OX2OX Migration Framework Source Technical Documentation for
2.1.0-rev27

2023-03-21

Copyright notice

Contents

1 General Information

1.1 Warnings

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

Warning
It is mandatory to restart the **open-xchange** service on all middleware nodes after performing the update.

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 Source 2.1.0 Preview Delivery 27

1.3 Install Package Repository

This delivery is part of a restricted preview software repository:

https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianBullseye-7.10.6
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianBuster-7.10.6
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.6
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.6
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianBuster-7.10.5
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.5
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.5
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianBuster-7.10.4
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.4
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.4
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.3
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL6-7.10.3
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.3
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.2
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL6-7.10.2
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.2
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianStretch-7.10.1
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.10.1
https://software.open-xchange.com/components/omf-source/preview/2.1.0/DebianJessie-7.8.

4
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL6-7.8.4
https://software.open-xchange.com/components/omf-source/preview/2.1.0/RHEL7-7.8.4

1.4 Build Dependencies

This delivery was build with following dependencies:

```
cloud-plugins-master-1.6,frontend-master-7.8.4,guard-master-2.8.0,
backend-master,guard-master,backend-master-7.10.5,guard-master-2.10.5,backend-master-
7.10.4,guard-master-2.10.4,cloud-plugins-master-1.10,backend-master-7.10.3,guard-master-
2.10.3,backend-master-7.10.2,guard-master-2.10.2,backend-master-7.10.1,guard-master-
2.10.1
```

1.5 Notice

Info
Some configurations can be changed without restarting the service, please call following command for getting a list of supported settings.

```
/opt/open-xchange/sbin/listreloadables
```

Please use following command to enable capable and changed configurations on a running system.

```
/opt/open-xchange/sbin/reloadconfiguration
```

2 Shipped Version

2.1 Package open-xchange-omf-source

OMF Source Bundles Source component of the OX Migration Framework.
Version: 2.1.0-27
Type: OX Middleware Plugin
Depends on:

```
open-xchange-core (<<7.10.7)
open-xchange-core (>=7.8.4)
open-xchange-rest (<<7.10.7)
open-xchange-rest (>=7.8.4)
```

2.1.1 Installation

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

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

2.1.2 Configuration

For details, please see appendix A
/opt/open-xchange/etc/omf-source.properties (page 12)

2.2 Package open-xchange-omf-source-dualprovisioning

OMF Dual-Provisioning Feature
Version: 2.1.0-27

Type: OX Middleware Plugin
Depends on:

```
open-xchange-admin (<<7.10.7)
open-xchange-admin (>=7.8.4)
open-xchange-omf-source (>=2.1.0)
```

2.2.1 Installation

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

```
<package installer> install open-xchange-omf-source-dualprovisioning
```

2.3 Package open-xchange-omf-source-dualprovisioning-cloudplugins

OMF Dual-Provisioning Addon for Cloud-Plugins Sources
Version: 2.1.0-27
Type: OX Middleware Plugin
Depends on:

```
open-xchange-admin (<<7.10.7)
open-xchange-admin (>=7.8.4)
open-xchange-cloudplugins (<<2.0.0)
open-xchange-cloudplugins (>=1.6.12)
open-xchange-omf-source (>=2.1.0)
open-xchange-omf-source-dualprovisioning (>=2.1.0)
```

2.3.1 Installation

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

```
<package installer> install open-xchange-omf-source-dualprovisioning-cloudplugins
```

2.4 Package open-xchange-omf-source-guard

OMF Support to migrate Guard data
Version: 2.1.0-27
Type: OX Middleware Plugin
Depends on:

```
open-xchange-guard
open-xchange-omf-source (>=2.1.0)
```

2.4.1 Installation

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

```
<package installer> install open-xchange-omf-source-guard
```

2.5 Package open-xchange-omf-source-mailfilter

OMF Source Mail Filter only Part of the Source component of OMF that supplies a core Mail Filter Provider.
Version: 2.1.0-27
Type: OX Middleware Plugin
Depends on:

```
open-xchange-core (<<7.10.7)
open-xchange-core (>=7.8.4)
open-xchange-mailfilter (<<7.10.7)
```

```
open-xchange-mailfilter (>=7.8.4)
open-xchange-omf-source (<<3.0.0)
open-xchange-omf-source (>=2.1.0)
```

2.5.1 Installation

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

```
<package installer> install open-xchange-omf-source-mailfilter
```

