

# Service Description

## AppAgile, Managed Service for Redis and Redis Cluster

### 1 Introduction

1.1 This specific service description complements the service description of AppAgile concerning Managed Service for the product Redis

1.2 Redis is an in-memory database open-source software project implementing a clustered, in-memory key-value store with optional durability.

### 2 Services provided by Telekom

2.1 Telekom provides Redis as a service for the customer on his AppAgile platform managed by Telekom.

#### 2.2 Managed Service

The Managed Service Redis includes following services:

- Administration of operational system parameters.
- Reactive patch management to prevent operational downtimes in Redis software.
- Resolution of all operational disruptions out of customers operating area (application level) incl. restore/recovery.
- Changes of existing configurations and technical parameters of the Redis instance on request (change request).
- Recording and administration of error lists, analysis of the error lists, and rotation of lists.
- Implementation of the Deutsche Telekom Group's security policies.
- Cleansing of logs, check logs, and temporary files of the database instances.
- Monitoring of the Redis instances regarding system-relevant events and service level.
- Starting and stopping of the database in line with the agreed procedures.
- Administration of the integrated file system and the IP network of the database instances.

#### 2.3 Operating times

- Operating time (uptime) refers to the period of time in which the services are available. Operating times are 24/7 as standard.
- Attended operation time (AOT) refers to the period in which technical support is accessible, and in which faults that may affect system availability are processed. Customers with the Flex and Committed editions can order AOT as OFFICE TIME or FULL TIME.
- Attended operation times for OFFICE TIME are from 8.00 am to 6.00 pm, Monday to Friday, excluding national holidays.
- The attended operation time for FULL TIME is 7 x 24 hours.

#### 2.4 Availability

- The minimum availability of the service is 99,5 percent for the platform as an annual average.

- The availability is calculated from the actual availability in relation to the defined attended operation time (AOT) minus the times for actually performed, planned maintenance and emergency changes.

- The actual availability is measured by the uptime of all Docker containers as well as the existence of corresponding service process.

#### 2.5 Maintenance

- Maintenance work is carried out on a regular basis in order to ensure functionality.
- Periodic housekeeping.
- Maintenance work which could impair the availability of the cloud service will be announced to the customer at the beginning of the maintenance planning. Standard maintenance windows are not included as unplanned downtimes in calculating the availability.
- Telekom will report any available and security-relevant patches, hotfixes, and new versions of the software used. Telekom will discuss with the customer when to upgrade the Docker container, what different tests will be done on customers' side and the maintenance or change planning. If the customer refuses to upgrade security-relevant patches and hotfixes or versions out of support, Telekom reserves the right to cancel SLAs on this service.

#### 2.6 Backup, recovery and restore

- Backup of database is done on file system level.
- Restore of a database instance, it's protocols and content based on regular snapshots is only possible for whole database.
- A restore has to be ordered and will be provided on best-effort delivery.

#### 2.7 Cluster

- If the customer orders a clustered solution of this service, Telekom will provide the following setup: one Redis master, two more Redis slaves and a set of three sentinels.

#### 2.8 Integration into logging and metrics collection

- If the customer orders additional logging and metrics services by AppAgile, Telekom will integrate all necessary logs and metrics to the central collection services to be accessible by the customer.

### 3 Optional services

The customer may order the services specified below separately; they are not included in Telekom's standard services. All corresponding services by Telekom shall be billed on a time and materials basis in accordance with the Price Sheet.

- Cluster planning
- Capacity planning
- Configuration of database according T-Systems standards
- Backup strategy for Redis persistence
- Failover tests for a high-availability solution.
- Test of standard restore.
- (Performance) Tuning and configuration optimizations.
- Recording and administration of additional diagnostics, metrics or traces (change).
- Periodic reporting of infrastructure consumptions, storage capacity and performance.