



**Release Notes for Release 7.10.4**  
2020-08-05

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# 1 General Information

## OX App Suite v7.10.4

OX App Suite is a modular platform designed for Telco's, Hosters, and other Service Providers. It delivers a wide range of cloud-based services. These include email, file sharing, document management, time management, cloud storage and metrics for monitoring end-user behavior. Enhancements to the OX App Suite platform in this release include:

- **Subscribe Improvements**  
Similar to calendar, it is now also possible to subscribe / unsubscribe from shared contact, and task, folders. It is also possible to select which folders are used for synchronization via CalDAV and CardDAV.
- **Design Changes**  
The redesign of the OX Mail compose dialog; the login page and the floating windows will provide a fresh look and improved the user experience.
- **Storage Provider Support**  
Nextcloud", "ownCloud" and WebDAV are popular online storage solutions that focus on sharing. OX App Suite v7.10.4 will now support the subscription to these providers.
- **Improved Feedback Tool**  
The feedback feature has been extended to provide feedbacks via Net Promoter Score (NPS). Additionally, system administrators can set when, and how often, the feedback interface is displayed to end users.

## OX Documents v7.10.4

For service providers looking to attract customers, OX Documents is the perfect hook. Fully integrated into OX App Suite, OX Documents now includes the following new features:

- **Better collaboration in real time**  
To make collaboration even more efficient, multiple users can now edit exactly the same text at the same time.
- **More attention to comments with @mentions**  
To make sure a specific user sees a comment, it is now possible to add them, as an @mention, to a comment in OX Spreadsheet and OX Presentation. The user mentioned will be notified, by email, with a link to the comment.
- **View documents in browser tab**  
To allow simultaneous document viewing and multitasking, documents can now, optionally, be viewed in a separate pop-out browser tab.

## What's New in General and Feature Overviews

- Open-Xchange now provides more detailed overviews and Feature Overview documents relating to new product releases. These can be found at <https://www.open-xchange.com/portfolio/whats-new/>

## General Information – Please Note

- Open-Xchange encourages administrators to regularly update to the latest available release. To ensure a stable and up to date environment please note the different versions supported. An overview of the latest supported Major, Minor and Public Patch Releases can be found in the OXpedia at: [https://oxpedia.org/wiki/index.php?title=AppSuite:Version\\_Support\\_Commitment](https://oxpedia.org/wiki/index.php?title=AppSuite:Version_Support_Commitment)
- With OX App Suite v7.10.4 the OX Documents SpellCheck has been introduced. To use the new service this must be installed, configured and run. All Documents related core modules for Text, Spreadsheet and Presentation rely on this service in order to check spelling for typed words and text contained in opened documents. More information under [https://oxpedia.org/wiki/index.php?title=AppSuite:Documents\\_Installation\\_Guide#SpellCheck\\_Service](https://oxpedia.org/wiki/index.php?title=AppSuite:Documents_Installation_Guide#SpellCheck_Service)
- In accordance with the supported browser policy, Open-Xchange announces the discontinuation of support for Microsoft Internet Explorer 11 and Microsoft Edge Legacy, with the next release. For details of all supported browsers please refer to the requirements page at: [https://oxpedia.org/wiki/index.php?title=AppSuite:OX\\_System\\_Requirements#Desktop\\_Browser\\_.28Minimum\\_display\\_resolution:\\_1024\\_x\\_768.29](https://oxpedia.org/wiki/index.php?title=AppSuite:OX_System_Requirements#Desktop_Browser_.28Minimum_display_resolution:_1024_x_768.29)
- As already communicated and in accordance with the supported platform policy, Open-Xchange announces the discontinuation of support for SUSE Linux Enterprise Server 12 (SLES 12), Red Hat Enterprise Linux 6 and CentOS 6 with the release of OX App Suite v7.10.4. We encourage administrators to update to the latest operating system version. For details of all supported platforms and databases please refer to the requirements page at: [https://oxpedia.org/wiki/index.php?title=AppSuite:OX\\_System\\_Requirements#Server\\_Platforms](https://oxpedia.org/wiki/index.php?title=AppSuite:OX_System_Requirements#Server_Platforms)

## 2 Shipped Product and Version

Open-Xchange App Suite backend 7.10.4-rev7  
Open-Xchange App Suite frontend 7.10.4-rev6  
Open-Xchange App Suite usm 7.10.4-rev2  
Open-Xchange App Suite hazelcast-enterprise 7.10.4-rev1  
Open-Xchange App Suite eas 7.10.4-rev2  
Open-Xchange App Suite documentconverter-api 7.10.4-rev3  
Open-Xchange App Suite imageconverter 7.10.4-rev3  
Open-Xchange App Suite office 7.10.4-rev3  
Open-Xchange App Suite documents-collaboration 7.10.4-rev3  
Open-Xchange App Suite documentconverter 7.10.4-rev3  
Open-Xchange App Suite readerengine 7.10.4-rev3  
Open-Xchange App Suite open-xchange-spellcheck 7.10.4-rev3  
Open-Xchange App Suite open-xchange-pdftool 7.10.4-rev3  
Open-Xchange App Suite office-web 7.10.4-rev3

Find more information about product versions and releases at [http://oxpedia.org/wiki/index.php?title=AppSuite:Versioning\\_and\\_Numbering](http://oxpedia.org/wiki/index.php?title=AppSuite:Versioning_and_Numbering) and <http://documentation.open-xchange.com/>.

## 3 Vulnerabilities fixed with this Release

This section provides a summary of security related bug fixes that have been applied subsequently to shipping Release 7.10.3. Solutions for vulnerabilities have been provided for the existing code-base via Patch Releases.

### **MWB-289 CVE-2020-15003**

CVSS:3.1

## 4 Bugs fixed with this Release

This section provides a summary of bug fixes and changes that have been applied subsequently to shipping Release 7.10.3. Some of the announced bug fixes may have already been fixed at the existing code-base via Patch Releases.

### **OXUIB-112 Throwing error while creating a filter rule with size > 2GB/2048MB/2097152KB**

Wrong comparative operator was used.

This has been fixed by adjusting the comparative operator.

### **OXUIB-343 Edge: disabled Subject and CC fields in the mail compose dialog**

Non-chromium-based browser was applied for chromium-based browser.

This has been fixed by differentiating detected edge browser by version number (79+ represents chrome-based).

### **OXUIB-329 Group 'All users' is not getting updating**

Appsuite UI side limit that request user details only for at most 1000 members, this limit only affects the settings pane "Groups".

This has been fixed by introducing customizable setting and now also inform user when limit was hit.

### **OXUIB-348 Cannot open newsletters with new edge chromium based browser**

Basic detection of Edge was added a while back, but noopener feature has not been adjusted.

This has been solved by reporting noopener support for Edge based on Chromium in internal functions.

**OXUIB-183 Found no such composition space**

There is a little time gap between the POST /compose/:id/attachment to state to have a progress of 100% and the fact, that the upload call resolves. This is the time, the server needs to finally store the attachment somewhere. If the mail is send in exactly this gap, a race condition between sending and attaching the image to the mail might occur.

Wait until the attachment-upload has been resolved before the mail send process can be started is solving this issue.

**OXUIB-252 Same email search results in different options**

When 'search' collection get's expired via expire() the 'expire' property got reverted immediately. This has been solved by manipulating 'expired' property directly.

**OXUIB-86 JSON field 661 (date) not used by UI**

Missing frontend counterpart of backend feature.

This has been solved by adding 610 as unsupported sort option with fallback 661.

**OXUIB-319 MDN / Read Receipt disappears after logout when not interacted with**

Missing property that identifies open read receipts for seen messages.

This has been solved by providing property for seen messages also now (unless read receipt was send). Additionally flag 512 can be used to identify a already send read receipt.

**OXUIB-303 Error saving webmailer signature on mobile tablet**

Editor content was not part of new/update requests when oximage tinymce plugin wasn't loaded.

This has been solved by ensuring editor content is used.

**OXUIB-89 "Add to calendar" action for imip appointment invitation mails should not be shown**

ToolBarView's selection change did not trigger a redraw (strict: true).

