

## PUBLICATION 1 SERVICE DESCRIPTION FOR LIVE OBJECTS SERVICE

### 1.1 Definitions

All capitalized terms used and not otherwise defined in this Service Description have the meanings given to them in the Agreement. In the event of any conflict between the definitions provided in this Service Description and those provided elsewhere in the Agreement, the definitions herein will prevail for purposes of this Service Description. The following terms shall have the meanings set out below:

**"API (Application Programming Interface)"** refers to a software programming interface which enables the Customer to connect Orange Live Objects Platform and services to the Customer's IT system and infrastructure.

**"Connected Objects"** means a device or object that is compatible with the Live Objects protocols (as described herein).

**"Message Bus"** means the software layer that gathers messages from different Connected Objects to be sent to the Live Objects Platform.

### 1.2 Overview

Live Objects is a scalable Software as a Service platform ("**Live Objects Platform**" or "**Service**") that allows Customers to easily connect, monitor, and manage Connected Objects to Customer's business applications through a server enabling communication between the devices and with Customer's applications. The Service is flexible and can be used for a broad range of purposes, as required for each Customer's unique needs. It is a Cloud Service, as described in the Specific Conditions for Cloud Services. The Live Objects Platform enables Customers to perform the following:

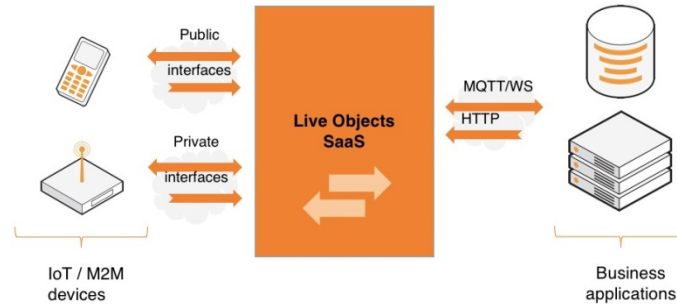
- **Message Management:**
  - Connect multiple Connected Objects to Customer's IT infrastructure; and enable message routing between Connected Objects and the Customer's business applications.
  - Optimize and simplify communications to and from Connected Objects regardless of their location.
  - Collect, deliver, filter, and route messages in near real-time.
- **Device management:**
  - Monitor and maintain an inventory of equipment and Connected Objects.
  - Configure and monitor the activities and status of Connected Objects (including implementing updates and carrying out diagnostics).
  - Remotely upgrade firmware embedded in Connected Objects.
  - Customize interface dashboards and reporting tools to suit Customer's use requirements, including:
    - being notified when Connected Objects malfunction, and
    - optimize business processes and monitor performance of Connected Objects.
- **Data management:**
  - Store and process data. Data from Connected Objects is time stamped.
  - Advanced indexed storage. APIs allowing multi-criteria search features to enable Users to search and extract a wide variety of data, as required.
- **Programming features:**
  - Enables Users to program the Connected Objects to provide automatic notifications and automated actions upon the triggering of certain pre-defined conditions, as set by the User.

### 1.3 Accessing the Live Objects Platform

The Live Objects Platform is accessible via the Internet (default set-up) and/or the Orange Business VPN Service ("**BVPN**") using the Live Objects Web Portal, available at: <https://liveobjects.orange-business.com/>. The administration functionalities can be accessed via a login/password provided by Orange, which the Customer and Users are required to treat as confidential.

Users can link their Connected Objects to the Live Objects Platform using APIs, which are made available on the Live Objects Platform. The APIs are accessible by Customers using API keys. Different API keys are generated for different sets of Connected Objects and only Connected Objects which have had API keys assigned to them will be able to communicate to the Live Objects Platform.

The Live Objects Platform has a number of standard protocols built-in, including MQTT(S), HTTP(S), REST, and SMS, which allow Connected Objects to communicate with the Customer’s business applications, as represented in the illustration below.



In order to ensure appropriate levels of security are maintained, Orange strongly advises Customer to use encrypted protocols to communicate between the Live Objects Platform and the Connected Objects.

**1.4 Service Categories**

Orange offers three categories of Services, depending on the functionalities Customer requires, these are "Express", "Advanced", and "Premium".

Prior to purchasing a specific category, Customer may request use of the free trial mode, which is called "Discover". "Discover" is available for a period of 3 months and provides the User with all the features available in the "Premium" Service category.

