



**OX2OX Migration Framework Scheduler Technical  
Documentation for  
2.1.0**

2021-06-01

## **Copyright notice**

---

©2021 by OX Software GmbH. All rights reserved. Open-Xchange and the Open-Xchange logo are trademarks or registered trademarks of OX Software GmbH. All other company and/or product names may be trademarks or registered trademarks of their owners. Information contained in this document is subject to change without notice.



Contents

<b>1</b>	<b>General Information</b>	<b>2</b>
1.1	Warnings	2
1.2	Delivery Comment	2
1.3	Install Package Repository	2
1.4	Build Dependencies	2
<b>2</b>	<b>Shipped Packages and Version</b>	<b>2</b>
2.1	Package open-xchange-omf-orchestrator	2
2.1.1	Installation	2
2.1.2	Configuration	2
2.2	Package open-xchange-omf-scheduler	3
2.2.1	Installation	3
2.2.2	Configuration	3
<b>A</b>	<b>Configuration Files</b>	<b>3</b>

# 1 General Information

## 1.1 Warnings



### Warning

This preview delivery is not for productive usage and not affected by service-level agreements.



### Warning

Custom configuration or template files are potentially not updated automatically. After the update, please always check for files with a **.dpkg-new** or **.rpmnew** suffix and merge the changes manually. Configuration file changes are listed in their own respective section below but don't include changes to template files. For details about all the configuration files and templates shipped as part of this delivery, please read the relevant section of each package.

## 1.2 Delivery Comment

This delivery was requested with following comment:

*OMF Scheduler 2.1.0 Preview Delivery 2*

## 1.3 Install Package Repository

This delivery is part of a restricted preview software repository:

<https://software.open-xchange.com/components/omf-scheduler/preview/2.1.0/RHEL7>  
<https://software.open-xchange.com/components/omf-scheduler/preview/2.1.0/DebianStretch>  
<https://software.open-xchange.com/components/omf-scheduler/preview/2.1.0/DebianBuster>

## 1.4 Build Dependencies

This delivery was build with following dependencies:

RedHat:RHEL-7,Debian:Stretch,Debian:Buster

# 2 Shipped Packages and Version

## 2.1 Package open-xchange-omf-orchestrator

OMF Orchestrator CLI to interoperate with the OX2OX Migration Framework.

Version: 2.1.0-2

Type: Other

### 2.1.1 Installation

Install on nodes with package installer **apt-get** or **yum**:

```
<package installer> install open-xchange-omf-orchestrator
```

### 2.1.2 Configuration

For details, please see appendix [A](#)

/opt/open-xchange/omf/orchestrator/etc/omf-orchestrator.yml (page [4](#))

## 2.2 Package open-xchange-omf-scheduler

OMF Scheduler OX2OX Migration Framework Scheduler.

Version: 2.1.0-2

Type: Other

### 2.2.1 Installation

Install on nodes with package installer **apt-get** or **yum**:

```
<package installer> install open-xchange-omf-scheduler
```

### 2.2.2 Configuration

For details, please see appendix [A](#)

/opt/open-xchange/omf/scheduler/etc/omf-scheduler.yml (page [7](#))

## A Configuration Files

### File 1 /opt/open-xchange/omf/orchestrator/etc/omf-orchestrator.yml

```

1 micronaut:
2   application:
3     name: omf
4   http:
5     services:
6       # The OMF Source HTTP REST API service configuration
7       # The url is dynamic and should not be specified here
8       source:
9         # If some sources don't have valid public certificates (e.g. use
10        # self-signed certificates), then their certificates can be added to
11        # a custom Java trust-store using the keytool command and configured
12        # here.
13        #
14        # Example:
15        # ssl:
16        #   enabled: true
17        #   trust-store:
18        #     path: file:/opt/open-xchange/omf/certs/source.p12
19        #     password: secret
20        #     type: PKCS12
21
22      # The OMF Scheduler Source HTTP REST API service configuration
23      scheduler-admin-source:
24        url: "${omf.scheduler.url}/omf/scheduler/admin/source/"
25
26      # If the scheduler does not have a valid public certificate
27      # (e.g. uses a self-signed certificate), then its certificate can be
28      # configured here.
29      ssl:
30        enabled: true
31        trust-store:
32          path: file:/opt/open-xchange/omf/certs/scheduler.p12
33          password: secret
34          type: PKCS12
35
36      scheduler-admin-target:
37        url: "${omf.scheduler.url}/omf/scheduler/admin/target/"
38
39      # If the scheduler does not have a valid public certificate
40      # (e.g. uses a self-signed certificate), then its certificate can be
41      # configured here.
42      ssl:
43        enabled: true