This has been fixed by just setting strict to false.

**OXUIB-75 Wrong translation in Finnish calendar module**

This was caused by missing context.

This was solved by changing to suggested message.

**OXUIB-27 Switch between conversation- and no conversation-view loses mail**

During toggling between normal and thread view the collection gets reset but the complete flag stays on 'true'. So no collection will be loaded as long there aren't enough mails for pagination in the current folder that triggers the incompleteness.

This has been solved by setting the complete flag to 'false' manually so that a reload will be triggered.

**MWB-94 Heavily increased CPU consumption**

Detected & applied wrong start time range to scheduler of GDPR data export tasks.

Detect & apply correct start time range to scheduler of GDPR data export tasks to solve this issue.

**MWB-130 File gets deleted when uploading new version and having autodelete\_file\_versions=true retentionDays=1 and maxVersions=1**

Wrong version number for current version was assumed when auto-deleting file versions.

This has been solved by passing proper current version number to auto-delete routine.

**MWB-174 F5 reload causes logout**

Session cookie has not been written to HTTP response.

This has been fixed by writing missing session cookie on login.

**MWB-462 Dedicated filestore does not work with Sproxid for Mail Compose**

Missing according DatabaseAccessProvider at runtime.

This has been fixed by adding missing DatabaseAccessProvider for mail compose that is needed in case an Sproxid file storage is used.

This fixed is based on revision 16 and is not part of any revision between revision 16 and 18. With next public patch in two weeks and revision 19+ all fixes between revision 16 and 18 will be included.

**MWB-475 Mail compose with non-instant attachment upload does not work**

Unused API parameter prevented non-storing of attachments. When used, send/save lead to errors and were not possible at all.

This has been solved by removing API parameter streamThrough and locally spool uploaded attachments before passing them on to save a draft or send an email.

**MWB-13 Some customers cannot send emails with attachments - CacheLoader returned null for key**

When using Google cache's 'get(key, loader)' method, the passed loader must not return null. Don't return null in passed CacheLoader instance to solve this issue.

**MWB-31 not possible to add multiple totp accounts on same server**

No unique information for the TOTP account.

Added the user's login to the TOTP account.

**MWB-53 Spam and phishing errors**

The problem is that SMTP server in question uses the reserved return code 552 "Exceeded storage allocation" incorrectly to advertise that message to send has been blocked due to spam/phishing detection. Unfortunately, there is no deterministic detection possible since the accompanying text for the 552 return code may be arbitrarily chosen. Only a heuristic can be used here.

Check accompanying text for the 552 return code for occurrences of "virus" or "spam" to interpret message as being blocked e.g. due to triggering a filter such as a URL in the message being found in a domain black list.

**MWB-69 Appointments exported from google and imported into Appsuite loose reminders**

Error thrown Reply-To header can't be parsed, actually the In-Reply-To header should be used.

This has been solved by using the In-Reply-To header.

**MWB-72 Performance issue after upgrading**

Mail content was read for detection of non-inline parts, which are supposed to be passed to document-converter service (that might be absent).

Don't trigger document preview if associated capability is absent and avoid reading mail text for detection of non-inline MIME parts. Note: In case Document-Converter is deployed on customer's installation, accessing MIME message's file attachments is done by intention.

**MWB-79 Search defaults to "From" in the Sent view**

Custom MAL implementation does not orderly mark the standard folders.

Now manually check for possible standard sent folder in case marker is absent for com.openexchange.mail.dataobjects.MailFolder instance to solve this issue.

**MWB-80 Caldav capability to manage ical subscriptions should not be announced to CalDAV Clients if com.openexchange.calendar.ical.enabled is set to false**

Calendarserver-subscribed is always announced to CalDAV clients.

This has been solved by only announcing the ical subscription capability for CalDAV client with "calendarserver-subscribed" when the fitting property, "com.openexchange.calendar.ical.enabled", is enabled AND the corresponding services are available.

**MWB-103 Recurring tasks can not be marked as done via EM Client**

The caldav servlet doesn't support operations on recurring tasks, but it also doesn't filter recurring tasks out.

This has been resolved by just filtering thoes recurring tasks.

**MWB-127 Display of special and polish charactes in Appsuite**

If "UTF8=ACCEPT" is advertised through IMAP server's capabilities, there is no need to encode(decode the mailbox name (according to RFC 2060, section 5.1.3. "Mailbox International Naming Con-

vention”).

This has been fixed by avoiding decoding/encoding of the mailbox name in case “UTF8=ACCEPT” is advertised through IMAP server’s capabilities.

**MWB-129 Reply all button does not work**

‘UnifiedInboxManagement’ OSGi service was not added to bundle’s needed/tracked services, which is required to check if an account is the special Unified Mail account.

Now orderly track ‘UnifiedInboxManagement’ OSGi service to check if an account is the special Unified Mail account.

**MWB-134 Email attachments from drive size checked not during “upload”**

Drive document has been accounted to upload quota, but shouldn’t.

This has been solved by do not throw upload quota exceeded error in case file attachment is a Drive document.

**MWB-149 Reply all on a mail from within unified inbox does not work**

‘UnifiedInboxManagement’ OSGi service was not added to bundle’s needed/tracked services, which is required to check if an account is the special Unified Mail account.

Solution: Orderly track ‘UnifiedInboxManagement’ OSGi service to check if an account is the special Unified Mail account.

**MWB-161 Import of an ics file results in Error while reading/writing from/to the database**

Event data was only stored partly when an unexpected error occurred during saving of supplementary data like alarms.

This has been solved by importing each calendar object resource within separate transaction, extended alarm validity check.

**MWB-235 Runallupdate Results in Hazelcast errors**

Missing upgrade package for hazelcast enterprise.

This has been fixed by adding a hazelcast enterprise upgrade package: open-xchange-cluster-enterprise-upgrade-from-7102.

**MWB-273 Unexpected error [Error performing calendar migration in context xxx] caused by NullPointerException**

A missing value within the legacy series pattern causes an unhandled exception when trying to convert it into a recurrence rule.

Fall back to “first” week when converting monthly\_2/yearly\_2 patterns if not specified.

**MWB-323 “set” in sieve rule: mailfilter page not loading**

Action command parser was missing.

This has been solved by adding action command parser for set action.

**MWB-419 Only 500 appointments are synced via CalDAV**

Used wrong default value.

This has been solved by using correct default value.

**MWB-437 “Remember me“-funktion is not working**

Open-xchange-session cookie was not set on successful /login?action=tokens response even though it should.

This has been solved by writing session cookie on token login.

**MWB-503 Error message and stacktrace during / on deletion of a user using deleteuser cmd**

Null connection returned to the DatabaseService.

Don’t return null connection to the DatabaseService to solve this issue.

**66622 Confirmation mail of appointment ever in English and Coordinated Universal Time**

For events where the (external) organizer is not attending, the timezone is not set explicitly and falls back to the system default.



This has been solved by preferring event timezone in notification mails for external organizer that does not attend the meeting.

**66771 Portal: Twitter does not work**

Wrong "API" parameter was used.

This has been fixed by adding correct API string to the request.

**67184 Error "Mail could not be found" opening webmail on mobile devices (Android/ios)**

Was caused by separate handling for savepoints on smartphones and other devices.

This has been solved by extending initial fix to also cover smartphones.

**67325 Not syncing all appointments in the future**

Was caused by hard coded limit for future appointments of 3 years.

This has been fixed by making this limit configurable in eas.properties: com.openexchange.usm.eas.appointments.future.time\_limit

**67692 Problem displaying videos**

The "important" CSS style value was dropped.

This has been solved by keeping the "important" CSS style value is dropped.

**67718 Vacation notice in UI available even if mail backend does not support this**

Action command was not checked for drop down in mail toolbar.

This has been solved by checking vacation action before rendering dropdown link.

**67883 OXUserCopyService.copyUser(): Unexpected problem occurred**

Duplicate task leads to abortion of user copy operation.

Solution: Do not hard fail on duplicate task, but handle it gracefully.

