# **eXo Support Services - Operations Procedure**

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# 1. eXo Support Services

## 1.1. Overview

This document describes the operational process of eXo Support services, for eXo products. These services are offered only in the context of an active customer subscription which may be contracted directly with eXo, or through a partner.

#### 1.2. Definitions

In this document, each word with a first upper-cased letter is defined herein with its proper meaning or by default refers to the meaning defined in the contract signed between eXo and the Beneficiary

#### **BUG**

"Bug" means any technical or functional dysfunction of the Applicable Software, noticeable and reproducible with the Applicable Software's delivered package, by deviating significantly from the expected behavior described in the Documentation.

#### **BENEFICIARY**

"Beneficiary" means the structure or interlocutor consuming directly the eXo support services through a subscription agreement. It may be a partner or an end customer.

## **INFORMATION**

"Information" means the operation intended to inform the Beneficiary on a property, a factory setting, a general configuration, usage, compatibility or feature of the Software. An information is usually illustrated with a published resource or made available by eXo in the Documentation or knowledge bases. An information does not, unless agreed in advance, permit to obtain instructions or recommendations for integration with third party software, for Version Change, and in general to all operations that a detailed knowledge of the technical environment or deployment of the solution on Customers' premises.

### WORKAROUND

"Workaround" means the operation allowing the restore of the nominal or degraded functioning of an installation package of the Applicable Software in the production environment. A workaround is systematically subject of deployment guidelines provided by eXo and allows the operator to apply the referenced operation.

## **VERSION CHANGE**

"Version Change" means the operation aimed at replacing the Major or Minor version of the eXo Platform package by a newer version (a Major or a Minor version).

### FIX

"Fix" means the operation aimed at deploying the software code portion or a maintenance release

that fixes definitely a Bug in the Applicable Software package. A Fix is always subject to deployment guidelines provided by eXo and allows the operator to apply the referenced operation. eXo Support Services is solely responsible for determining the category of the fix. In general, the delivery of a Fix means the closing of the support ticket.

If applicable, the delivery of a Workaround occurs in a timely manner according to the contracted service levels between the Beneficiary and eXo.

A workaround usually consists of a specific operating procedure, or the delivery of a temporary software patch.

Unless specified in the contract, the Beneficiary is responsible for the deployment steps aimed at implementing the Workaround on the installed Applicable Software package within the relevant technical environment, including checking impacts of the Workaround on data, manipulated types of data and parts of a codes realized "on top" of the Applicable Software of a Customer project.

#### **MAINTENANCE UPDATE**

"Maintenance Update" means the operation aimed at substituting the maintenance release frequently used by the beneficiary by a more recent maintenance release. Operations related to these updates, supported by eXo through the subscription services are detailed in the Maintenance Program available on eXo corporate website.

#### **MAINTENANCE PROGRAM**

"*Maintenance Program*" means the services operated by eXo to a Beneficiary in accordance to the terms listed on the **relevant page** on eXo corporate website.

#### **INCIDENT**

"Incident" means the initial state of an issue expressed by the Beneficiary to eXo Support via the <a href="eXo Support Services portal">eXo Support Services portal</a>. Triggering an Incident marks the starting point for managing a support case. The qualification of an Incident into on a Bug belongs exclusively to eXo Support Services teams, following the diagnosis made after the initial consideration of the issue.

# 2. Scope of application

#### 2.1. Perimeters of activities

eXo supports your Production systems operations (as opposed to staging, development, preproduction, etc.).

Support **includes** assistance for the installation, usage, problem diagnosis and access to the Software Maintenance Program of eXo Platform.

The support **does not include** assistance in code development, system design, network design, architectural design, optimization, settings recommendations, the development or the

implementation of security policies or rules, recommendations for integration with third party software, migration operations related to Change Version activity.

The scope of Support Services depends of the type of Subscription Services signed by the Beneficiary.

## 2.2. Product Scopes, SLA and duration

The Support Services are applicable to any eXo software package offering, regardless of the version, provided it has not reached the "EOSL" milestone described in the Maintenance Program, in accordance with the Service Level Agreements described here: <a href="http://www.exoplatform.com/SLA">http://www.exoplatform.com/SLA</a>, and provided in the Maintenance Program.

eXo Platform products being intended to be deployed in contexts of Java application server, only a limited list of these is eligible in terms of supported operational requirements. This list is regularly maintained and updated by eXo and is available on the <a href="the-corporate website">the corporate website</a>.

