



## Service Description – CloudDesk



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## 1. Introduction

This document describes the service Calligo provides known as CloudDesk according to ITILv3 standards.

It sets out:

- the key features of the service;
- responsibilities; and
- how you can use the service.

As with all services, we are at times dependent on you, as the Client, to take certain steps to enable us to properly provide the Calligo Service Management. We have described, by way of a RACI matrix, how our responsibilities will be apportioned and what we require from you.

This is intended to help you to identify what we do and, perhaps just as importantly, what we don't do in respect of each service. If you believe any area of responsibility (whether on our behalf or yours) needs to be amended or updated, please contact us at <https://calligo.cloud/io>.

This Service Description is subject to change from time as time, as our services develop to meet our client's needs. We will notify you in writing of such changes as they occur.

If a conflict exists between the terms of (a) our Master Services Agreement and/or standard terms and conditions and (b) this Service Description, the terms of the documents listed at (a) shall govern.

The Service Description forms part of the service design and is used to document the key elements of the service.

## 2. Service Information

CloudDesk is a service that enables users to access a secure Virtual Desktop without having to worry about the management of the associated technologies. The service offers all the common features of an owned infrastructure without the overhead of management.

### 2.1. Key Product Features

- Windows 7 user experience (Windows Server 2008R2 desktop image), Windows 8.1 user experience (Windows Server 2012R2 desktop image)
- Dedicated connection servers with client specific security policy
- Dedicated Virtual Desktop per user
- Desktop pools for common user types, provides a baseline for applications and configuration
- User installable applications on the Virtual Desktop
- User persona abstraction for quick desktop rebuilds in the event of failure
- Logically separate infrastructure at all levels
- Single sign-on to other Calligo services purchased by the client
- Bundled with CloudProtect for CloudDesk – managed Anti-malware service
- Microsoft operating system and MS Office patching

Optional Features (available on request at an additional charge)

- Two factor authentication
- Add-on Disaster Recovery service
- Web filtering service
- Microsoft desktop applications including MS Office can be licensed by Calligo on a monthly basis

### 2.2. Locations of Service

The service is available in the following Calligo locations:

- Jersey
- Guernsey
- Bermuda
- Singapore
- Zurich
- London

### 2.3. Relation to other services

The service is dependent on the following services:

- CloudCore

### 2.4. Using the service

Client can perform the following with the service:

- Access Virtual Desktop from any supported device
- Request installation of applications on the Virtual Desktop which may be subject to further charge
- Request changes to standard configuration policies
- Request additional Virtual Desktops for named users.

The Client's use of the service is based on the following assumptions; -

- That the Client will follow secure computing best practices
- Be responsible for any remedial work required to its own or third party applications and services, unless otherwise agreed with Calligo.

If the Client fails to meet those assumptions, Calligo will not be able to provide this service in the manner intended, if at all.

## 2.5. Requesting additional resource

Request to increase or decrease number of desktops or desktop resources will require a service request ticket. This will be actioned according to the Calligo Service Desk response times based upon priority of the request. The current Calligo Service Desk SLA's are published separately at <https://calligo.io/licences>.

## 2.6. Commercials

The latest prices per unit are available from our Account Management team and/or as contained in your SOW.

## 2.7. Service Levels

Service Availability target = 99.9% per calendar month. The service is available 24 hours 365 days a year.

If availability on a monthly basis falls below 99.9%, we will provide credits for the service affected as described below:

<b>Monthly Uptime Percentage &lt; 9.5%</b>	Service Credit - 10% (of monthly charge)
<b>Monthly Uptime Percentage &lt; 99%</b>	Service Credit - 25% (of monthly charge)

(For further information, please see our Service Level Agreement - <https://calligo.io/licences>).

## 2.8. Access to service

Clients can access the service via any of the supported devices that the Client installed, or via a compatible web browser supporting HTML5. Details of the latest supported list can be found in the Calligo compatibility matrix - <https://calligo.io/compatibility>.