**68091 Found no such composition space**

Existing mechanism to periodically perform a clean-up task for expired composition spaces might not trigger actual clean-up often enough.

This has been solved by choosing another mechanism to periodically perform a clean-up task for expired composition spaces.

**68105 Dead links on documentation.o.c**

Some dead links and obsolete infos.

This has been solved by cleaning up start page and removed obsolete information.

**68150 Shift+Enter does not work with Firefox**

Scroll behavior in enter key listener changed selection.

This has been solved by checking shift key too and prevent execution in that case.

**68163 Letters with descenders (like p, g, y lowercase ) have bottom truncated**

Firefox has some issues with visibility hidden and descenders.

This has been fixed by adjusting css with padding and negative margins.

**68205 Wrong font is displayed in toolbar for empty lines when replying a mail**

Selection is modified to get correct scrollbehavior but not restored correctly afterwards.

This has been fixed by restoring selection correctly.

**68285 Filter rules can have > 2GB if using GB/MB/KB**

Unit was not considered when checking size.

This has been solved by adjusting check accordingly.

**68343 Emails are not sent as HTML and text**

No support for contentType multipart/alternative with initial new compose api.

This has been solved by adding support for it, Appsuite UI now send this as a parameter. The MW will then create a html/text part from the html part.

**68351 Google account after password change offers "Try again"**

This has been adjusted and for error code OAUTH-0013 button "Try again" is replaced by "Edit accounts" that links to corresponding settings pane.

**68397 Tasks are reset iPhone**

A NPE was triggered if start\_time is not set(null).

This has been fixed by using correct variable to determine UTC time difference.

**68421 HTML and CSS problem in combination with media-queries**

Every rule in the stylesheet was treated as a css rule.

This has been solved by treating rules according to rule type.

**68424 AM1 & AM2 Sent Mail Listing Missing Recipients**

Overlapping addresses were not correctly handled.

This has been fixed by adjusting associated css.

**68435 Error occurs when moving mail from external account to default**

Mix-up of folder to account association when composing JSON response.

This has been fixed by accessing folder in proper account.

**68444 Name of external account in mail compose**

Name of external account name was not offered after adding a new external mailaccount.

This has been solved by adding handling for an active mail compose window when a mail account get's added/removed.

**68501 Distribution list is not shown in mail compose address picker**

Now a popup is displayed if maxlimit for the addresspicker is reached and "admin=false" parameter is respected if applying index range.

**68507 External Drive: Old name displays in Settings - Account for external drive after re-naming in Drive**

Accounts get's refreshed now once a related folder get's updated to solve this issue.

**68510 MAC contacts app does not allow to add new contacts to OX on Catalina**

The contacts application in the latest macOS release introduced a bug where the current user's privileges were derived from the virtual root, and not the actual contacts collection.

This has been fixed by indicating privileges from default folder also for root collection for macOS client.

**68516 Caldav Sync Problem - 500 CalDAVAccountRefreshQueueableOperation**

URIs in href-elements within a PROPFIND request from a client may get decoded two times under certain circumstances, which might lead to a runtime exception whenever the original URI contains the percent sign '%'.  
Solution: Ensure to decode percent-encoded values only once.

**68522 Mail settings not displayed when mailfilter package (API) not enabled**

Missing capability check before sending requests to the API.

This has been solved by adding "global" capability check in internal API module.

**68539 Draft preview doesn't work**

Dependent on MAL implementation, an absent subject is returned as null, which confuses App Suite UI.

Solution: Advertise a missing subject as an empty string within output layer.

**68584 logout with an unfinished mail on Android causes Error "Mail could not be found" after some repetitions**

Issue was caused by race condition (multiple almost simultaneous removeRestorePoint calls)

**68606 Backend fetches SNIPPETS from external accounts once this account provides "SNIPPET=FUZZY"**

Missing config switch in settings-list.  
Added missing config key to documentation.open-xchange.com

**68612 Strange behavior of calendar Appointments**

When serving the 'all' request, a potential exception is raised when recurrences are processed.  
Solution: Additional exception handling when processing loaded event data, increased logging capabilities.

**68615 Failure on adding email address to guard key**

Code expected RSA key, failed with DSA. The fix removes specified cast, uses existing public key algorithm

**68629 Appointment with the same start as end date/time cannot be viewed in month view**

This has been fixed by adding missing handling for this special case.

**68666 Connection refused nginx - appsuite**

Websocket push using Socket.IO in combination with Grizzly TLS causes deadlocks in Grizzly selector threads.

This has been solved by reducing lock scope in original implementation. Furthermore offer a whole different Socket.IO implementation that uses less locking overall.

**68684 deleting account does only delete "inner" account, leaving the "outer" one as it is**

Adjust to latest API behaviour when removing folders associated to accounts.

**68689 Script errors in IE and Firefox**

Some model changes might trigger long running redraw actions, which block the browser and might even lead to "long running script"-warning.

This has been solved by preventing browsers from redrawing the whole list where possible.

**68734 Subject Line Cyrillic encoding preview issue**

Don't attempt to re-encode subject string given by ENVELOPE fetch item to solve the cyrillic encoding issue.

**68744 Shared Calendar Abonnement Setting not kept for Google and Default Calender**

Folder properties are protected, but the UI does not respect that.

This has been solved by disabling the checkmark if the sync property is protected such that the user will not be able to sync google calendars for example.

**68762 Calendar can not be synced anymore to iPhone**

A change exception where the series master event could no longer be looked caused a runtime exception when converting the data to an appointment as used by the legacy calendar API.

Now do not fail if the recurrence identifier cannot be converted to the corresponding recurrence (date) position.

**68773 Error Description Improvement in the WebUI**

USM can not send an error message, the communication is restricted to the http return code for a failed login.

Increased logging: Increase the level for those kind of log messages from DEBUG to INFO.

**68803 OX drive disappears**

Actually undefined properties are cached at the "configuration" provider of the config cascade once they've been queried for the first time. This happens implicitly when the final scope is determined for a property that was picked up at another level of the config cascade. In case such properties are prefixed with "com.openexchange.capability.", they're also considered and evaluated to "false" when constructing the capability set for any other user, potentially overriding module permissions

if they've been used in a discouraged way of using the permission identifier as capability property name.

This has been fixed by ignoring undefined capability properties when building the capability set, added debug logging to reveal problematic configurations.

## 5 Changes relevant for Operators

### 5.1 Changes of Configuration Files

#### **Change #SCR-554 New mapping file for import of Outlook2016 address book**

New configuration file for mapping contact fields for Outlook2016 has been added: outlook2016.en\_EN.properties in directory /opt/open-xchange/importCSV/.

#### **Change #SCR-562 Added the ability to allow or denied hosts when a file is uploaded by user to an office document**

Each time when a user adds a file from url to a office document the host will be checked against a white- and blacklist if the selected host can be used. Adding new file upload related properties to /opt/open-xchange/etc/documents.properties

#### **Change #SCR-588 Added new lean boolean property that controls whether stateless or statefull Dovecot Push implementation is used**

Added new lean boolean property `com.openexchange.push.dovecot.stateless` that controls whether stateless or statefull Dovecot Push implementation is used. Default value is `true`.

#### **Change #SCR-593 Made properties for Siptgate SMS service reloadable and config-cascade aware**

Made properties `com.openexchange.sms.siptgate.username`, `com.openexchange.sms.siptgate.password` and `com.openexchange.sms.siptgate.maxLength` reloadable and config-cascade aware along with refactoring Siptgate SMS service to use Siptgate's REST API.

#### **Change #SCR-596 Disabling not needed Hazelcast runtime service for DC server within overwrite.properties**

The DocumentConverter (DC) server needs some Hazelcast bundles as indirect dependencies but does not need the Hazelcast functionality itself at runtime. As such, Hazelcast functionality should be disabled for the DC server runtime during startup.

