



## **Service Description – Server Patching**



|                                                        |                                                                                                                                                                  |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TITLE</b>                                           | Service Description - Server Patching                                                                                                                            |
| <b>DOCUMENT REFERENCE NUMBER</b>                       | QMS-REC65                                                                                                                                                        |
| <b>DESCRIPTION</b>                                     | Service description for the Server Patching service                                                                                                              |
| <b>OWNER / AUTHORITY</b>                               | Director of Product & Service Development                                                                                                                        |
| <b>VERSION NUMBER</b>                                  | 1.5                                                                                                                                                              |
| <b>VERSION DATE</b>                                    | 09/08/2019                                                                                                                                                       |
| <b>QMS / ISMS/27018:2014 DOCUMENT CROSS REFERENCE:</b> | <ul style="list-style-type: none"> <li>• QMS REC28 – Design Board Submission</li> <li>• QMS QP4 – Design &amp; Development of Products &amp; Services</li> </ul> |

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## 1. Introduction

The purpose of this document is to detail the Server Patching service 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

Server Patching is a solution for patching client servers hosted on CloudCore. The service provides Operating System patches to be deployed onto customer servers.

### 2.1. Key Product Features

- All Operating System patching managed
- Snapshot for roll back after updates
- Patching for all supported Windows Operating Systems on CloudCore

### 2.2. Locations of Service

The service is available in the following Calligo locations:

- Jersey
- Guernsey
- Bermuda
- Singapore
- Zurich

### 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:

- Request patch schedules and amend the schedules
- Request exclusions or inclusion of patches per server

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

Requests to increase number of servers will require a service request ticket that 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 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

Not applicable to this Service.

## 2.8. Access to service

Clients can apply the service to any of the supported Windows Operating Systems that can be hosted on CloudCore. See the CloudCore service description for details.

Details of the latest supported list can be found in the Calligo compatibility matrix <https://calligo.io/compatibility>.

## 2.9. Levels of Access

Clients can have multiple levels of access (as shown below) providing an increased level of control and adherence to governance.

- User – Can request servers to be added or removed from the service. Can request amendments to the schedule and patching policies

## 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

### Standard Service

| Item                                                                                                | Responsible | Accountable | Consulted | Informed |
|-----------------------------------------------------------------------------------------------------|-------------|-------------|-----------|----------|
| Patching of specified servers as per agreed schedule with the latest patches                        | Calligo     | Calligo     | Client    |          |
| Reporting of the patches applied and status of each server                                          | Calligo     | Calligo     |           | Client   |
| Checking the servers reboot successfully after patching if a reboot was required                    | Calligo     | Calligo     |           |          |
| Notify Calligo of any changes to the servers covered by the service                                 | Client      | Client      |           | Calligo  |
| To test the servers for issues post patching                                                        | Client      | Client      |           | Calligo  |
| To allow Calligo a suitable window to perform the patching                                          | Client      | Client      | Calligo   |          |
| Notification to Client of patches requiring OS configuration                                        | Calligo     | Calligo     |           | Client   |
| Operating System configuration for patches requiring Operating System changes (i.e. registry keys)* | Client      | Client      | Calligo   |          |

## 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



### **2.13. Backup and Restore**

The service does not contain any client or configuration data. During the patching service a snapshot will be taken to allow roll back. The servers protected should be covered by a valid backup either by CloudCopy or alternate method (responsibility for ensuring back-ups in place lies with Client).

Calligo will roll back the snapshot for any server that fails testing after patching that cannot be recovered.

### **2.14. Scheduled maintenance windows**

The service does not require a maintenance window that affects the availability SLA.



## 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                                                                                                                                                                |

| CHANGE HISTORY RECORD |                                                     |               |                                |               |
|-----------------------|-----------------------------------------------------|---------------|--------------------------------|---------------|
| VERSION               | DESCRIPTION OF CHANGE                               | AUTHOR        | APPROVAL                       | DATE OF ISSUE |
| 1.0                   | Initial Issue                                       | Mark Thomas   |                                | 30/10/2017    |
| 1.1                   | Revision after review by Julian Box                 | Mark Thomas   | Julian Box                     | 09/11/2017    |
| 1.2                   | Added RACI matrix, glossary of terms and amendments | Mark Thomas   |                                | 18/01/2018    |
| 1.3                   | Review by Sara Liddle                               | Mark Thomas   | Sara Liddle                    | 26/01/2018    |
| 1.4                   | Group review                                        | Brendan Walsh | Mark Herridge;<br>Karl Simpson | 19/03/2018    |
| 1.5                   | General verbiage review                             | Brendan Walsh | Mark Thomas                    | 09/08/2019    |
|                       |                                                     |               |                                |               |
|                       |                                                     |               |                                |               |