## 2.9. Levels of Access

Clients using the service can have one or more of the following roles:

- User – Can logon to desktop service and consume desktop

## 2.10. Responsibilities

The service has split responsibilities to deliver all functionality and the following responsibilities are defined for each party:

### 2.10.1. RACI Definitions

- Responsible - Those who do the work to achieve the task. There is at least one role with a participation type of responsible
- Accountable - The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible. In other words, an accountable must sign off (approve) work that responsible provides. There must be only one accountable specified for each task or deliverable
- Consulted - Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication
- Informed - Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication

## Matrix

Item	Responsible	Accountable	Consulted	Informed
Configuration, monitoring and management of the supporting infrastructure to deliver the service	Calligo	Calligo		
Configuration, monitoring and management of virtual desktop template deployed in the provision of the CloudDesk service	Calligo	Calligo		
Configuration and management of standard applications deployed in the provision of the CloudDesk service	Calligo	Calligo		
Licensing of virtual desktop Operating System & Microsoft applications deployed in the provision of the CloudDesk service	Calligo	Calligo		
Configuration and monitoring of Anti-Malware protection for virtual desktops	Calligo	Calligo	Client	
Specification of client CloudDesk systems (e.g.: specification of virtual desktop size, quantity, desktop pools)	Client	Client	Calligo	
Configuration & management of master image (Gold Build) template virtual desktops	Calligo	Calligo	Client	
Specification of network and firewall configuration	Client	Client	Calligo	Calligo
Configuration of network and firewalls based on clients specification	Calligo	Calligo	Client	
Creation and management of user profiles and persona storage	Calligo	Calligo	Client	
CloudDesk datacentre internet connectivity	Calligo	Calligo		Client



Item	Responsible	Accountable	Consulted	Informed
Clients internet connectivity	Client	Client		Calligo
Windows Update patching of client virtual desktop Operating Systems	Calligo	Calligo	Client	
Testing of client virtual desktop Operating Systems patches applied	Client	Client	Calligo	
Configuration and management of client virtual desktop applications	Client	Client	Calligo	
Licensing of client virtual desktops and Operating Systems	Calligo	Calligo		
Licensing of client virtual desktop Microsoft applications	Calligo	Client		
Licensing of client virtual desktop non-Microsoft applications	Client	Client		Calligo
Maintain a compatible physical client device to connect to the service	Client	Client	Calligo	
Troubleshooting of issues with physical connection devices	Client	Client	Calligo	
Troubleshooting virtual desktop issues relating to supporting infrastructure and operating system	Calligo	Calligo	Client	
Logging and monitoring of client environment and applications	Client	Client		
Security operation management (SOC) of client environment	Client	Client		

## 2.11. Documentation and Training

The end user documentation for this service is found on the Calligo Supportal, this will be updated as and when the service is changed. <https://viaje.cloud/support>

There is no formal training provided by Calligo for this service.

## 2.12. Standards and Policies

This service is compliant with the following compliance standards and policies up to the responsibility boundaries:

- ISO 9001
- ISO 27001
- SSAE 16 SOC 1 – Type 1

## 2.13. Backup and Restore

The Virtual Desktops hosted on the service do not hold any client specific data. User personal data is held separately and is backed up as part of the service for recovery if data is deleted or corrupted.

Calligo backup all management infrastructure and configuration to ensure that recovery of service can be made in the event of a failure.

Clients may also purchase CloudShield Disaster Recovery service which will protect Virtual Desktops via replication to another site if required.

Restores of client data are performed by Calligo. Clients can request restores through a service request.

## 2.14. Scheduled maintenance windows

The service requires a regular maintenance windows to ensure that the service is updated and patched as required by Calligo's standards. The scheduled maintenance is taken into account by any Service Level Agreement (SLA) for the service so as not to reduce its overall availability.

Details of all scheduled maintenance windows can be found at – <https://calligo.cloud/licences>.

## 3. Appendices

### 3.1. Appendix A – Availability Table

Availability %	Downtime per month
90% ("one nine")	72 hours
95% ("one and a half nines")	36 hours
97%	21.6 hours
98%	14.4 hours
99% ("two nines")	7.20 hours
99.5% ("two and a half nines")	3.60 hours
99.8%	86.23 minutes
99.9% ("three nines")	43.8 minutes

### 3.2. Appendix B – Glossary

**256bit AES** – An encryption algorithm that keeps data secure. The larger the bit number the harder it is for the data to be decrypted without the key.