# 3. Support Processes

## 3.1. Managing requests

Support requests are filed by the Beneficiary through the eXo support portal. As part of the "Premium" offer, a phone number is provided to directly contact our support team.

The receipt of a support request initiates the processing of a Support Case. A reference, a severity, and a description are associated to every Support Case.

Requests identified by the Beneficiary as related to eXo Software will be processed by eXo through the process described below, and with response times respective to their severity:

- Severity 1: Blocker
- Severity 2: Major
- Severity 3: Minor
- Severity 4: None/Info

For more formal descriptions, and details about the SLA guidelines, please refer 3.6 Support Services SLA Guidelines in Appendix 1 of eXo subscription agreement.

For best results, the Beneficiary is encouraged to file the requests with the relevant severity level. However, the final qualification of the severity for an issue, according to the information submitted by the Beneficiary, belongs to eXo.

Support requests should be described by the Beneficiary. He is responsible of filling out the ticket form and providing all relevant and necessary information to the qualification step by eXo, particularly in the context of reproducing an issue, reported as an incident of an installation of the eXo Platform package. Such information is at least:

- Nature of the issue
- Version of the concerned eXo Platform package

- Specifications and versions of technical deployment environment (operating system, application server, Java virtual machine, physical machine),
- Users Volumetry,
- Deployment details
- Presence of any third-party software with structural aspect in terms of integration with the software

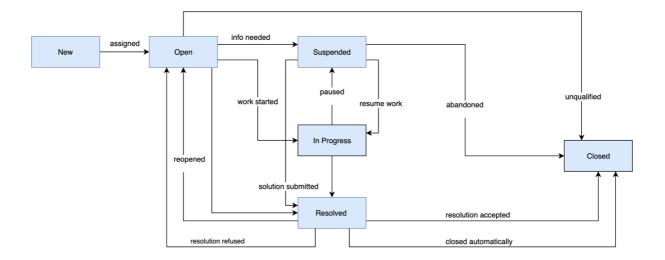
In the case of reporting an incident, regardless of its severity:

- Detailed description of the error behavior,
- If necessary, detailed step by step scenario to reproduce the error behavior through the interface of the software package,
- If so, step by step, reference data, injector values on the platform, manipulations on the host platform in order to reproduce the same scenario and visualize the dysfunction,
- Where appropriate, measurement taken through third-party tools of profiling of the Java Virtual Machine,
- Status of the platform (memory dump, CPU consumption, "thread dump") **before** the incident, if available
- Runtime log files for a relevant period,
- Identified applicative Stack Traces
- Content or content types in error, excluding content types not manipulated natively by the platform,
- Any other useful information allowing eXo support team to make an efficient qualification signaling

**Warning:** For the proper handling of incidents, our support team requires an up-to-date information about your environments (OS version, eXo product/addons versions, etc..). If you didn't provide this information or if the information about the environment we have is too old, our support team will ask you to update the information and will not start handling the ticket until you give them the missing information

If you are unsure on how to enter the information that is expected in this context, eXo support team, we will forward to the Beneficiary a user guide for support portal upon request.

## 3.2. Life cycle of an issue



#### **NEW**

Upon receiving a support case, the ticket is recorded with the status "**NEW**" which marks the clock timer for the target response time in accordance with the service level agreement (<a href="http://www.exoplatform.com/SLA">http://www.exoplatform.com/SLA</a>) of the Beneficiary.

### **OPEN**

As soon as someone is available to handle the request, the ticket is assigned to a support agent and the status of the ticket is set to "**OPEN**". Then, the support case is subject to a qualification of conformity, where the eXo support agent validates the severity and the presence of relevant information necessary for the analysis. At this stage,

- The eXo support agent may update the severity of the case based on information available.
- If eXo support agent needs more information to pursue analysis (such as logs or step by step instructions), the status is set to "SUSPENDED". Note that eXo support team will stop working on the case until they receive additional information on the case.
- If eXo support agent can find a Workaround, an existing Fix or a relevant Information, he updates the ticket with the solution and the status is set to "RESOLVED".
- If eXo support agent has enough information but no solution is readily available, the case enters in "Support Level 2" and the status is set to "IN PROGRESS".
- If the case does not qualify as a valid support case, the agent may terminate it by setting "CLOSED" status and explaining the reason (ex: duplicate, unintelligible language, etc.).