The protocols and features of each Service category are set out in the following table:

Live Objects			
Protocols & Features	Service Category		
	Express	Advanced	Premium
MQTT(S)	Y	Y	Y
HTTP(S) / REST	Y	Y	Y
SMS (device traffic with an Orange SIM)	Y	Y	Y
SDK for Connected Objects	Y	Y	Y
Management of Connected Objects	Y	Y	Y
Unitary Firmware Updates	Y	Y	Y
Message Management	Y	Y	Y
Time and Date stamping / Time Series Data Storage		Y	Y
Group Management and Scheduling		Y	Y
Message Decoding			Y
Data Searching			Y
Data Indexing			Y
Non-Complex Event Management and Notification			Y
Graphical Representation of Data			Y

Details of the protocols and features are provided below.

- 1.4.1 **MQTT(S) & HTTP(S).** MQTT(S) and HTTP(S) are industry standard protocols which are used to communicate between the Live Objects Platform and Connected Objects. Orange recommends using the protocol encryption layer (TLS) in order to protect User credentials and ensure an optimum level of security.
- 1.4.2 **SMS.** SMS is an industry standard protocol used for the purposes of sending text messages. This feature is limited to Connected Objects that are equipped with an Orange mobile SIMs.
- 1.4.3 **SDK for Connected Objects.** Orange provides Customer with a Software Developer Kit (SDK) that helps Users to program their Connected Objects to enable communications to and from the Customer’s business applications, as per each Customer’s unique requirements.
- 1.4.4 **Management of Connected Objects.** The Live Object Platform offers various functions dedicated to management of Connected Objects, including:
  - Supervise devices connection and disconnection to/from the Service.
  - Manage Connected Object configuration parameters.
  - Send command to Connected Objects and monitor the status of these commands.
  - Send resources (any binary file) to Connected Object and monitor the status of the operation.

- 1.4.5 **Unitary Firmware Updates.** Users can updated firmware embedded in Connected Objects via the Live Objects Platform on a "unitary" basis – i.e. the firmware on different Connected Objects may be update one at a time.
- 1.4.6 **Message Management.** The Live Objects Platform uses a Message Bus that enables messages (i.e. data communication) from Connected Objects to be routed to the Customer's external business applications.
- 1.4.7 **Data Storage.** Data collected from Connected Objects is stored in France on servers controlled by Orange. This data may be retrieved by Customer using the HTTP / REST API.
- 1.4.8 **Time and Date Stamping / Time Series Data Storage.** When data is collected, the Live Objects system automatically attributes a date and time to when that data was received.
- 1.4.9 **Group Management and Scheduling.** This advanced feature allows Customers to manage a "group" of Connected Objects in any instance (as opposed to managing each Connected Object separately), as follows:
- Schedule regular intervals (in hours or days) for updating firmware embedded in a group of Connected Objects at specific times, and
  - Send and receive specific commands to a group of Connect Objects at the same time and/or at set intervals. For example: A User can send a command to a group of Connect Objects to "sleep" for a set period each day.
- 1.4.10 **Message Decoding.** Live Objects can decode and organize raw binary data collected from Connected Objects into meaningful human-readable format.
- 1.4.11 **Data Searching.** A full-text and geographical search engine based on "**Elastic Search**" is provided in order to search and extract the stored data. This service is accessible through HTTP / REST API.
- 1.4.12 **Data Indexing.** The Live Objects Platform has built-in data indexing capabilities, which allows Users to search and extract a wide variety data using different search functions and indicators.
- 1.4.13 **Non-Complex Event Management and Notification.** Customer can pre-program certain processes or actions that need to be taken upon certain triggers generated by the Connected Objects. By way of illustration: User can set up a set of rules whereby if the Connected Object is performing below a specified target level (set by the Customer), the User is notified by email so that he/she can take such action deemed appropriate.
- 1.4.14 **Graphical Representation of Data.** The Live Objects Platform enables Users to view collected data using a variety of graphical representations, including pie charts, graphs, or maps.
- 1.5 Help and Support**
- 1.5.1 **Support Forum.** Customer can access free technical support via two Orange help forums (both monitored by Orange development and support personnel), available at: <https://developer.orange.com/apis/datavenue/> and [http://stackoverflow.com/questions/tagged/Live Objects/](http://stackoverflow.com/questions/tagged/Live+Objects/)
- 1.5.2 **Helpdesk Support.** Orange also provides a dedicated Customer support helpline, which Customer can email at any time. Contact details for the helpline are available on the Live Objects Web Portal: <https://liveobjects.orange-business.com/>.
- 1.6 Data Processing**
- Exhibit A sets out the subject matter, duration, nature, and purpose of the Processing, the type of Personal Data and the categories of Data Subjects of the Processing of Personal Data carried out by Orange as part of this Service.

