

Cloudreach

Cloud Operations - Agile Improvement Services

G-Cloud Framework Service Definition



Cloudreach Overview

Founded in 2009, Cloudreach are a renowned cloud native and global cloud enabler. We have empowered some of the largest and best known enterprises in the world to realise the benefits of cloud. In 2012, we were the first company in world to move a true enterprise data-centre to AWS, for Kempinski Hotels. Other enterprise customers we've enabled include Channel 4, The Economist, Belron, Delaware North, Time Inc, and News Corp.

We believe public cloud platforms present a clear transformational shift in IT and change everything. For everyone. This means the consumption of, planning, migration, integration, transition to and operation of cloud platforms must be approached in a brand new way, with new tools and a fresh set of skills. This is achieved through embracing not only cloud technologies, but also by adopting the culture and processes through the introduction of methods such as DevOps, continuous integration and continuous delivery.

Our focus is ensuring the enterprise can consume cloud based IT in a clear, governed and secure way, by carefully selecting and providing the tools and services required for successful cloud adoption. We partner with Amazon Web Services, Microsoft Azure and Google to provide cloud platforms, tools and the finest cloud specialists for our enterprise customers globally. Freeing our customers financially and mentally from traditional IT models enables them to innovate and become a digital revolutionaries.

Our business is underpinned by our own cloud operations and billing tools and we supply and use best in class cloud-ready tooling from selected ISVs to manage the combined infrastructure environment on a true 24/7 basis, in an ISO 27k certified environment. When delivering projects and team augmentation we provide our own engineers, consultants and project managers, and we pride ourselves on treating our employees as individuals. Our team was carefully hired, trained by us and have constant and instant access to the ever expanding internal engineering community within Cloudreach.

Cloudreach is part of Blackstone's portfolio of companies. Blackstone is one of the world's leading investment firms with assets under management of over USD 360 billion.



1. Service Overview

Cloudreach Agile Improvement Services ("AIS") is focused on: (i) enabling rapid, efficient, reliable, and measurable delivery of value generated by applications and services to end users; (ii) uplifting the capabilities of the Customer teams through skill sharing, exemplar practices, and a strong partnership in actively unlocking value; and (iii) technical excellence that is proactively adapted based on the customer's changing needs and evolution in the cloud.

Cloudreach provides access to the capabilities of highly skilled and experienced engineers, experienced in the Agile, DevOps, Site Reliability Engineering (SRE), and Remote-First practice disciplines, who work closely to champion improvements with internal development, infrastructure, application, data, and operations teams. Cloudreach uses our delivery team as a bridge across typically disparate teams, equipping customers with expertise in their chosen application space, cloud platform services, and practice technologies and offers elasticity and increased agility with the primary goal of meeting business objectives and modernizing core business applications.

2. Delivery Team Description

Experience Level	Description
Improvement Engineer	The Improvement Engineer works on the delivery of improvement services and participates in the Customer's planning and delivery processes in collaboration with the Customer's teams, adapting to the changing needs and experiences of the Customer, regularly adjusting plans to ensure effective delivery of value, with KPI measured delivery of high quality value at velocity. The Improvement Engineer is focused on:
	 delivering improvements in technology, delivery strategy and organisational capabilities; driving better value outcomes through adoption of managed services, automation, architecture improvements, and improved software enablement; delivering agreed improvements in alignment with the Customer's planned needs and priorities.
	For the avoidance of doubt: Improvement Engineers do not monitor or react to ticketing systems in order to define their work.
Improvement Lead	The Improvement Lead's core mission is to drive service improvements from a technical and cultural perspective, leading by example and playing a key role in the technical and cultural decision-making process that will run throughout the work package. The Improvement Lead exemplifies technical and cultural expertise and best practice, and is able to lead a delivery team from environment design through operational delivery. In particular, the Improvement Lead:



supports, guides and mentors Improvement Engineers and the Customer, where valuable; evangelises Agile, DevOps, SRE, and Remote-First methodologies and technical best practises, ensuring they are implemented to the highest standard across Customer environments in order to meet the Customer's desired outcomes; develops a strong culture of technical excellence and solid technical and process skills within the Customer teams; performs delivery related tasks to support continued development, in the absence of an Improvement Engineer, in order to meet the defined SLA; performs well architected reviews to generate periodic improvement recommendations. The Service Delivery Manager is dedicated to providing "Ensure and Service Delivery Manager Advise" level guidance in a work package to own and improve Customer satisfaction and to enable Customers to gain the maximum business advantage from Cloudreach's services; championing the delivery of an end to end customer experience. In particular, the Service Delivery Manager: works under general guidance; influences teams and specialist peers; reports on service delivery levels including adherence to availability levels in accordance with section 6. Service Levels for delivery of improvement services; Supports and governs set ITSM processes; collects KPI's and improvement recommendations from Improvement Leads to advise the Customer on opportunities and improvement progress; Promote and schedule periodic well architected reviews to be be performed by the Improvement Lead in a cadence suitable for the workload, not more regularly than every 4 months.