**Active Directory Federation Services (ADFS)** – A Microsoft Windows service to allow two domains to exchange authentication credentials via an encrypted connection over the internet.

**Active Directory Synchronisation** – A tool to copy user accounts from one domain to another and keep the passwords in synchronisation.

**Application consistent** – A point in data where the application that uses it will always see it as valid as opposed to crash consistent where the data may be incomplete.

**DNS (Domain Name Service)** – A computing service used to translate an IP address to a name. Used both for public domains such as [www.xyz.com](http://www.xyz.com) and private internal domains.

**GB** – Gigabyte of capacity, 1 GB = 1024 Megabytes.

**Gold Build** – Template from which other virtual machines can be provisioned from. Contains all the required OS and software pre-installed.

**High Availability** – A configuration that provides for the loss of components within a site and maintain the service that is being delivered without the need to recover from backup or switch to another site.

**Infrastructure as a Service (IaaS)** – A service that provides computing resources such as memory, CPU, networking and disk to allow for virtual machines to be hosted in a resource consumption based model.

**Input Output Operations Per Second (IOPS)** – A unit of measurement for disk storage performance.

**ITILv3** – Version 3 of the Information Technology Information Library which is a collection of best practice processes and documents to manage an information technology company.

**Multiprotocol Label Switching (MPLS)** – A network connection for high performance networking over the internet that can use quality of service to provide better reliability.

**MB** – Megabyte of capacity, 1 MB = 1024 Kilobytes.

**Multi-tenant** – Shared service or resources to provide a commodity of scale service where users pay for a subset of the service or resources as is required by the user.

**Platform** – A grouping of technology and services that provide the overall service that is being delivered.

**Platform as a Service (PaaS)** – A service that provides tools to create computer applications without the need to run virtual machines that have operating systems (OS). The service is consumed on a resource consumption model.

**Point-to-Point (P2P)** – A private physical network connection between two locations not over the internet.

**Protection Group** – A group of virtual machines that are replicated together for consistency.

**Public IP Address** – A unique computerised address used in computer networks to define destinations for communication on the internet.

**Recovery Time Objective (RTO)** – The time in which a protected item can be made available for use after recovery.

**Recovery Point Objective (RPO)** – The point at which any protected item can be recovered to. This stipulates the potential amount of lost time or data.

**Single sign-on** – The use of a single credential to access multiple services or applications.

**Software as a Service (SaaS)** – A service that provides access to an application for use without access to any associated OS or infrastructure required to run that application. The service is consumed on a resource consumption model.

**Solid State Disk (SSD)** – A disk with no moving parts offering greater performance than traditional hard disk drives (HDD).

**Storage Volumes** – A logical partition of a storage system used to hold specific data.

**TB** – Terabyte of capacity, 1 TB = 1024 Gigabytes.

**Two Factor Authentication (2FA)** – The use of a secondary one time passcode in addition to a username and password to gain access to a service or application.

**User Persona** – Settings and data specific to a user's configuration of an operating system or application. Allows for these settings to be transferred between virtual machines.

**Virtual datacentre (vDC)** – A logical representation of a physical datacentre's resources such as CPU, Memory and Disk.

**Virtual Desktop** – A virtual representation of a physical desktop comprised of memory, CPU, network and disk. The virtual desktop runs an operating system and applications.

**Virtual Machine (VM)** – A virtual representation of a physical server or desktop comprised of memory, CPU, network and disk. The virtual machine runs an operating system and applications.

**Virtual private network (VPN)** – An encrypted network connection over the internet between two end points.

## 4. Document Control

DOCUMENT OWNER & APPROVAL
The Director of Product & Service Development is the owner of this document and is responsible for ensuring that this procedure is reviewed in line with the review requirements of Calligo's Information Security Management System framework.
Approved by Director of Product & Service Development, Calligo on 09 August 2019

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