**EXHIBIT A DESCRIPTION OF PROCESSING OF PERSONAL DATA BY ORANGE BUSINESS SERVICES AS PROCESSOR FOR CUSTOMER - ARTICLE 28 OF GDPR**
**Name of the Service: Live Object**
**ExA.1 Processing Activities**

Collection (receiving personal data of employees and users of customer who are natural persons, etc.).	Yes
Recording (capturing personal data in a file or software program, including the generation of metadata like Call Details Records, etc.).	Yes
Organization (organizing personal data in a software program, etc.).	Yes
Storage (keeping the personal data in a software program for a determined period, including for archiving purposes, etc.).	Yes
Modification (modifying the content or the way the personal data are structured, etc.).	Yes
Consultation (looking at personal data that we have stored in our files or software programs, etc.).	Yes
Disclosure or otherwise making available (communicating personal data to another recipient by any means, etc.). Except for disclosure mentioned in the service description or required by law, or otherwise specifically directed by the customer, the categories of potential recipients are only those subcontractors referenced herein or otherwise approved by the customer.	No
Combination (merging two or more databases with personal data, etc.).	No
Restriction (implementing security measures in order to restrict the access to the personal data, etc.).	Yes
Deletion or destruction (deleting or anonymizing the personal data or destroying the hard copies, etc.).	Yes
Other use (if "YES" to be detailed).	No

**ExA.2 Categories of Personal Data Processed (Type of Personal Data)**

Categories of Personal Data Identifiable by Orange	
Identification data (ID document / number, phone number, email, etc.).	Yes
Traffic / Connection data (IP address, Mac address, CDRs, access and usage data, online tracking and monitoring of services).	Yes
Location Data (geographic location, device location).	No
CRM data (billing information, customer service data, ticketing info, telephone recordings, etc.).	Yes
Financial data (bank account details, payment information).	No
Sensitive Data (racial/ethnic background, religion, political or philosophical beliefs, trade union membership, biometric data, genetic data, health data, sexual life, and/or orientation).	No
Categories of Personal Data Not Identifiable by Orange	
Any categories of personal data that may be recorded or stored (voicemail, call recording, files) by Customer and which recording is hosted on Orange infrastructure.	No

**ExA.3 Subject-Matter and Duration of the Processing**

Subject-Matter of Processing		Duration of Processing
Service activation.	Yes	For the period necessary to provide the service to the customer plus 6 months.
User authentication.	Yes	
Incident Management.	Yes	
Quality of Service.	Yes	
Invoice, contract, order (if they show the name and details of the contact person of Customer).	Yes	For the period required by applicable law.
Itemized billing (including traffic / connection data of end-users who are natural persons).	No	
Customer reporting.	No	
Hosting.	Yes	For the duration of the hosting service ordered by Customer.
Other. [if yes please describe]	No	

**ExA.4 Purposes of Processing**

Provision of the service to Customer.
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**ExA.5 Categories of Data Subject**

Customer's employees/self-employed contractors using or managing the service or the contract who are natural persons.	Yes
Customer's other end-users of the service who are natural persons (client of the Customer, etc.) usable by users other than internal users.	No

**ExA.6 Sub-Processors**

Sub-Processors Approved by Customer	Safety Measures
Orange Business Services entities that are processing information for this Service and that are within the EU/EEA are communicated separately to the customer.	NA
Orange Business Services entities that are processing information for this Service and that are outside of the EU/EEA are communicated separately to the customer	Intra-group agreements with standard model clauses, Binding Corporate Rules approval request filed with CNIL.
Orange Business Services suppliers which are performing one or more processing activities described above in connection with this Service and that are within the EU/EEA are communicated separately to the customer.	NA
Orange Business Services suppliers that are processing information for this Service and that are outside of the EU/EEA are communicated separately to the customer.	Standard Model Clauses in contract with supplier.

**END OF SERVICE DESCRIPTION FOR LIVE OBJECTS SERVICE**