Solution: Setting the config item '`com.openexchange.hazelcast.enabled=false`' within the `overwrite.properties` file of the DC server deployment disables the startup of not needed Hazelcast services for the DC server. The DC server `overwrite.properties` config file is located at: /opt/open-xchange/documentconverter/etc/overwrite.properties

#### **Change #SCR-597 Added property `com.openexchange.http.deferrer.maxParameterLength`**

Added property "`com.openexchange.http.deferrer.maxParameterLength`", which specifies the max. size in bytes allowed for parameters of requests targeted at deferrer end-point. Default value: 10240 (10 KB).

#### **Change #SCR-599 New value 'nps-v1' for property '`com.openexchange.userfeedback.mode`'**

To enable the NPS feedback mode it is possible to use the feedback type identifier 'nps-v1' as value for '`com.openexchange.userfeedback.mode`'.

#### **Change #SCR-603 Added several lean configuration options for outbound HTTP communication from OpenID and OAuth authentication module**

Added the following lean configuration options for outbound HTTP communication for OpenID module

- `com.openexchange.httpclient.oidc.totalConnections` - The max. number of concurrent HTTP connections that may be established. If you have specified more than one hosts, this setting should be configured so that `connectionsPerRoute < totalConnections <= n * connectionsPerRoute`.

- `com.openexchange.httpclient.oidc.connectionsPerRoute` - The max. number of concurrent HTTP connections that may be established with a certain endpoint
- `com.openexchange.httpclient.oidc.connectTimeout` - The connection timeout in milliseconds. If establishing a new HTTP connection to a certain host exceeds this value, a timeout exception is thrown.
- `com.openexchange.httpclient.oidc.readTimeout` - The socket read timeout in milliseconds. If waiting for the next expected TCP packet exceeds this value, a timeout exception is thrown.
- `com.openexchange.httpclient.oidc.connectionRequestTimeout` - The pool timeout in milliseconds. If waiting for the next available HTTP connection from pool exceeds this value, a timeout exception is thrown.

Added the following lean configuration options for outbound HTTP communication for OAuth authentication module

- `com.openexchange.httpclient.oauth-authentication.totalConnections` - The max. number of concurrent HTTP connections that may be established. If you have specified more than one hosts, this setting should be configured so that `connectionsPerRoute < totalConnections <= n * connectionsPerRoute`.
- `com.openexchange.httpclient.oauth-authentication.connectionsPerRoute` - The max. number of concurrent HTTP connections that may be established with a certain endpoint
- `com.openexchange.httpclient.oauth-authentication.connectTimeout` - The connection timeout in milliseconds. If establishing a new HTTP connection to a certain host exceeds this value, a timeout exception is thrown.
- `com.openexchange.httpclient.oauth-authentication.readTimeout` - The socket read timeout in milliseconds. If waiting for the next expected TCP packet exceeds this value, a timeout exception is thrown.
- `com.openexchange.httpclient.oauth-authentication.connectionRequestTimeout` - The pool timeout in milliseconds. If waiting for the next available HTTP connection from pool exceeds this value, a timeout exception is thrown.

#### **Change #SCR-604 Changes in OX PNS configuration**

Added property topic for clients configured in `pns-apns-options.yml`, specifying the topic to use for OX PNS push notifications. Topic is the iOS app's bundleId. No default value. Dropped lean property `com.openexchange.pns.transport.apn.ios.feedbackQueryInterval`. Property is not needed anymore with new push mechanism via HTTP/2.

#### **Change #SCR-605 Added several lean configuration options for WebDAV filestorage integration**

Added the following lean configuration options for WebDAV filestorage integration:

- `com.openexchange.capability.filestorage_webdav`, which allows a user to integrate a WebDAV account as file storage. Default: false
- `com.openexchange.capability.filestorage_owncloud`, which allows a user to integrate an OwnCloud account as file storage. Default: false
- `com.openexchange.capability.filestorage_nextcloud`, which allows a user to integrate a NextCloud account as file storage. Default: false

#### **Change #SCR-615 Unicode quotes in dynamic theme properties file replaced**

The properties configuration file for the dynamic theme used non-ASCII characters, which can cause problems on systems, not using the used UTF-8 character set. Therefore those characters need to

be replaced with ASCII characters.

### Change #SCR-617 Introduced HTTP client properties

With 7.10.4 a new OSGi service `com.openexchange.rest.client.httpclient.HttpClientService` is added. This service manages HTTP clients. Each client managed by this service can have an independent configuration for e.g. read timeouts as well as a general default. The general default can be configured via

```
com.openexchange.httpclient.readTimeout=30000
com.openexchange.httpclient.connectTimeout=30000
com.openexchange.httpclient.connectionRequestTimeout=30000
com.openexchange.httpclient.keepAlive.duration=20
com.openexchange.httpclient.keepAlive.monitorInterval=5
com.openexchange.httpclient.totalConnections=20
com.openexchange.httpclient.connectionsPerRoute=10
com.openexchange.httpclient.socketBufferSize=8192
```

For a specific client, the client ID must be added, which will look like, e.g.

```
com.openexchange.httpclient.icalfeed.readTimeout=30000
com.openexchange.httpclient.icalfeed.connectTimeout=30000
com.openexchange.httpclient.icalfeed.connectionRequestTimeout=30000
com.openexchange.httpclient.icalfeed.keepAlive.duration=20
com.openexchange.httpclient.icalfeed.keepAlive.monitorInterval=5
com.openexchange.httpclient.icalfeed.totalConnections=20
com.openexchange.httpclient.icalfeed.connectionsPerRoute=10
com.openexchange.httpclient.icalfeed.socketBufferSize=8192
```

Known clients are

- Autoconfiguration ISPDB - `autoconfig-ispdb`
- Autoconfiguration configuration server - `autoconfig-server`
- DAV Push - `davpush`
- DAV Subscribe - `davsub`
- Dovecot Admin - `dovadm`
- Dropbox - `dropbox`
- iCAL Feed - `icalfeed`
- Microsoft Graph - `msgraph`
- Proxy - `proxy`
- RestExecutor - `rest`
- SAML OAuth - `saml-oauth`
- Schedjoules - `schedjoules`
- Sipgate - `sipgate`
- Spam experts - `spamexperts`
- SProxyD - `sproxyd-[filestoreId]`
- XING - `xing`

Because some clients did have some programmatic defaults in previous versions, we needed to add those explicit to avoid changed behavior with HTTP clients. Therefore also introduced 'legacy' properties.

```
com.openexchange.httpclient.autoconfig-server.readTimeout
com.openexchange.httpclient.autoconfig-server.connectTimeout
com.openexchange.httpclient.davpush.connectTimeout
com.openexchange.httpclient.davpush.totalConnections
com.openexchange.httpclient.davpush.connectionsPerRoute
com.openexchange.httpclient.dropbox.readTimeout
com.openexchange.httpclient.dropbox.connectTimeout
com.openexchange.httpclient.proxy.readTimeout
com.openexchange.httpclient.proxy.connectTimeout
com.openexchange.httpclient.spamexperts.connectTimeout
com.openexchange.httpclient.spamexperts.totalConnections
com.openexchange.httpclient.spamexperts.connectionsPerRoute
com.openexchange.httpclient.davsub.readTimeout
com.openexchange.httpclient.davsub.connectTimeout
com.openexchange.httpclient.davsub.totalConnections
com.openexchange.httpclient.davsub.connectionsPerRoute
```

For an complete property overview please have a look at

- <https://documentation.open-xchange.com/components/middleware/config/7.10.4/#mode=features&feature=HTTP%20Client%20Configuration>
- <https://documentation.open-xchange.com/components/middleware/config/7.10.4/#mode=features&feature=HTTP%20Client%20Configuration%20legacy%20values>

For further details on how configuration influences the client see [https://documentation.open-xchange.com/7.10.4/middleware/administration/http\\_client\\_configuration.html](https://documentation.open-xchange.com/7.10.4/middleware/administration/http_client_configuration.html)

#### **Change #SCR-618 Introduced lean setting to control whether to consider Doveadm for issuing METADATA commands**

Introduced lean setting "com.openexchange.push.dovecot.preferDoveadmForMetadata" whether to consider Doveadm for issuing METADATA commands. Default is "false"

#### **Change #SCR-626 Added new lean configuration option for considering trash folder via Web-DAV**

Added the new lean configuration option com.openexchange.infostore.trash.useForWebdav which enables trash folder support when accessing the infostore via WebDAV. Default: true

#### **Change #SCR-632 Prevent configuration / provisioning of capabilities which are actually permissions**

Up until now it was unintentionally possible to configure / provision permissions via capabilities. E.g. for 'infostore' by configuring com.openexchange.capabilities.infostore=true. This was not intentional and should be avoided. Therefore with this release this option is deprecated and will be removed with the next release.