## **SUSPENDED**

When a ticket reaches "SUSPENDED" status, it means eXo needs information from to further progress on the ticket. Most of the time, we lack clear instructions to reproduce a problem or technical information from the logs. The support agent will explain directly on the ticket what he needs to resume work. At this stage,

- If additional information is added to the ticket and analysis or solution building can be resumed, the agent sets the "IN PROGRESS" status
- If additional information is added and the eXo support can find a Workaround, an existing Fix or a relevant Information, he updates the ticket with the solution and sets the status to "RESOLVED".

If no additional is added after a few days, the eXo support agent will update the case with a reminder of the needed information. After three unsuccessful attempts to contact you, the support agent may **abandon** the case by setting the status to "CLOSED".

#### **IN PROGRESS**

When a ticket reaches is "IN PROGRESS", it means we have enough information to proceed. This status serves as an indicator for you that we are actively working on the case. The support agent is either attempting to reproduce the incident or looking for a solution. At this stage,

- If more information appears necessary, the eXo support agent updates the ticket to indicate what he needs and sets the status to "SUSPENDED".
- When the eXo support agent can find a Workaround, an existing Fix or a relevant Information, he updates the ticket with the solution and sets the status to "RESOLVED".

**Escalation**: On a case by case basis, if "IN PROGRESS" status was reached after multiple back and forth, with no significant progress eXo support may initiate an **escalation** for a more direct interaction. For efficiency, and after mutual agreement, we may interact with you via phone calls, audio/video conference, or instant messaging. We may also request remote access or schedule on site intervention. After such a direct interaction, the support agent updates the status according to the outcome of the interaction.

#### **RESOLVED**

When an eXo support agent submits a solution, either in the form of an answer, a Fix or a Workaround, he sets the status to "**RESOLVED**". At this point, you are expected to respond to this proposal by either accepting or refusing the solution proposed. At this stage,

- If the solution provided does not suit you, you can set the ticket to status "OPEN"
- You can accept the proposed solution simply by setting the ticket to status "CLOSED"
- After a few days, if you don't change the status, the eXo support agent will kindly remind
  you to update the status. After three attempts, the eXo support agent may assume the
  solution is valid and set the status to "CLOSED".

**Fixes Policy**: Fixes are normally delivered through Maintenance versions of the product that are released regularly. eXo support team will only send one-off patches for Fixes in critical situations (such as service disruption or security breach). Hence, eXo support team may mark a case as "RESOLVED" when they deliver a patch or when they can confirm a Fix is scheduled for next release.

#### **CLOSED**

The final status of a support case is "CLOSED". A reason (Patch sent, works as intended, solution accepted, fix scheduled, etc.) should indicate the conclusion of the case.

**Warning**: there is no way to reopen a closed ticket. Hence, we encourage you to monitor tickets and respond to tickets in status SUSPENDED and RESOLVED. If a problem remains after the corresponding ticket is closed, you may create a new ticket and refer to the closed ticket in the description.

## 3.3. Resolving issues

The answers given by eXo shall be considered as valid if, at least, they represent one of the following situations:

- Acceptance of a proposed solution in the form of an Information, a Workaround or a Fix allowing to resolve the problem, or alternatively to reduce the severity of the issue.
- Refusal of the request by eXo support for reason of conformity "Works as intended"
- Clear demonstration that the problem is caused by an improper use of the Software Package or induced by another external product or an application cohabiting with eXo Software package.

### 3.4. Support Management and escalation

eXo Support team operates its activity in an industrial optics, according to clear and transparent processes. At any time, thanks to the opening of a regular issue via the Support Portal, the Beneficiary may request eXo Support to provide the desired clarification on the functioning of or the information related to the Support operations and the Maintenance Program.

In case of blocking point, difficulties during nominal support services processing, sliding or slipping in anticipation of delays related to the contracted service levels agreement, recognized risk (technical, human), one or both of two Parties will be entitled to trigger a management escalation.

Escalation points at eXo are identified in the subscription agreement, as well as escalation points regarding the Beneficiary.

Upon request by the Beneficiary, eXo will provide an activity report made of Key Performance Indicators. This information will be provided through an issue creation in the support portal; it is being understood that this particular request will not be required for a retroactive period of more than one (1) year.

This reporting will be used primarily, for management escalations triggered by one or both Parties, the main objective being to shape the relationship between the Beneficiary and eXo Support Services into a process of continuous improvement.