



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

2021-07-30

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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:

Scheduler 2.1.0 Preview Delivery 6

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: 2.1.0-6

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: 2.1.0-6

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 [8](#))

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 Scheduler Source HTTP REST API service configuration
7       scheduler-admin-source:
8         url: "${omf.scheduler.url}/omf/scheduler/admin/source/"
9
10      # If the scheduler does not have a valid public certificate
11      # (e.g. uses a self-signed certificate), then its certificate can be
12      # configured here.
13      ssl:
14        enabled: true
15        trust-store:
16          path: file:/opt/open-xchange/omf/certs/scheduler.p12
17          password: secret
18          type: PKCS12
19
20      scheduler-admin-target:
21        url: "${omf.scheduler.url}/omf/scheduler/admin/target/"
22
23      # If the scheduler does not have a valid public certificate
24      # (e.g. uses a self-signed certificate), then its certificate can be
25      # configured here.
26      ssl:
27        enabled: true
28        trust-store:
29          path: file:/opt/open-xchange/omf/certs/scheduler.p12
30          password: secret
31          type: PKCS12
32
33      # The OMF Scheduler Migration HTTP REST API service configuration
34      scheduler-migration:
35        url: "${omf.scheduler.url}/omf/scheduler/migration/"
36
37      # If scheduler-admin above has a custom SSL configuration,
38      # then it needs to be repeated here.
39      ssl:
40        enabled: true
41        trust-store:
42          path: file:/opt/open-xchange/omf/certs/scheduler.p12
43          password: secret

```

```

44         type: PKCS12
45
46     # The OMF Scheduler Monitoring HTTP REST API service configuration
47     scheduler-monitoring:
48         url: "${omf.scheduler.url}/ws/omf/scheduler/workers/monitor/"
49
50     # If scheduler-admin above has a custom SSL configuration,
51     # then it needs to be repeated here.
52     ssl:
53         enabled: true
54         trust-store:
55             path: file:/opt/open-xchange/omf/certs/scheduler.p12
56             password: secret
57             type: PKCS12
58
59 omf:
60     shell:
61         config:
62             user.dir: ${user.dir}/.omf/config
63             app.dir: /opt/open-xchange/omf/lib/scripts
64     scheduler:
65         # Credentials for the scheduler
66         # On multi-user systems, specifying the password in a configuration file
67         # with proper file system permissions is preferred to specifying it on
68         # the command line, since the command line is visible to all local users.
69         #
70         # Example:
71         # username: admin
72         # password: secret
73
74         # Location of the scheduler. Only the protocol and host name need to be
75         # specified.
76         url: "https://localhost:8443"
77     ui:
78         color: true
79         unicode: true
80         expandIds: false
81         history.file: ${user.dir}/.omf_history
82
83     logger:
84         levels:
85             # change this to TRACE to see a detailed log of the HTTP traffic between the
86             # Orchestrator and the Scheduler
87             io.micronaut.http.client: INFO

```

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        connect-timeout: 30s
27        read-timeout: 120s
28        # Example SSL configuration in case a source uses a private certificate
29        # ssl:
30        #   trust-store:
31        #     path: file:/opt/open-xchange/omf/certs/source.p12
32        #     type: PKCS12
33        #     password: secret
34      omf-target:
35        connect-timeout: 30s
36        read-timeout: 120s
37      application:
38        name: omf-scheduler
39        # Configure security including basic auth: https://micronaut-projects.github.io/
40        micronaut-security/latest/guide/#basicAuth
41        # Must be set to true or the Source Controller is not secure
42      security:
43        enabled: true
44        # Change the security of the open api views to anonymous so that they can be viewed
45        without credentials
46      intercept-url-map:
47        - pattern: /swagger/**
48          access:
49            - isAnonymous()
50        - pattern: /swagger-ui/**
51          access:
52            - isAnonymous()
53        - pattern: /rapidoc/**
54          access:
55            - isAnonymous()
56      # https://docs.micronaut.io/latest/guide/index.html#_configuring_caches
57      #caches:
58        #example:
59        #  charset: UTF-8
60        #  expire-after-access: 1h
61      metrics:
62        enabled: true
63      export:
64        # Creates an endpoint like http://host/prometheus - uses basic auth from
65        # credentials under scheduler.http.admin
66      prometheus:
67        enabled: true
68        step: PT1M
69        descriptions: true
70      router:
71        # Adds api versioning: https://docs.micronaut.io/latest/guide/index.html#apiVersioning
72      versioning:
73        enabled: true
74      parameter:
75        enabled: true
76        names: 'v'
77      header:
78        enabled: true
79        names: 'X-API-VERSION'
80      # Allows the openapi views to be seen
81      static-resources:
82        swagger:
83          paths: classpath:META-INF/swagger
84          mapping: /swagger/**
85        redoc:
86          paths: classpath:META-INF/swagger/views/redoc
87          mapping: /redoc/**
88        rapidoc:
89          paths: classpath:META-INF/swagger/views/rapidoc
90          mapping: /rapidoc/**

