging incidents, service requests and change requests.
- You must agree to Jisc owning the management/payer account associated with your AWS accounts².

4 Service Management

Jisc is a proven service management specialist with extensive experience of service management implementation, operation and continual service improvement. All our operational processes are aligned with ITIL v3 and information assurance is provided through our ISO 27001 certification.

4.1 Support

Jisc provides support via our experienced service desk personnel, who act as your first point of contact for any service-related issues or queries that you may have. Support is provided during core hours of service, Monday to Friday between the hours of 08:00 - 18:00, excluding UK public holidays. Jisc also offer an Enhanced Support offering where we can provide support on a 24-hour basis.

Where AWS is being purchased through us, we require you to also buy AWS Business Support. Where we are unable to resolve an incident or change request, our team will act as an intermediary between you and the AWS Business Support team. Where AWS is not being purchased through us, we strongly recommend that you buy AWS Business Support yourself. Without this, we will be unable to raise support calls against AWS on your behalf.

4.2 Incident Management

The Managed AWS service will follow ITIL incident management process guidelines to log, assign and diagnose incidents and to restore service operation as quickly as possible with minimum disruption, in line with the agreed hours of service.

The timings below indicate the target time to respond to an incident. In most cases, this will require us to triage the incident, raise a call against the AWS Business Support service desk. Once we receive the response, we will pass it back to the customer.

Service Incident Response Targets ³	Core ⁴	Enhanced ⁵
Priority 1 incidents Service component failed or severely impaired resulting in serious business-wide impact or multiple users/services impacted. Needs immediate attention.	30 mins	30 mins

² As an AWS partner, we are required to own all management/payer accounts procured through us. In this case, 'own' means that the credentials (email address, password, and MFA device) used to access the root user must be managed by Jisc. See our FAQ for more details.

³ Incident resolution targets do not apply in cases where the incident is outside of Jisc's control, e.g. an AWS Region failure.

⁴ Core support: Incidents are managed Monday-Friday 08:00-18:00 excluding UK public holidays unless otherwise stated.

⁵ Enhanced support: Incidents are managed 24 hours a day, seven days a week.

Priority 2 incidents Service component impaired resulting in some loss of functionality, or loss of access to a single or subset of users, but work can reasonably continue in an impaired manner.	60 mins	60 mins
Priority 3 incidents Incident with minor or no direct impediments on the customer's business and/or is not time sensitive.	2 hours	2 hours

4.3 Service Requests and Change Requests

The Managed AWS service will follow ITIL request fulfilment process to manage service requests and change requests. Where necessary, we will raise a call against the AWS Business Support service desk, returning the response to the customer as we get it.

Service/Change Request Response Targets	Core	Enhanced
A request for information, advice, access to a service component or where effort is identified as less than 2 hours.	4 hours	4 hours

Change requests are managed Monday-Friday 08:00-18:00 excluding UK public holidays unless otherwise stated.

4.4 Account Management

You will be assigned a named account manager who will be your primary contact at Jisc for all service-related matters. For technical queries, your account manager will liaise with your named technical contact at Jisc.

Your account manager will arrange quarterly service review meetings (typically by video call). Whenever necessary, these will also include your named technical contact.

5 Associated Services

Jisc is a trusted technology advisor and ally of the education, public and third sectors. We provide best-in-class technology advice, engineering and support and work as part of your team to transfer knowledge at every step. As a not-for-profit membership organisation, we are an allied technology partner and we reinvest our profits back into the communities we earn them in.

We see public cloud technology as a key enabler of a digital revolution in the sectors we serve. Our consultants, architects, engineers, developers and support staff are the best at what they do and are dedicated to delivering the best service possible whilst also transferring their knowledge and skills to our members and customers.

Together, our services provide a full suite to support your use of public cloud services from start to finish. They can be taken in sequence to support your entire cloud journey or selected as needed to enhance just those parts of your programme where you need support.

5.1 Cloud Consultancy

- [Cloud Architectural Review](#) – we provide advice on optimisation, cost control, performance enhancements, security improvements and service resilience
- [Cloud Strategy & Roadmap](#) – we assess your IT estate and operating model before setting out a strategy for public cloud adoption

5.2 Cloud Professional Services

- [Cloud Design & Deployment](#) – we develop high-level and low-level designs for new or re-architected uses of public cloud and we deploy and test them to your chosen platform using infrastructure as code
- [Cloud Migration](#) – we provide technical and project management expertise to lift and shift existing services to public cloud
- [Office 365 Migration](#) – we offer consultancy, implementation and project management expertise to support your migration to the Microsoft 365 suite of collaboration tools