Now an error will be thrown in case a permission is provisioned via a capability and additionally already existing capabilities will be ignored when the capabilities of an user or context are generated. In order to restore the old behavior two new properties has been introduced which both default to false:

- com.openexchange.capabilities.allowIllegalPermissionProvisioning: If set to true this property allows one to provision capabilities which are actually permissions.
- com.openexchange.capabilities.applyIllegalPermissions: If set to true this property applies those illegal capabilities when the capabilities of an user or context are generated.

#### **Change #SCR-633 Introduced the new property com.openexchange.calendar.preferNoReplyForNotifications**

Introduced the new property 'com.openexchange.calendar.preferNoReplyForNotifications'. If set to true internal notification mails are send with the noreply account instead of with the users mail

account. The mail headers are still the same though. This way an admin is able to create special mail queues for those emails.

#### **Change #SCR-636 New property `com.openexchange.calendar.allowOrganizerPartStatChanges`**

A new lean property named "`com.openexchange.calendar.allowOrganizerPartStatChanges`" is introduced to configure whether organizer changes of the participation status property of other attendees are allowed beyond the recommended restrictions mentioned in RFC 6638, section 3.2.1. Otherwise, only transitions to NEEDS-ACTION are possible.

For further details, see <https://documentation.open-xchange.com/components/middleware/config/7.10.4/#mode=search&term=com.openexchange.calendar.allowOrganizerPartStatChanges>

#### **Change #SCR-638 New properties to configure the internet free busy servlet**

The following new lean properties are introduced to enable and configure the internet free busy servlet:

- `com.openexchange.calendar.enableInternetFreeBusy`: Enables the internet free busy REST endpoint for public access. Default value is false.
- `com.openexchange.calendar.publishInternetFreeBusy`: Defines whether the free busy data is published for the free busy servlet or not. Default value is false.
- `com.openexchange.calendar.internetFreeBusyMaximumTimerangePast`: Defines the maximum time range into the past in weeks that can be requested by free busy servlet. Default value is 12 weeks into the past.
- `com.openexchange.calendar.internetFreeBusyMaximumTimerangeFuture`: Defines the maximum time range into the future in weeks that can be requested by free busy servlet. Default value is 26 weeks into the future.

#### **Change #SCR-639 New lean configuration property `com.openexchange.drive.maxConcurrentSyncFiles`**

A new lean, config-cascade-enabled property named `com.openexchange.drive.maxConcurrentSyncFiles` is introduced, defaulting to a value of 10.

The actual value is indicated to OX Drive clients to signal how many synchronization requests of folder contents should be bundled within a single `multiple-Request`.

#### **Change #SCR-643 Changed folder-move related configuration**

To extend the ability to inherit parent folder's permission on folder moves for private and shared folders, new lean properties are introduced:

- `com.openexchange.folderstorage.permissions.moveToPublic`
- `com.openexchange.folderstorage.permissions.moveToShared`
- `com.openexchange.folderstorage.permissions.moveToPrivate`

For each property, the modes `keep`, `inherit` and `merge` are possible. For `keep`: The permissions of moved folder and of its subfolders remain unchanged. This is the default value for all three properties. For `inherit`: The permissions of new parent folder are applied to the moved folder and all of its subfolders. For `merge`: The permissions of new parent folder and moved folder are first merged, then applied to moved folder and all of its subfolders.

Drop property `com.openexchange.folderstorage.inheritParentPermissions`. If `com.openexchange.folderstorage.inheritParentPermissions` was formerly set to `true`, this value will be considered when moving a folder into the `public-folder-tree`.

#### **Change #SCR-644 Added new lean configuration option for blacklisting WebDAV hosts**

Introduced a new lean configuration property `com.openexchange.file.storage.webdav.blacklistedHosts` which defines a blacklist of WebDAV hosts which must not be accessible. `defaultValue: 127.0.0.1-127.255.255.255,localhost`

Introduced a new lean configuration property `com.openexchange.file.storage.webdav.allowedPorts`



which defines a list of ports allowed to be accessed for WebDAV. The default value is empty, which means all ports are allowed.

#### **Change #SCR-647 Introduced new micrometer properties**

With 7.10.4 we introduced new properties which configure the way metrics are published. The following properties were introduced:

- `com.openexchange.metrics.micrometer.enable.[METRIC_NAME]`: Enables/Disables that specific metric
- `com.openexchange.metrics.micrometer.enable.all`: Enables/Disables all metrics.
- `com.openexchange.metrics.micrometer.distribution.histogram.[METRIC_NAME]`: Enables/Disables the percentiles histogram of that specific metric.
- `com.openexchange.metrics.micrometer.distribution.percentiles.[METRIC_NAME]`: Defines the percentiles to publish for that specific metric.
- `com.openexchange.metrics.micrometer.distribution.slo.[METRIC_NAME]`: Defines the SLOs to publish for that specific metric.
- `com.openexchange.metrics.micrometer.distribution.minimum.[METRIC_NAME]`: Defines the lower bound of percentile histogram buckets to publish for that specific metric.
- `com.openexchange.metrics.micrometer.distribution.maximum.[METRIC_NAME]`: Defines the upper bound of percentile histogram buckets to publish for that specific metric.
- `com.openexchange.metrics.micrometer.query.[PSEUDO_NAME]`: Defines a query which can further filter all metrics by tags. The `[PSEUDO_NAME]` is then used to access all `enable` and `distribution.*` properties (it replaces the `[METRIC_NAME]`).

All properties are reloadable.

#### **Change #SCR-648 Removed ldap.properties and associated functionality**

The properties in the `ldap.properties` file are remnants from a previous versions of the appsuite middleware. They are not used for some time now and therefore all those properties and all associated functionality is going to be removed.

#### **Change #SCR-655 Add lean configuration for application passwords**

The following lean configuration settings added for application passwords

- `com.openexchange.com.openexchange.authentication.application.enabled` - Global enabled/disabled of application passwords
- `com.openexchange.com.openexchange.authentication.application.blacklistedClients` - List of clients that should not be able to use application passwords
- `com.openexchange.com.openexchange.authentication.application.appTypes` - List of types of applications supported for application passwords
- `com.openexchange.authentication.application.storage.rdb.enabled` - Enabling default storage package
- `com.openexchange.authentication.application.storage.rdb.contextLookupNamePart` - Define the method for looking up context based on login
- `com.openexchange.authentication.application.storage.rdb.storeUserPassword` - Determine if the users password should be stored in the application password database for accessing IMAP accounts

#### **Change #SCR-657 Example yml file for application-passwords**

Details of the supported applications, their names, sort order, and permission scopes are to be

configured in a YAML file. To aid in this setup, a sample configuration file "app-passwords-apps-template.yml" file is shipped with the installation.

#### **Change #SCR-662 Configurable IMAP command monitoring**

Advanced monitoring capabilities for IMAP have been introduced. While the default configuration is defined to keep the monitoring footprint small, output can be made more verbose. The following lean properties have been introduced (imap.properties):

- com.openexchange.imap.metrics.enabled
- com.openexchange.imap.metrics.groupByPrimaryHosts
- com.openexchange.imap.metrics.groupByPrimaryEndpoints
- com.openexchange.imap.metrics.measureExternalAccounts
- com.openexchange.imap.metrics.groupByExternalHosts
- com.openexchange.imap.metrics.groupByCommands
- com.openexchange.imap.metrics.commandWhitelist

#### **Change #SCR-667 Configuration to enable/disable mentions in comment**

With 7.10.4, the mentions features in comments has been introduced for OX Spreadsheet and OX Presentation. This feature is turned on by default, but can be configured with the following property: io.ox/office//module/mentionsEnabled = true|false (default: true)

#### **Change #SCR-669 Introduced new configuration system for s3 clients**

Introduced a new configuration system for s3 clients which allows the configuration of s3 clients for multiple filestores.