```

```

91     swagger-ui:
92       paths: classpath:META-INF/swagger/views/swagger-ui
93       mapping: /swagger-ui/**
94 ---
95 scheduler:
96   id: 'scheduler-0'
97   hostname: ''
98   batch:
99     presync:
100       # Max number of contexts in a batch
101       size: 10
102       # Strategy to use when creating batches.
103       # Current supported strategies:
104       #   - fill-first: create batches up to the batch size then create the next batch
105       #   - fill-equal: create batches of equal size
106       strategy: fill-equal
107     cutover:
108       size: 10
109       strategy: fill-equal
110     preprovisioning:
111       size: 10
112       strategy: fill-equal
113 kafka:
114   wait: false
115   queues:
116     batch: "omf-batch"
117     response: "omf-response"
118   resize:
119     batch: true
120     response: true
121   record.header.enhance: true
122   topic:
123     list:
124       timeout: -1s
125     describe:
126       timeout: -1s
127     retry:
128       attempts: 3
129       wait: 3s
130     create:
131       # whether topics should be created when a source is created or synced (true) or
132       # whether we make use of auto-creation instead (old behaviour prior to 2.1.0-6):
133       enabled: true
134       timeout: -1s
135       partitions: 2
136       replication.factor: 0
137       config:
138         retention.ms: 432000000
139 workers:
140   allow.shutdown: false
141 http:
142   admin:
143     # Basic auth creds
144     username: admin
145     password: secret
146     controller:
147       path: /omf/scheduler/admin
148   migration:
149     controller:
150       path: /omf/scheduler/migration
151 metrics:
152   monitor:
153     windows:
154       enabled: true
155       interval: 5m
156       delay: 30s
157     batches:
158       enabled: true
159       interval: 5m
160       delay: 30s
161     sources:
162       enabled: true

```



```

163         interval: 5m
164         delay: 30s
165     targets:
166         enabled: true
167         interval: 5m
168         delay: 30s
169     contextmappings:
170         enabled: true
171         interval: 5m
172         delay: 30s
173     migrationevents:
174         enabled: true
175         interval: 5m
176         delay: 30s
177 ---
178 jackson:
179     bean-introspection-module: true
180     serialization:
181         indent-output: true
182         writeDatesAsTimestamps: false
183 ---
184 datasources:
185     # Used to persist scheduling data
186     scheduler:
187         # url should use createDatabaseIfNotExist=true if the database will not
188         # already exist: https://dev.mysql.com/doc/connector-j/8.0/en/connector-j-reference-
189         # configuration-properties.html
190         url: jdbc:mysql://localhost:3306/scheduler?createDatabaseIfNotExist=true
191         username: root
192         password: my-secret-pw
193         driverClassName: org.mariadb.jdbc.Driver
194         dialect: MYSQL
195         maximumPoolSize: 10
196         maxLifetime: 180000
197     # Used to create/drop databases for sources. This is not really the "default" data
198     # but we need to use default because of bug https://github.com/micronaut-projects/
199     # micronaut-data/issues/598s
200     default:
201         url: jdbc:mysql://localhost:3306/
202         username: root
203         password: my-secret-pw
204         driverClassName: org.mariadb.jdbc.Driver
205         dialect: MYSQL
206         maximumPoolSize: 5
207         maxLifetime: 180000
208 ---
209 endpoints:
210     loggers:
211         enabled: true
212         sensitive: true
213     health:
214         discovery-client:
215             enabled: false
216         sources:
217             enabled: false
218         targets:
219             enabled: false
220     liquibase:
221         # fails with missing transition, might be fixed in later Micronaut releases
222         enabled: false
223     info:
224         enabled: true
225         sensitive: true
226         sourceCodeOrigin:
227             enabled: true
228             location: file:/opt/open-xchange/omf/scheduler/share/SourceCodeOrigin.txt
229 ---
230 zookeeper:
231     server: zookeeper:2181
232 ---
233 kafka:

```

```
232 bootstrap:
233   servers: kafka-1:9092, kafka-2:9092, kafka-3:9092
234 producers:
235   batch-producer:
236     enable.idempotence: true
237     # This enables transactions for the Batch Producer
238     # The value must be unique per application, but should
239     # not change for the same app after a crash, etc.
240     transactional.id: producer-1
241   #consumers:
242     #response-consumer:
243   ---
244 mail:
245   # whether to send emails
246   enabled: false
247   window:
248     # whether to send emails when a Window succeeds:
249     success: false
250     # whether to send emails when a Window fails:
251     failure: true
252   # mandatory, must be set to be able to send emails:
253   from: ${scheduler.id}
254   # whom to send those mails to (can be a comma separated list):
255   to:
256   cc:
257   bcc:
258   # text to include in the subject line, wrapped in []:
259   subject.id:
260   smtp:
261     host: localhost
262     port: 25
263     # leave empty for no authentication:
264     username:
265     password:
266     # SMTP, SMTPS or SMTP_TLS (SMTP with mandatory StartTLS):
267     transport: SMTP
268     # whether to allow SMTP without StartTLS:
269     smtp.plain: true
270     tls:
271       # whether to trust all SMTP server keys
272       trustall: false
273       # whether to verify SMTP server keys
274       verify: true
275   ---
276 liquibase:
277   datasources:
278     scheduler:
279       change-log: 'classpath:liquibase/scheduler/liquibase-changelog.xml'
280   ---
281 logger:
282   levels:
283     ROOT: INFO
284     com.openxchange: INFO
285     omf: INFO
286     omf.scheduler.admin.AuthenticationProviderUserPassword: WARN
287     org.apache.kafka.clients.consumer.ConsumerConfig: WARN
288   ---
```