5.3 Cloud Resell & Support

- [Managed AWS](#) – we resell AWS and provide the day-to-day management and support for your AWS deployments
- [Managed Azure](#) – we resell Microsoft Azure and provide the day-to-day management and support for your Azure deployments
- [Managed GCP](#) – we resell Google Cloud Platform and provide the day-to-day management and support for your GCP deployments
- [Managed Database](#) – we look after the day-to-day running, maintenance and backup of your public cloud databases
- [Managed Microsoft 365](#) – we resell Microsoft 365, help to optimise your use of Microsoft licencing, maintain a secure environment and ensure that you always have access to Microsoft Premier Support when you need it

5.4 Connectivity & Security

- [Janet Cloud Connect](#) – we provide high-capacity, resilient and secure access to AWS, Microsoft and Google via the Janet Network
- [Govroam](#) – we provide public sector staff with seamless access to roaming connectivity at participating sites across the UK
- [Managed Website Protection](#) – we provide DDoS mitigation and Web Application Firewall (WAF) protection for your public-facing websites

At every step of every engagement we aim to transfer our knowledge and skills to you because, by doing so, we will have a greater impact on society and become trusted and long-term allies. Our ultimate intention with all our services is to empower education, public and third sector organisations to become digitally independent.

Annex 1: Managed AWS Pricing

Our Managed AWS service pricing depends on whether you buy AWS through Jisc or direct from AWS but is typically made up of three components:

- AWS consumption charges (the fee you pay for the AWS services you are using), including AWS Business Support
- A core managed service fee
- Fees for any Service Options you are using.

The first of these will not appear if you are buying direct from AWS. We strongly recommend you buy AWS Business Support so we can escalate calls to AWS on your behalf.

We will invoice you on a monthly basis in £ in arrears.

There is an on-boarding fee for the managed service if we are migrating from an existing provider depending on the size and complexity of the estate. This fee is not applicable if the environment has been built by us through our 'Cloud Design and Deployment' or the 'Cloud Migration' services.

All service options are in addition to the core managed service.

AWS Consumption Charges	Pricing
AWS consumption charges when bought from Jisc	AWS list price
AWS Business Support when bought from Jisc (mandatory)	AWS list price (~10%)

Core Managed Service	Pricing
Core managed service charge when AWS services bought from Jisc	Free
Core managed service charge when AWS services bought direct from AWS	5% of AWS consumption charge

Service Options	Pricing
Enhanced Support EC2 management charge RDS management charge General management charge	Includes all 3 components: £50 per EC2 instance per month £5 per RDS instance per month 7% of AWS consumption
Annual Security Review <i>Undertaken on a T&M basis (typically 2 days effort)</i>	As per SFIA rate card
Enhanced Anti-malware <i>Excludes licensing costs of any third-party anti-malware software.</i>	£5 per EC2 instance per month
Managed Backup <i>Excludes licensing costs of any third-party backup software.</i>	£5 per EC2 or RDS instance per month
Hybrid Solutions <i>Quoted on an hours/month basis following requirements gathering</i>	As per SFIA rate card
Enhanced Security <i>Quoted on an hours/month basis following requirements gathering</i>	As per SFIA rate card

As an AWS partner, we are required to own all management/payer accounts procured through us. In this case, 'own' means that the credentials (email address, password, and MFA device) used to access the root user must be managed by Jisc. See our FAQ for more details. In most cases, because your AWS accounts will sit within one of our AWS Organizations where the management/payer account is owned by us, this will happen automatically. However, in some cases, we will allow you to use one or more stand-alone AWS Organization(s). In these cases, there will be an additional charge of £250/month per Organization.

We can optionally invoice you separately for different parts of your organization. We do this on a per-account basis. Where we do this, there will be an additional charge of £100/month per additional invoice raised.

Full details for all AWS consumption charges are available at <https://aws.amazon.com/pricing/>.

All prices exclude VAT at current rate.

All prices exclude travel and subsistence which is chargeable separately at cost.

Special Terms

Customers have the following responsibilities in relation to the service:

- You must provide accurate contact and payment details on Managed AWS registration.
- As referenced in Clause 7.8 of the Terms and Conditions for Jisc Cloud Services, the Managed AWS service is subject to additional terms that we are required to pass on by Amazon. These Amazon AWS terms prevail over the Terms and Conditions for Jisc Cloud Services terms for those elements of the service which are supplied by Amazon. These terms are set out below:
- The AWS Customer License Terms, a separate agreement between you and Amazon Web Services, Inc., a current version of which is located here: <https://s3-us-west-2.amazonaws.com/legal-reseller/AWS+Reseller+Customer+License+Terms.pdf>
- The rights and restrictions located at <http://aws.amazon.com/serviceterms>, as updated by AWS from time to time, and as may be made available on any successor or related site designated by AWS
- The terms and conditions of the AWS Customer Agreement located at <http://aws.amazon.com/agreement/>, where the rights and obligations of AWS shall be the rights and obligations of Jisc Services Limited
- You must follow designated procedures for logging incidents and Change Requests
- You must agree to Jisc owning the management/payer account associated with your AWS accounts.