Most of the already existing properties have been duplicated. Those are now not only applicable for a single filestore but for all filestore which match the new buckets property.

Here is the list of the duplicated properties. They have the same meaning and default value as the original ones:

- com.openexchange.filestore.s3client.[clientID].endpoint
- com.openexchange.filestore.s3client.[clientID].region
- com.openexchange.filestore.s3client.[clientID].pathStyleAccess
- com.openexchange.filestore.s3client.[clientID].secretKey
- com.openexchange.filestore.s3client.[clientID].encryption
- com.openexchange.filestore.s3client.[clientID].encryption.rsa.keyStore
- com.openexchange.filestore.s3client.[clientID].encryption.rsa.password
- com.openexchange.filestore.s3client.[clientID].signerOverride
- com.openexchange.filestore.s3client.[clientID].chunkSize
- com.openexchange.filestore.s3client.[clientID].connectTimeout
- com.openexchange.filestore.s3client.[clientID].readTimeout
- com.openexchange.filestore.s3client.[clientID].maxConnectionPoolSize
- com.openexchange.filestore.s3client.[clientID].credentialsSource

Additional the new `com.openexchange.filestore.s3client.[clientID].buckets` property has been introduced which contains all buckets the client serves. The property is reloadable and has no default value.

**Change #SCR-679 Added option for data export to control whether "permission denied" errors are considered for diagnostics report**

Added lean option for data export to control whether "permission denied" errors are considered for diagnostics report

- `com.openexchange.gdpr.dataexport.considerPermissionDeniedErrors` - Whether to add "permission denied" errors to diagnostics report. Requires that "`com.openexchange.gdpr.dataexport.addDiagnosticsReport`" is set to "true", otherwise it will be ignored

**Change #SCR-675 Added new settings to control availability of a certain push implementation**

Added new lean settings to control availability of a certain push implementation

- `com.openexchange.push.dovecot.enabled` - Enabled or disables Dovecot Push. Reloadable and config-cascade aware.
- `com.openexchange.push.imapidle.enabled` - Enabled or disables IMAP IDLE Push. Reloadable and config-cascade aware.
- `com.openexchange.push.mail.notify.enabled` - Enabled or disables Mail Notify Push. Reloadable and config-cascade aware.

**Change #SCR-677 Introduced setting to specify wait timeout for asynchronous ramp-up during login execution**

Introduced new lean property to specify wait timeout for asynchronous ramp-up during login execution, which was formerly hard-coded

- `com.openexchange.ajax.login.rampup.timeoutSeconds` - Specifies the timeout in seconds when awaiting completion of asynchronously performed ramp-up actions during login execution. Default value is 10. Property is reloadable as well as config-cascade aware

**Change #SCR-682 Added property to specify the number of used threads when sending out notifications to internal users**

Added lean property to specify the number of used threads when sending out notifications to internal users

- `com.openexchange.share.notification.numOfNotificationThreads` - Specifies the number of threads that are used to concurrently send out notification mails to internal users when a folder gets shared. Default is 10. Config-cascade aware and reloadable.

**Change #SCR-688 Added several lean configuration options for IMAP trace logging**

All configuration options are reloadable and config-cascade aware.

- `com.openexchange.imap.debugLog.enabled`
- `com.openexchange.imap.debugLog.file.path`
- `com.openexchange.imap.debugLog.file.size`
- `com.openexchange.imap.debugLog.file.count`
- `com.openexchange.imap.debugLog.file.pattern`

**Change #SCR-658 Introduced limits for the maximum number of permissions**

Introduced two new configurable (lean) limits which limit the maximum amount of permissions allowed for folders and files:

- `com.openexchange.folder.maxPermissionEntities` - Specifies the maximal allowed number of folder permissions. Default value is 100. Config-cascade aware and reloadable.
- `com.openexchange.infostore.maxPermissionEntities` - Specifies the maximum allowed number of object permissions. Default value is 100. Config-cascade aware and reloadable.

**Change #SCR-690 New property to control implicit removal of timed out sessions from distributed storage**

When a session times out on one middleware node after a certain period of inactivity, its reference in the distributed session storage is removed implicitly, too.

This might not be ideal in some situations, especially when the same session is also in use on another middleware node at the same time, and a premature removal from the distributed storage would lead to a missing session failover capability then.

Therefore, a new lean property named `com.openexchange.sessiond.removeFromSessionStorageOnTimeout` is introduced to configure whether sessions that were rotated out of the containers are implicitly also removed from the session storage or not. It defaults to true so that the default behavior remains unchanged, though.

If set to false, the session in the in the distributed session storage will still get evicted if being idle for some time, as specified in the map config at `hazelcast/session.properties`.

**Change #SCR-692 Added new s3 lean property `com.openexchange.filestore.s3client.[clientID].maxRetries`**

Added a new lean property which controls the number of max retries of the s3 client (default = 3): `com.openexchange.filestore.s3client.[clientID].maxRetries`

**Change #SCR-693 New property `com.openexchange.calendar.maxConferencesPerEvent`**

Appointments can be extended with information about one or more "conference" properties. For self-protection purposes, the lean configuration property `com.openexchange.calendar.maxConferencesPerEvent` is introduced to specify how many of them can be associated with an event. The value can be configured through the config-cascade and defaults to 100.

**Change #SCR-697 Appointment notification templates extended to show conferences**

The notification templates used by the scheduling subsystem of the middleware to describe new and updated appointments is extended to also include details of conferences associated with the appointment. In particular, the generic templates `notify.appointment.show.html.tmpl` and `notify.appointment.show.txt.tmpl` that are included by various other templates are updated accordingly.

**Change #SCR-698 Added new cache region for groups to 'cache.ccf' configuration file**

Added (non-lean!) new cache region for groups to 'cache.ccf' configuration file.

**Change #SCR-703 New configuration property to bypass access combination checks during provisioning**

In former times access to the global address book has been a requirement for other groupware features, in particular access to public and shared folders. Although useful in most cases - technically, this restriction is no longer required, and therefore a new configuration switch is introduced so that these checks can be bypassed during provisioning operations.

The new lean property is named `com.openexchange.admin.bypassAccessCombinationChecks` and defaults to false, so that the behavior remains unchanged unless explicitly changed. It can be configured via the config-cascade up to the context level. If set to true, certain checks for illegal access combinations will not be performed, in particular the permissions `editpublicfolders`, `readcreate-sharedfolders`, `delegatetask` and `webdavxml` will then be possible in combination with `globaladdressbookdisabled` being set.

**Change #SCR-707 New properties to hide system groups from API responses**

The group service offers methods to retrieve information about all groups within a context. This also includes the "virtual" groups "All Users" and "All Guests", and the automatically populated "Standard Group".

While it is necessary that those groups do exist in a context for different purposes (e.g. as permission entries in folders), they may not be really useful in client responses of the "all" action of the "group" module as they cannot be edited anyway. Also, in very large contexts with many users, it may be helpful if such groups would not be included in responses to search requests, e.g. during auto-complete for participants when creating new appointments, as the members are automatically "expanded", then.

Therefore, new options are introduced to hide those groups for the "all" and "search" methods. However, those groups will still be accessible when being directly targeted by their identifiers in the "get" and "list" calls, or for provisioning operations.

The settings are configurable through the config-cascade, with the following defaults:

- com.openexchange.group.hideAllUsers=false
- com.openexchange.group.hideAllGuests=true
- com.openexchange.group.hideStandardGroup=true

**Change #SCR-704 Added possibility to deny auto-creation of a new schema in case all suitable schemas are currently locked (update running) or need an update (update tasks pending)**

Introduced setting "ALLOW\_CREATING\_NEW\_SCHEMA\_IF\_ALL\_LOCKED\_OR\_NEED\_UPDATE" in file 'hosting.properties' to control whether auto-creation is performed or not for that special case. To not break current behaviour, its default value is assumed to be "true".