```

```

44     trust-store:
45       path: file:/opt/open-xchange/omf/certs/scheduler.p12
46       password: secret
47       type: PKCS12
48
49     # The OMF Scheduler Migration HTTP REST API service configuration
50     scheduler-migration:
51       url: "${omf.scheduler.url}/omf/scheduler/migration/"
52
53     # If scheduler-admin above has a custom SSL configuration,
54     # then it needs to be repeated here.
55     ssl:
56       enabled: true
57       trust-store:
58         path: file:/opt/open-xchange/omf/certs/scheduler.p12
59         password: secret
60         type: PKCS12
61
62   omf:
63     source:
64       # List source api username and passwords by identifying them
65       # with the name that will be used to create the source entry in OMF.
66       #
67       # This is not required, and the username and password can be entered
68       # for each command when working with the source.
69       #
70       # Example:
71       # mysource:
72       #   username: admin
73       #   password: secret
74     scheduler:
75       # Credentials for the scheduler
76       # On multi-user systems, specifying the password in a configuration file
77       # with proper file system permissions is preferred to specifying it on
78       # the command line, since the command line is visible to all local users.
79       #
80       # Example:
81       # username: admin
82       # password: secret
83
84       # Location of the scheduler. Only the protocol and host name need to be
85       # specified.
86       url: "https://localhost:8443"
87     ui:
88       color: true
89       unicode: true
90       expandIds: false

```

## File 2 /opt/open-xchange/omf/scheduler/etc/omf-scheduler.yml

```

1  # https://docs.micronaut.io/latest/guide/config.html#configurationProperties
2  ---
3  micronaut:
4    # SSL configuration
5    # Required for production environments.
6    # See https://docs.micronaut.io/latest/guide/index.html#https for details.
7    ssl:
8      enabled: true
9      port: 8443
10     key-store:
11       path: file:/opt/open-xchange/omf/certs/keystore.p12
12       type: PKCS12
13       password: secret
14     server:
15       dual-protocol: true
16       port: 8080
17
18     http:

```

```

19  services:
20    # The omf-source service is use to collect health status and metrics from the Source
21    # OMF nodes. The HTTP client can be configured (ex: ssl) here by referencing
22    # https://docs.micronaut.io/latest/guide/configurationreference.html#io.micronaut.
23    # http.client.ServiceHttpClientConfiguration
24    # and the subsequent sections related to micronaut.http.services.*
25    omf-source:
26      # Example SSL configuration in case a source uses a private certificate
27      # ssl:
28      #   trust-store:
29      #     path: file:/opt/open-xchange/omf/certs/source.p12
30      #     type: PKCS12
31      #     password: secret
32  application:
33    name: omf-scheduler
34    # Configure security including basic auth: https://micronaut-projects.github.io/
35    # micronaut-security/latest/guide/#basicAuth
36    # Must be set to true or the Source Controller is not secure
37  security:
38    enabled: true
39    # Change the security of the open api views to anonymous so that they can be viewed
40    # without credentials
41  intercept-url-map:
42    - pattern: /swagger/**
43      access:
44        - isAnonymous()
45    - pattern: /swagger-ui/**
46      access:
47        - isAnonymous()
48    - pattern: /rapidoc/**
49      access:
50        - isAnonymous()
51    # https://docs.micronaut.io/latest/guide/index.html#_configuring_caches
52  #caches:
53    #example:
54      #charset: UTF-8
55      #expire-after-access: 1h
56  metrics:
57    enabled: true
58    export:
59      # Creates an endpoint like http://host/prometheus - uses basic auth from
60      # credentials under scheduler.http.admin
61      prometheus:
62        enabled: true
63        step: PT1M
64        descriptions: true
65  router:
66    # Adds api versioning: https://docs.micronaut.io/latest/guide/index.html#apiVersioning
67    versioning:
68      enabled: true
69      parameter:
70        enabled: true
71        names: 'v'
72      header:
73        enabled: true
74        names: 'X-API-VERSION'
75    # Allows the openapi views to be seen
76  static-resources:
77    swagger:
78      paths: classpath:META-INF/swagger
79      mapping: /swagger/**
80    redoc:
81      paths: classpath:META-INF/swagger/views/redoc
82      mapping: /redoc/**
83    rapidoc:
84      paths: classpath:META-INF/swagger/views/rapidoc
85      mapping: /rapidoc/**
86    swagger-ui:
87      paths: classpath:META-INF/swagger/views/swagger-ui