A Configuration Files

File 1 /opt/open-xchange/etc/omf-source.properties

```
#
# The login of the user allowed to access the webservices
# Parameter is mandatory
#
com.openexchange.omf.source.webserviceLogin=

#
# The password of the user allowed to access the webservices
# Parameter is mandatory
#
com.openexchange.omf.source.webservicePassword=

# ldap connection pool setting, see
# https://docs.ldap.com/ldap-sdk/docs/getting-started/connection-pools.html
# all other ldap parameters are read from /opt/open-xchange/etc/cloudplugins.properties
# com.openexchange.cloudplugins.read.*
com.openexchange.omf.source.ldappool.initialConnections=10

# ldap connection pool setting, see
# https://docs.ldap.com/ldap-sdk/docs/getting-started/connection-pools.html
# all other ldap parameters are read from /opt/open-xchange/etc/cloudplugins.properties
# com.openexchange.cloudplugins.read.*
com.openexchange.omf.source.ldappool.maxConnections=20

# Location of the JKS trust store file that contains the certificates of the target HTTPS endpoint.
# Note that this configuration setting is only applied when the URL the
# target AppSuite endpoints are using the HTTPS protocol.
#
# The default value is empty, which causes the use of the CA certificates that are bundled
# with the Java Runtime Environment.
#
# Example:
# com.openexchange.omf.source.ssl.truststore.file=/opt/open-xchange/omf/source-keystore.jks
#
# Example for using the bundled CA certificates:
# com.openexchange.omf.source.ssl.truststore.file=
com.openexchange.omf.source.ssl.truststore.file=

# The password to use to open the JKS trust store file.
# Only relevant when the configuration parameter above has been set.
# Leave empty if no password is necessary (which is the common practice and, hence, the default).
#
# Example:
# com.openexchange.omf.source.ssl.truststore.password=
# com.openexchange.omf.source.ssl.truststore.password=secret
com.openexchange.omf.source.ssl.truststore.password=

# Should the dual provisioning be enabled?
# Dual provisioning ensures send mail related provisioning requests to the migration target
# Default: false
```

```
#
# Note that the dual provisioning feature also requires the open-xchange-omf-source-dualprovisioning
# package to be installed.
com.openexchange.omf.source.dualprovision.enabled=false

# Migration target URL
# Parameter is mandatory
# Example: https://provisioning.example.com
com.openexchange.omf.source.dualprovision.targetUrl=

# Migration source name
# Parameter is mandatory
# An alias for this this system used as migration source. The name must be known to the target.
# Example: foo.customer.site
com.openexchange.omf.source.dualprovision.sourceName=

# Ignore dual provisioning failures when the context cannot be found by the Target.
# This is useful when enabling dual provisioning before all contexts have been provisioned
# on the Target.
# It should not be enabled if you expect all contexts to already be provisioned.
com.openexchange.omf.source.dualprovision.ignoreContextNotFound=false

# Ignore dual provisioning failures when the user cannot be found by the Target.
# This is different from ignoreContextNotFound which will only ignore when the Target
# context cannot be found. This property will ignore the error when the Target context is
# found, but the user is not.
# If dual-provisioning is enabled prior to provisioning all contexts, and ignoreContextNotFound
# is enabled, it's possible that a context may be created but a user create event executed
# at the same time does not get propagated to the Target. That means that a user existing
# on Source may not exist on Target yet. This would be eventually be resolved, by follow up
# pre-provisioning runs or identified during presync or cutover, however, it would cause
# provisioning errors in the mean time.
com.openexchange.omf.source.dualprovision.ignoreUserNotFound=false

# Brand usernames and passwords to use to authenticate when provisioning users
# using the Dual-Provisioning feature.
#
# Format:
# com.openexchange.omf.source.dualprovision.targetBrandPassword.<brandName>=<password>
#
# Example:
# com.openexchange.omf.source.dualprovision.targetBrandPassword.acme=secret
# com.openexchange.omf.source.dualprovision.targetBrandPassword.name.of.the.brand=super_secret
#
# Note that when the com.openexchange.omf.source.metadata.brandProvider property is
# set to 'single', then there should only be a single such entry, as exemplified below:
# com.openexchange.omf.source.metadata.brandProvider=single
# com.openexchange.omf.source.dualprovision.targetBrandPassword.acme=secret
# With that configuration above, new contexts will be provisioned into the target
# brand "acme", using "acme:secret" as the basic authentication credentials to do so.
#
# This setting is mandatory and has no default value.

# com.openexchange.omf.source.dualprovision.targetBrandPassword.<brandName>=<password>

# Login resolver strategy: how should logins be determined when exporting metadata.
#
# Two strategies are available:
# * cloudplugins: mailLogin = {userId}@{contextId}
# * loginsource: mailLogin = depends on the value of the config cascade aware configuration
#       property com.openexchange.mail.loginSource
#
# The parameter is optional and defaults to loginsource.
#
# Examples:
# com.openexchange.omf.source.loginResolver=cloudplugins
```