## 5.2 Changes of Database Schema

**Change #SCR-583 Column "recurrence" extended in tables calendar\_event, calendar\_event\_tombstone and calendar\_alarm\_trigger**

The column recurrence in the database tables calendar\_event, calendar\_event\_tombstone and calendar\_alarm\_trigger is extended to store more characters. Afterwards, the updated column definition will be: recurrence VARCHAR(64) COLLATE utf8mb4\_bin DEFAULT NULL

**Change #SCR-600 New table 'feedback\_nps\_v1' for global database to persist NPS user feedback**

The global database will be extended by the table 'feedback\_nps\_v1' to persist the NPS related user feedback.

**Change #SCR-608 Support for "reply\_to" field in new mail compose implementation**

Support for "reply\_to" field in new mail compose implementation through adding VARCHAR column "replyToAddr" to "compositionSpace" table.

**Change #SCR-613 Remove wrong DAV user agent names from user\_attribute table**

Removed values of DAVUserAgent enum from user\_attribute table. For the complete list of removed names see UpdateTask RemoveDAVUserAgentNamesForMWB58

**Change #SCR-621 Created appPasswords database table to support application passwords**

Created tables in the user databases to store application passwords.

**Change #SCR-654 Created table to list history of application password use**

Created a table in the user database to keep track of the login history for application passwords.

**Change #SCR-668 Reassign guest user to context admin in case the original user was deleted**

A guest user is created by a regular user. A reference to this user can be found in the column "guestCreatedBy". If a user who created a guest user is deleted, the reference to this user still exists. So that the database refers to a non-existent user. This is adjusted with the fix for MWB-257. From now on, when deleting a user, there will be a check which guest user the user has created and the reference will be redirected to another user (default: admin). This UpdateTask adjusts existing guest users with deleted users and sets the column "guestCreatedBy" for these guest users to the context admin id.

**Change #SCR-695 New database tables for "calendar\_conference" and "calendar\_conference\_sequence"**

In order to store data for conferences attached to events, the following database tables are introduced: calendar\_conference and calendar\_conference\_sequence. They'll get created through the database update task com.openexchange.chronos.storage.rdb.groupware.CalendarAddConferenceTablesTask.

### 5.3 Changes of Commandline Tools

**Change #SCR-610 Added a new command-line tool named appsuiteui-history**

Added a new command-line tool named appsuiteui-history

**Change #SCR-660 Introduced a new command line tool for listing all users' external accounts**

Introduced a new command line tool for deleting users' external accounts.

**Change #SCR-661 Introduced a new command line tool for deleting users' external accounts**

Introduced a new command line tool for deleting users' external accounts.

**Change #SCR-672 Introduced gabMode for CLTs**

The CLT createcontext has been enhanced by the flag `-gabMode` to set the GABMode. Note: No short option as `-g` is already taken.

The CLT restoregabdefaults has been enhanced by the flags `-gabMode` or `-g` to set the GABMode. The mode will influence if individual permissions for each user or a global permissions for "all users and groups" will be saved in the DB. This will influence the size of responses for the GAB and its permissions.

Per default no value is set which will be interpreted as "individual" permissions for each user (like before).

### 5.4 Changes of Behavior

**Change #SCR-624 Add new @Interface to restrict api access when using application passwords**

With application passwords, like oauth, authentication is limited to certain functionality. Adding `@RestrictedAction` interface to be used with certain api actions. For example, for a folder action, the following may be added to the action class. When an application password is used, it must have the module permission, otherwise an unauthorized error will be thrown.

**Change #SCR-631 Exposing trash folder via WebDAV by default**

The infostore trash folder is now exposed via WebDAV by default. However, there is still the possibility to hide the trash by setting the new configuration option `com.openexchange.infostore.trash.useForWebdav` to false.

**Change #SCR-585 Refactored Dovecot Push to use a lean and stateless implementation**

The implementation of the Dovecot Push has been refactored. There is no longer a push listener representation in application's memory since Dovecot Push does not require an active resource being managed (such as a socket connection).

This drastically lowers memory footprint and avoids useless re-scheduling of "listeners" on topology changes.

In consequence, the pushusers command-line tool will no more list push users when Dovecot Push is running. Same applies to the listPushUsers SOAP end-point for <http://my.open-xchange.com:8009/webservices/PushSoapInterface>. As there is no push listener representation anymore, the Open-Xchange Middleware can no longer serve that request.

#### **Change #SCR-587 Changed value for constant carrying static virtual identifier for mail root folders**

Changed value for constant carrying static virtual identifier for mail root folders from "default" to "" (empty string).

#### **Change #SCR-659 Async delivery of "internal" sharing mails**

If a context consists of thousands of users, sharing a folder to the "All user group" and finally creating sharing mails for all users can take some time. While all those mails are generated and send, the MW currently blocks the response to the client to transmit all errors that might occur in the process. This then blocks the UI which waits for a response to allow the user to handle those errors. To mitigate the problem the MW will now only gather errors that occur while sending sharing mails to external users.

The creation of sharing mails for internal users will be handled by another thread, which will log potential errors. Please note that internal users will have access to the shared object even without a mail, therefore a mail to an internal user is not essential for functionality.

#### **Change #SCR-637 Code-wise changes of customizations are only necessary for contexts where preferSentDate is set to true**

Column 609 represents sent\_date while 610 represents received\_date. The middleware introduced a "magic" date field 661 that contains one of those based on 'com.openexchange.mail.preferSentDate' (default false).

## **5.5 Changes of Packaging**

#### **Change #SCR-575 Remove UWAWidgets**

Removed the already deprecated code (with 7.10.3) regarding UWAWidgets. Code and bundles are dropped.

#### **Change #SCR-577 Remove Swift filestore**

With 7.10.4 we finally remove the already deprecated swift filestore. Code and bundles are dropped

#### **Change #SCR-580 Upgraded OSGi runtime bundles**

Upgraded OSGi runtime bundles:

- Apache Felix Gogo Runtime upgraded from v1.0.6.v20170914-1324 to v1.1.0.v20180713-1646
- Apache Felix Gogo Shell upgraded from v1.0.0.v20170914-1324 to v1.1.0.v20180713-1646
- Eclipse Equinox Console upgraded from v1.3.0.v20180119-0630 to v1.4.0.v20190819-1430
- Eclipse OSGi Services upgraded from v3.7.0.v20180223-1712 to v3.8.0.v20190206-2147
- Eclipse OSGi Utils upgraded from v3.5.0.v20180219-1511 to v3.5.300.v20190708-1141
- Eclipse OSGi upgraded from v3.13.0.v20180409-1500 to 3.15.0.v20190830-1434
- Eclipse Config Admin upgraded from v1.1.0.v20131021-1936 to v1.4.100

#### **Change #SCR-591 New bundle com.openexchange.drive.events.apn2.util**

Created utility bundle com.openexchange.drive.events.apn2.util for APN via HTTP/2. Added bundle to package open-xchange-drive.

**Change #SCR-598 Added new bundle 'com.openexchange.userfeedback.nps' to package 'open-xchange-userfeedback'**

Added a new bundle 'com.openexchange.userfeedback.nps' to the package 'open-xchange-userfeedback' that adds support for NPS feedback type.

**Change #SCR-602 New package open-xchange-file-storage-webdav**

Introduced new package open-xchange-file-storage-webdav consisting of following bundles:

- com.openexchange.file.storage.webdav
- com.openexchange.file.storage.owncloud
- com.openexchange.webdav.client.jackrabbit

**Change #SCR-609 The new appsuite history feature requires certain folders with write access**

The new appsuite history feature requires two folders with write access:

- /var/opt/open-xchange/frontend/history/manifests
- /var/opt/open-xchange/frontend/history/apps

**Change #SCR-611 Added new bundle com.openexchange.metrics.micrometer to open-xchange-core**

Added new bundle com.openexchange.metrics.micrometer to open-xchange-core.