3. Service Description

Cloudreach provides AIS in two flavours:

3.1 AIS

Each AIS Pack will provide the Customer the following services every month:

- Delivery of Improvement services equivalent to one Improvement Engineer full time;
- Management of delivery of Improvement Services equivalent to one Improvement Lead who shall be available 25% of the time:
- One Service Delivery Manager allocated to the Customer to deliver the following outcomes:
 - o First point of customer escalation and owner of the Customer experience;
 - Creation of structured work packages, responsible for capturing actions, risks and outputs from all Customer sessions;
 - Owner of the monthly service and quarterly business reviews:
 - The monthly service review undertakes a holistic performance of the



Customer estate with

Cloudreach with an aim to identify and recommend areas of improvement;

- The quarterly business review undertakes a strategic review of the estate and relationship health and focuses on alignment of strategic plans and goals.
- Governance of aligned Cloudreach and Customer IT Service Management (ITSM) processes across the estate;
- Act as the Customer advocate within Cloudreach, aligning resources and expertise to meet Customer needs and requirements;
- Provide reports and recommendations around the ongoing services provided.

3.2 AIS Flex

AIS Flex provides the Customer the same delivery capabilities as AIS (i.e improvement services delivered by Improvement Engineer and management of delivery by Improvement Lead) but will do so by Cloudreach providing the Customer with remote only access to improvement services. The Customer shall utilise the AIS Flex Units purchased under the order form on a service request basis, as follows:

- One AIS Flex Unit can be utilised with 1 (one) business day written notice.
- In order to request more than one AIS Flex Unit, 5 (five) business days written notice are required.
- The Customer shall submit single service requests to the Service Desk to utilise AIS Flex Units.
- The Customer may utilise a maximum of 2 (two) AIS Flex Units per day.

AIS Flex Units associated to a given month may be carried over for a maximum of 3 months. The Customer's right to consume unused AIS Flex Units shall expire after 3 months.

The capabilities of the Improvement Lead will be limited to what can be delivered in a remote only model, and also limited by the amount of contact time enabled by the customer's consumption of AIS Flex Units.

The number of AIS Flex Units per month will be agreed with the Customer in the Order Form. If the number of AIS Flex Units needed to deliver the requested outcome exceeds the original number of AIS Flex Units ordered, Cloudreach will inform the Customer as soon as becoming aware and Customer and Cloudreach will agree on the additional AIS Flex Units required to complete the request.

4. Service Elements

AIS and AIS Flex provide the Customer with the ability to leverage experienced Improvement Engineers and Improvement Leads who can enable rapid infrastrastructure and application development, and reliable and performant production environments.



4.1 Delivery Team

Service Elements	Description	
Engineer Certification Level	Certified to at least AWS Solutions Architect Associate, GCP Associate Cloud Engineer, or Architecting Microsoft Azure Solutions [70-535] level as used in the service	
Tasks	Tasks are created as part of the agile planning process led by the Customer. The Customer will prioritise which tasks are actioned in a given period.	
	Customer acknowledges that:	
	 The implementation of tasks is not subject to an SLA as the delivery team's workload is managed by the Customer during sprint planning; The delivery team may not be able to act on every task assigned. Where Cloudreach is not able to act on the task, the delivery team will notify the Customer; Examples of requests where Cloudreach may not be able to act include but are not limited to: 1) Tasks which negatively impact the security of the Customer environment, 2) Application related changes where Cloudreach does not have the skills to implement change 	
Tooling	Cloudreach may utilize Customer tooling or services to provide this service.	
	Where the Customer has purchased tooling and services from Cloudreach, it may utilize Cloudreach tooling, services and additional support capabilities.	
	Where Customer tooling or services is used, the integration of Customer systems to Cloudreach systems is either scheduled within the work of the delivery team, or subject to a separate order form.	
Reporting	The delivery team will track effective resource utilisation and performance pursuant to section 6, Service Levels for delivery of improvement services, and service improvement KPI's and recommendations in a monthly service review report.	