```
# com.openexchange.omf.source.loginResolver=loginsource
#
com.openexchange.omf.source.metadata.loginResolver=loginsource

# The method to use to determine the brand to use when creating contexts
# on the Target tier, which is used in two mechanisms:
# - in the Source metadata, which is used for the pre-provisioning operations,
# - in the Dual-Provisioning feature.
#
# For Source metadata and pre-provisioning operations, this setting determines the
# name of the plugin to use to push the brand to use for provisioning contexts and
# users on the target side by including it in the metadata.
# Not populated if left empty.
#
# For Dual Provisioning, that brand both determines the authentication credentials
# to use (specifically the basic authentication username) as well as in which target
# brand the context ought to be created.
# The matching password is configured using the property
# com.openexchange.omf.source.dualprovision.targetBrandPassword.<brandName>=<password>
#
# Built-in providers:
# - configCascade: looks up a configurable property via config cascade, optionally maps it and
#                  injects that as the brand
# - single: uses the brand credentials configuration properties to determine the brand, requiring
#           that one and only one set of credentials is configured that way
#
# Example:
# com.openexchange.omf.source.metadata.brandProvider=configCascade
# com.openexchange.omf.source.metadata.brandProvider=single
#
# This configuration setting is optional and there is not a default
com.openexchange.omf.source.metadata.brandProvider=

# When using the configCascade brand provider, configures the name
# of the property that contains the brand information.
#
# Is mandatory when using the configCascade brand provider and has
# no default value.
#
# Example:
# com.openexchange.omf.source.metadata.brandProvider.configCascade.propertyName=config/io.ox/core//theme
#
com.openexchange.omf.source.metadata.brandProvider.configCascade.propertyName=

# When using the configCascade brand provider, configures the optional
# default value that should be used when there is not a value found at the context
# level for the property configured in com.openexchange.omf.source.metadata.brandProvider.configCascade.propertyName
#
# This property is optional. When not used, the brand will not be provided.
#
# Example:
# com.openexchange.omf.source.metadata.brandProvider.configCascade.default=defaulBrand
#
com.openexchange.omf.source.metadata.brandProvider.configCascade.default=

# When using the configCascade brand provider, optionally maps
# the values from the property defined above to another value that is
# then exported as the brand information.
#
# Syntax:
# com.openexchange.omf.source.metadata.brandProvider.configCascade.map.<from>=<to>
#
# Example:
# com.openexchange.omf.source.metadata.brandProvider.configCascade.map.pink_theme=brand1
#
# com.openexchange.omf.source.metadata.brandProvider.configCascade.map.<from>=

# The following property is only used when installing the open-xchange-omf-source-
```

```
mailfilter
# package. Otherwise, you can ignore it.
#
# The master authentication password to use when using the core mailfilter provider.
# If the core mail filter properties are already configured to use master password,
# or per user passwords will be supplied by OMF, then there is no need to use this.
com.openexchange.omf.source.mailfilter.masterPassword=

# The following property is only used when installing the open-xchange-omf-source-mailfilter
# package. Otherwise, you can ignore it.
#
# When using SASL PLAIN authentication, it's possible to specify an authentication user which
# is normally selected from the user's credentialSource, however, the auth user can be
# overridden here. This is useful when master auth uses a master user.
# This property is optional.
com.openexchange.omf.source.mailfilter.masterUser=

# The following property is only used when installing the open-xchange-omf-source-mailfilter
# package. Otherwise, you can ignore it.
#
# Format the username with printf style format. This is useful when a separate pair of credentials
# have been setup for mail migration. For instance, if the username is jon.doe@domain and you
# specify a userFormat of "mig-%s" then the username will be "mig-jon.doe@domain".
# This property is optional.
com.openexchange.omf.source.mailfilter.userFormat=

# The following property is only used when installing the open-xchange-omf-source-mailfilter
# package. Otherwise, you can ignore it.
#
# Format the authname with printf style format. For instance, if the authname is jon.doe@domain
# and you specify an authFormat of "mig-%s" then the authname will be "mig-jon.doe@domain".
# This property is optional.
com.openexchange.omf.source.mailfilter.authFormat=