```

```

88         mapping: /swagger-ui/**
89 ---
90 scheduler:
91   id: 'scheduler-0'
92   hostname: ''
93   batch:
94     presync:
95       # Max number of contexts in a batch
96       size: 10
97       # Strategy to use when creating batches.
98       # Current supported strategies:
99       #   - fill-first: create batches up to the batch size then create the next batch
100      #   - fill-equal: create batches of equal size
101      strategy: fill-equal
102    cutover:
103      size: 10
104      strategy: fill-equal
105    preprovisioning:
106      size: 10
107      strategy: fill-equal
108  kafka:
109    queues:
110      batch: "omf-batch"
111      response: "omf-response"
112    resize:
113      batch: true
114      response: true
115  http:
116    admin:
117      # Basic auth creds
118      username: admin
119      password: secret
120      controller:
121        path: /omf/scheduler/admin
122    migration:
123      controller:
124        path: /omf/scheduler/migration
125  metrics:
126    cache:
127      windows.millis: 300000
128      batches.millis: 300000
129 ---
130 jackson:
131   bean-introspection-module: true
132   serialization:
133     indent-output: true
134     writeDatesAsTimestamps: false
135 ---
136 datasources:
137   # Used to persist scheduling data
138   scheduler:
139     # url should use createDatabaseIfNotExist=true if the database will not
140     # already exist: https://dev.mysql.com/doc/connector-j/8.0/en/connector-j-reference-
141     # configuration-properties.html
142     url: jdbc:mysql://localhost:3306/scheduler?createDatabaseIfNotExist=true
143     username: root
144     password: my-secret-pw
145     driverClassName: org.mariadb.jdbc.Driver
146     dialect: MYSQL
147     maximumPoolSize: 10
148     maxLifetime: 180000
149   # Used to create/drop databases for sources. This is not really the "default" data
150   # source
151   # but we need to use default because of bug https://github.com/micronaut-projects/
152   # micronaut-data/issues/598s
153   default:
154     url: jdbc:mysql://localhost:3306/
155     username: root
156     password: my-secret-pw
157     driverClassName: org.mariadb.jdbc.Driver
158     dialect: MYSQL
159     maximumPoolSize: 5

```



```
157     maxLifetime: 180000
158 ---
159 endpoints:
160   loggers:
161     enabled: true
162     sensitive: true
163   health:
164     discovery-client:
165       enabled: false
166   liquibase:
167     # fails with missing transition, might be fixed in later Micronaut releases
168     enabled: false
169   info:
170     enabled: true
171     sensitive: true
172     sourceCodeOrigin:
173       enabled: true
174       location: file:/opt/open-xchange/omf/scheduler/share/SourceCodeOrigin.txt
175 ---
176 zookeeper:
177   server: zookeeper:2181
178 ---
179 kafka:
180   bootstrap:
181     servers: kafka-1:9092, kafka-2:9092, kafka-3:9092
182   producers:
183     batch-producer:
184       enable.idempotence: true
185       # This enables transactions for the Batch Producer
186       # The value must be unique per application, but should
187       # not change for the same app after a crash, etc.
188       transactional.id: producer-1
189     #consumers:
190     #response-consumer:
191 ---
192 liquibase:
193   datasources:
194     scheduler:
195       change-log: 'classpath:liquibase/scheduler/liquibase-changelog.xml'
196 ---
197 jooq:
198   datasources:
199     default:
200       sql-dialect: 'MARIADB'
201     scheduler:
202       sql-dialect: 'MARIADB'
203 ---
204 logger:
205   levels:
206     ROOT: INFO
207     com.openxchange: INFO
208     omf: INFO
209     omf.scheduler.admin.AuthenticationProviderUserPassword: WARN
210 ---
```