4.2 Supported Technologies

Supported Technologies	Description
Cloud Vendor Supported Technologies	All AWS, Azure and Google Cloud Platform (GCP) services generally released for at least 12 months are supported.
	All services that have been generally released for less than 12 months can be supported by AIS on a case-by-case basis after review and approval between the Customer and Cloudreach.
	Other cloud vendor technologies can be supported by AIS on a case-by-case basis after review and approval between the Customer and Cloudreach.
Independent Software Vendor (ISV) Supported Technologies	All cloud native Configuration Management tools.
	Other ISV technologies can be supported by AIS on a case-by-case basis after review and approval between the Customer and Cloudreach.

5. Delivery Model

AIS may be used to support the delivery of change and improvement within the Customer's public cloud environment and align with their sprint planning. Improvement Engineers and Leads can review planned work, and deliver work with internal Cloudreach teams in order to accelerate and optimise the value of delivery for their customers.

Common AIS activities are geared towards application and practices modernization and include, but are not limited to:

- Identifying and promoting Agile, DevOps, SRE and Remote-First practices that fit with the priorities and specific journey the customer is on;
- Identifying, collecting, monitoring, and reporting on key performance indicators (KPIs) that affect the delivery of value to the end users;
- Identifying and promoting initiatives that could accelerate the unlocking of value for end users:
- Implementing and managing an end-to-end development and deployment pipeline using continuous integration, continuous delivery or continuous deployment techniques;
- Application delivery and integration for release into production, iterating towards full automation;
- Automating the reliable management of configuration and secrets for applications in different environments;
- Identifying and promoting opportunities to enable developers to be accountable and responsive for the impact and quality of changes;
- Using continual improvement methodologies to ensure continual delivery of value when transforming monolithic applications to modern service or serverless architectures;
- Providing developer expertise that focus on non-business logic or user interface changes that allow for the reliable, efficient delivery of value to end users;



- Unlocking opportunities to disrupt the market through accelerated adoption of cloud technologies (e.g. machine learning or big data analytics);
- Working in data rich environments to manage the extract, transform and load service ("**ETL**") flows through to analytics and reporting;
- Scoping and delivering changes to cloud based infrastructure, applications, and data
 processing and making recommendations regarding Customer's desired additional tooling
 with the primary goal of meeting Customer objectives;
- Where necessary, working with Cloudreach's Cloud Core Operations teams to ensure a seamless and efficient management to "keep the lights on";
- Working closely with development, architects, application, data, and operational teams developing intimate knowledge of the Customer's Cloud Platform including additional tooling whilst increasing agility;
- Implementing financial and security optimisation recommendations / actions;
- Deployment cycle auditing;
- Operational task automation.

Activities other than application modernization can be performed by the delivery team on a case-by-case basis after review and approval between the Customer and Cloudreach.

Customer shall work together with the Improvement Lead to schedule the rotation of Improvement Engineers based on upcoming customers needs. The rotation is to prevent any single Improvement Engineer from consecutively delivering services for longer than 5 months and to secure individual improvement time for Improvement Engineers with a minimum of 4 consecutive hours.

6. Service Level for delivery of improvement services

The delivery of improvement services shall be provided according to the following Target Availability. Target Availability does not apply to AIS Flex:

Service	Target Availability
Delivery of improvement services as part of AIS	90%

For the avoidance of doubt, target availability of 90% accounts for the need of the delivery team to continuously upskill as part of their individual development plans. In the case of partial month(s), Target Availability shall be prorated based on the number of working days available in the applicable month to deliver improvement services.

The number of days actually spent by the delivery team on the delivery of improvement services during the Service Term ("Actual Delivery Days") and the Measured Availability of Improvement Engineers shall be calculated and reported on by the Service Delivery Manager at the end of the Service Term. Actual Delivery Days will be calculated by applying the General Hours to Days Rule.

In the event that the Measured Availability is less than the Target Availability as a result of Cloudreach's acts or omissions, Cloudreach shall credit the Customer by extending the Service Term



by the number of days which fall under the Target Availability at no additional cost to the Customer (each a "Term Extension").

By way of example the following calculation shall be utilised:

Target Availability = 90%

Service Term = Tuesday 5th July 2016 to Friday 30th September 2016

Maximum Delivery Days (100% availability) during the Service Term = 63

Number of AIS Units purchased = 2

Maximum Delivery Days for 2 AIS Units = $2 \times 63 = 126$

Actual Delivery Days = 112.1

Measured Availability = Actual Delivery Days / Maximum Delivery Days = 112.1 / 126 = 89.0%

Credit:

Where the Measured Availability falls below the Target Availability, the Service Term is extended in accordance with the example:

Term Extension = Maximum Delivery Days x (Target Availability - Measured Availability) = $126 \times (90.0\% - 89.0\%) = 1.26 \text{ days}$, then rounded to the nearest day = 2 days

For the avoidance of doubt the Term Extension is the number of working days added to the Service Term, that will be rounded up to the nearest full number of days.