# The following property is only used when installing the open-xchange-omf-source-mailfilter
# package. Otherwise, you can ignore it.
#
# Override the configured mailfilter server.
# This property is optional.
com.openexchange.omf.source.mailfilter.server=

# The following property is only used when installing the open-xchange-omf-source-mailfilter
# package. Otherwise, you can ignore it.
#
# Override the configured mailfilter port. Only used when server is also overridden.
# This property is optional.
# Default: 4190
com.openexchange.omf.source.mailfilter.port=

# If the mail filter hierarchy separator character (delimiter) that is used on
# the Source IMAP server differs from the character used on the Target, then
# the Source character will need to be mapped to the Target, and any reference
# of the Target character will need to be escaped.
# Reference: https://datatracker.ietf.org/doc/html/rfc3501#section-5.1.1
#
# If mail filters will not be migrated by OMF or the delimiters are the same
# on each system, then there is no need to use these properties.
#
# Specify the Source delimiter with:
#   com.openexchange.omf.source.mailfilter.sourceDelimiter
# Specify the Target delimiter with:
#   com.openexchange.omf.source.mailfilter.targetDelimiter
```

```
# Specify the Target delimiter escape character with:
#   com.openexchange.omf.source.mailfilter.targetEscapeChar

# Configure Standard folder names that should be mapped from one value to another during
# the mail filter migration process.
# For example, if you instruct OMF to map folder Draft to Drafts, then a reference in a
# mail filter of Draft.Subfolder would end up as Drafts.Subfolder.
# Note: this only takes care of cases when the Standard folder is at the root, so
#   cases like INBOX.Draft.Subfolder will stay as is.
#
# There is no default value.
#
# Format:
# com.openexchange.omf.source.mailfilter.folder.<fromfoldername>=<tofoldername>
#
# Example:
# com.openexchange.omf.source.mailfilter.folder.Draft=Drafts
# com.openexchange.omf.source.mailfilter.folder.Drafts=Draft

# When usernames (uid) are not unique, a different strategy needs to be used to determine
# what to send as the username (uid) as part of the metadata.
#
# Built-in strategies are:
# - uid: it's the default and uses the 'uid' field from the 'login2user' table
# - email: uses the 'mail' field from the 'user' table
# - brand: concatenates the following fields with '_':
#   * 'uid' field from the 'login2user' table
#   * the numeric user id
#   * the numeric context id
#   * the source name
#   * the target brand
# - brandcontext: concatenates the following fields with '_':
#   * 'uid' field from the 'login2user' table
#   * the numeric user id
#   * the numeric context id
#   * the context name
#   * the source name
#   * the target brand
# - format: creates a username based on property 'com.openexchange.omf.source.metadata.
    username.format'
#
# Note that using 'brand' or 'brandcontext' requires a target brand strategy to be
# enabled and selected using the property com.openexchange.omf.source.metadata.
    brandProvider,
# as well as a source name to be set in com.openexchange.omf.source.dualprovision.
    sourceName.
#
# Using 'brandcontext' also incurs a slight performance penalty since it requires
    resolving
# the context name from the context id using the 'context' table in the configdb.
#
# It can also be configured as a chain of strategies to attempt, with the
# leftmost strategy winning (first hit wins), e.g.:
# com.openexchange.omf.source.metadata.usernameStrategy=email, uid
#
# Note that this property is optional, defaulting to using the 'uid' column.
#
# If the architecture of the Source is Cloud-Plugins, then this property must be empty or
    'uid'
#
# Example:
# com.openexchange.omf.source.metadata.usernameStrategy=email
com.openexchange.omf.source.metadata.usernameStrategy=

# Define the username with defined keys within the formatter "${}" when using
# com.openexchange.omf.source.metadata.usernameStrategy=format
#
# Possible Keys:
#   * uid: field from the 'login2user' table
#   * userId: the numeric user id
#   * contextId: the numeric context id
#   * email
```

```
#   * source: the source name
#   * brand: the target brand name
#   * sourceContextName
#   * targetContextName: might be the same as sourceContextName
#
# Key brand requires property: com.openexchange.omf.source.metadata.brandProvider
# Key source requires property: com.openexchange.omf.source.dualprovision.sourceName
#
# Example:
# com.openexchange.omf.source.metadata.username.format=customer_${userId}_${contextId}_${uuid}
#  where userId = 4 and contextId=87494 would result in: customer_4_87494_8f3078a8-9bf9-4d37-ad2e-da003ac0ac68
com.openexchange.omf.source.metadata.username.format=

# When you need to modify the context name that will be used on the Target
#
# Built-in strategies are:
# - name: takes the context name as-is (default)
# - string-replace: uses the context.replace properties to perform string replace on the
#    existing context name
#
# Example:
# com.openexchange.omf.source.metadata.contextNameStrategy=name
com.openexchange.omf.source.metadata.contextNameStrategy=

# To control the "string-replace" contextNameStrategy that is configured with property
# com.openexchange.omf.source.metadata.contextNameStrategy, use the following properties.
#
# Property prefix "com.openexchange.omf.source.metadata.context.replace.with." is used to
# replace a regex in the existing context name with a string (can be empty).
# Example:
#  com.openexchange.omf.source.metadata.context.replace.with.replaceme=withme
# This will replace the string "replaceme" with the string "withme". Other examples of the
# regex to be replaced are: "guid\+", "^replaceit", "test$"
# You can use the special string "|empty" to replace with an empty string.
#
# Property prefix "com.openexchange.omf.source.metadata.context.replace.first." is used to
# inform the contextStrategy that the regex should be replaced only once in case there are
# multiple instances of it in the context name.
# Example:
#  com.openexchange.omf.source.metadata.context.replace.first.replaceme=true
# This will replace the regex "replaceme" only one time. The result of this for context name
# "replacemereplaceme" will be "withmereplaceme".
# This property is optional and defaults to false.
#
# Property "com.openexchange.omf.source.metadata.context.replace.order" determines the order
# of replacement when there are multiple strings to replace. Each regex is delimited with the
# character '|'
# Example:
#  com.openexchange.omf.source.metadata.context.replace.with.replaceme=withme
#  com.openexchange.omf.source.metadata.context.replace.with.replaceyou=replaceme
#  com.openexchange.omf.source.metadata.context.replace.order=replaceyou|replaceme
# This will first replace "replaceyou" and then "replaceme". So the context name "replaceyou"
# will change to "replaceme" and finally "withme".
# This property is optional, but if it is used, all replacements must be specified. When it is
# not used, replacement order is random.

# Comma separated list of user attributes that should be included in source metadata
#
# Example:
# com.openexchange.omf.source.metadata.userAttributes=foo,bar,spam

# Comma separated list of database table names that should be excluded from the migration
# Example:
# com.openexchange.omf.source.database.export.excludedTableNames=myTable1,anotherTable2
com.openexchange.omf.source.database.export.excludedTableNames=
```

```

# An export gate which controls access to context data. This enhances security to allow only
# the data of selected contexts to be exported. By default, all contexts may be exported
# so that this setting can be deployed without breaking existing migrations. Note: metadata
# API's which only export contextId to schema mappings do not use this gate, therefore you
# can still learn of the existence of a contextId on the system, even if its data is gated.
#
# Base options:
#   <empty> or "allowall": a noop which allows export of all contexts on this system
#   "allownone": denies export of all contexts. This is set when this configuration option fails to load
#
# In addition to base options, a plugin may provide additional named ContextExportGates
# Example:
# com.openexchange.omf.source.context.export.gate.name=customer-x-gate
com.openexchange.omf.source.context.export.gate.name=

# Configure a cache for the context export gate. This is only useful when actually using a context
# export gate other than allowall. You can invalidate the cache with API
# /omf/source/metadata/1/gate/invalidate/{contextId} where no contextId invalidates the whole cache
#
# Enable the cache
# com.openexchange.omf.source.context.export.gate.cache.enable=
#
# Hours until entry is evicted
# com.openexchange.omf.source.context.export.gate.cache.hours=
#
# Max number of entries in the cache
# com.openexchange.omf.source.context.export.gate.cache.max=
#
# Defaults:
# com.openexchange.omf.source.context.export.gate.cache.enable=false
# com.openexchange.omf.source.context.export.gate.cache.hours=24
# com.openexchange.omf.source.context.export.gate.cache.max=100000


# The connect timeout for all outbound HTTP/REST requests.
#
# Example:
# com.openexchange.omf.http.connect.timeout=2m
#
# Defaults to 1m.
com.openexchange.omf.http.connect.timeout=1m

# The read timeout for all outbound HTTP/REST requests.
#
# Example:
# com.openexchange.omf.http.read.timeout=10m
#
# Defaults to 5m.
com.openexchange.omf.http.read.timeout=5m

# The write timeout for all outbound HTTP/REST requests.
#
# Example:
# com.openexchange.omf.http.write.timeout=10m
#
# Defaults to 5m.
com.openexchange.omf.http.write.timeout=5m

# The read timeout for slow outbound HTTP/REST requests.
#
# Example:
# com.openexchange.omf.http.slow.read.timeout=20m
#
# Defaults to 30m.
com.openexchange.omf.http.slow.read.timeout=30m
```

```

# The write timeout for slow outbound HTTP/REST requests.
#
# Example:
# com.openexchange.omf.http.slow.write.timeout=12m
#
# Defaults to 30m.
com.openexchange.omf.http.slow.write.timeout=30m
```