**Change #SCR-656 Create packaging for installation of application passwords default database storage**

Application passwords will support different methods for storage (LDAP, database). Default package "open-xchange-authentication-application-storage-rdb" for storing these application passwords in the database will be shipped as a possible default installation.

Contains the bundle "com.openexchange.authentication.application.storage.rdb"

**Change #SCR-664 Added new bundles for external account management**

Added two new bundles for external account management:

- com.openexchange.external.account - Contains interfaces and service interface
- com.openexchange.external.account.impl - Contains implementation for service interface

Both bundles are supposed to be part of "open-xchange-core" package.

**Change #SCR-674 Create package for Guard MailFilter integration**

MailFilter integration for testing PGP Signatures or automatically encrypting emails. Code depends on installation of the core-mailfilter package. As this may or may not be installed, requires the Guard integration to be a separate package.

**Change #SCR-686 Added new com.openexchange.rss.utils bundle**

Added the new com.openexchange.rss.utils bundle to the open-xchange-messaging package.

**Change #SCR-699 New bundle com.openexchange.metrics.micrometer.health**

A new bundle com.openexchange.metrics.micrometer.health was introduced as part of open-xchange-core. It provides version and health information to the new Prometheus metrics output.



## 6 Changes relevant for Developers

### 6.1 Changes of external APIs

#### **Change #SCR-584 New format of recurrence identifiers in module "chronos"**

The string value of recurrence identifiers as used in the event data fields recurrenceId, changeExceptionDates and deleteExceptionDates is extended so that also the timezone identifiers for local dates with timezone reference is included, as prefix of the date-time string, separated with a colon character.

#### **Change #SCR-594 Allow additional "mail" type (or synthetic scenario) for obtaining a PLIST profile for IMAP/SMTP access**

HTTP-API end-points `/onboarding?action=link` and `/onboarding?action=download` now accept additional value "mail" for "type" query parameter for obtaining a PLIST profile for IMAP/SMTP access.

#### **Change #SCR-595 Adjusted naming of the authenticity column**

Adjusted naming of the authenticity column 664 of the `/mail` end-point from "authenticity" to "authenticity\_preview".

#### **Change #SCR-614 Add lower boundary for "pending" action in module "chronos/alarm"**

The "pending" action in module "chronos/alarm" is extended by an additional parameter named "rangeStart" so that the client can define a lower boundary for the time range of returned pending alarm triggers.

Similarly as in other actions, the parameter value is expected as an UTC date-time value, as specified in RFC 5545 chapter 3.3.5. E.g. "20170708T220000Z".

Pending alarm triggers for recurring event series that point to a point in time prior the supplied time range are implicitly attempted to be shifted towards a later event occurrence, for which the trigger time would fall into the specified time range again.

#### **Change #SCR-628 Added used\_for\_sync field to folder api**

A json object containing the fields 'value' and 'protected'. The value field indicates whether this folder is used for sync or not. And the 'protected' field shows if the client can change this value or not.

#### **Change #SCR-629 The subscribed field is no longer set to true in case it is missing**

Previously the subscribed field of the folder module was interpreted as true in case the client didn't sent a value for it. This has been changed. A missing value is now ignored.

#### **Change #SCR-630 New parameter "noChunks" for UPLOAD action in OX Drive API**

The UPLOAD action in the OX Drive synchronization protocol is extended with an additional parameter noChunks to indicate that no partial uploads are possible. If set to true, the client should upload the file completely instead of sending multiple chunks.

#### **Change #SCR-635 New Parameter "connectionCheck" for "all" action in module "fileaccount"**

Clients need a way to determine if a file-account is still accessible. A new, optional, boolean parameter "connectionCheck" can be used to perform a connection check for each returned file-account. If the connection could not be validated the already existing error fields are filled in the JSON response. (hasError, error, error\_id, ..etc.)

#### **Change #SCR-640 Extended response of "settings" action in module "drive"**

The "settings" action in module "drive" is extended so that an additional value for "maxConcurrentSyncFiles" is returned to clients, indicating how many synchronization requests of folder contents should be bundled within a single multiple-Request.

#### **Change #SCR-645 New calls added to the "/webservices/OXResellerContextService" SOAP end-point for page-wise retrieval**

Added new calls to the `/webservices/OXResellerContextService` SOAP interface, which extend the

existing "list", "listAll", "listByDatabase" and "listByFilestore" calls by "offset" and "length" parameters to offer page-wise retrieval for a context listing.

- "listPage" is the extension for the "list" call, accepting "offset" and "length" parameters, which specify the chunk or page for the context listing
- "listPageAll" is the extension for the "listAll" call, accepting "offset" and "length" parameters, which specify the chunk or page for the context listing
- "listPageByDatabase" is the extension for the "listByDatabase" call, accepting "offset" and "length" parameters, which specify the chunk or page for the context listing
- "listPageByFilestore" is the extension for the "listByFilestore" call, accepting "offset" and "length" parameters, which specify the chunk or page for the context listing

#### **Change #SCR-650 Moved checkCountsConsistency method from OXContextService SOAP interface to OXUtilService SOAP interface**

The checkCountsConsistency method was moved from the /webservices/OXContextService SOAP interface to the /webservices/OXUtilService SOAP interface.

#### **Change #SCR-687 New field "includeSubfolders" in extended folder permissions for anonymous share links**

Anonymous share links for folders can be created with the option "include subfolders". The state of this option is now also reflected in the corresponding extended folder permission for such a permission entity within the Extended permission object of the HTTP API, as a new boolean field named includeSubfolders.

#### **Change #SCR-683 New field "appendClientToken" in response of "jump" action in module "drive"**

The response object that contains the redirect URI of the jump action in module drive is extended with a new field indicating whether the client token should be appended when following the redirect URI or not.

Usually this is the case, however, in certain environments where the token login is not functional it should rather be omitted.

#### **Change #SCR-696 New event flag "conferences" to indicate which events contain conference properties**

The flags array of the EventData model in the HTTP API is extended with an additional flag conferences for events that contain at least one conference.

This may be used by clients to display an appropriate icon for such events in calendar views, similarly to the paperclip icon for appointments with attachments.

#### **Change #SCR-694 Extend event model by "conferences" attribute**

The EventData model in the HTTP API is extended with an attribute conferences which holds an array of Conference objects.

## **6.2 Changes of internal APIs**

#### **Change #SCR-578 Upgraded Guava (Google Core Libraries for Java) from v27.1 to v28.1**

Upgraded Guava (Google Core Libraries for Java) from v27.1 to v28.1

#### **Change #SCR-579 Upgraded OSGi runtime bundles**

Upgraded OSGi runtime bundles:

- Apache Felix Gogo Runtime upgraded from v1.0.6.v20170914-1324 to v1.1.0.v20180713-1646
- Apache Felix Gogo Shell upgraded from v1.0.0.v20170914-1324 to v1.1.0.v20180713-1646

- Eclipse Equinox Console upgraded from v1.3.0.v20180119-0630 to v1.4.0.v20190819-1430
- Eclipse OSGi Services upgraded from v3.7.0.v20180223-1712 to v3.8.0.v20190206-2147
- Eclipse OSGi Utils upgraded from v3.5.0.v20180219-1511 to v3.5.300.v20190708-1141
- Eclipse OSGi upgraded from v3.13.0.v20180409-1500 to 3.15.0.v20190830-1434
- Eclipse Config Admin upgraded from v1.1.0.v20131021-1936 to v1.4.100

### **Change #SCR-586 Renamed & changed value for constants carrying static virtual identifier/-name for mail root folders**

Renamed & changed value for constants carrying static virtual identifier/name for mail root folders in class `com.openexchange.mail.dataobjects.MailFolder`.

- Constant `com.openexchange.mail.dataobjects.MailFolder.DEFAULT_FOLDER_ID` has been renamed to `com.openexchange.mail.dataobjects.MailFolder.ROOT_FOLDER_ID` and its value changed from "default" to "" (empty string).
- Constant `com.openexchange.mail.dataobjects.MailFolder.DEFAULT_FOLDER_NAME` has been renamed to `com.openexchange.mail.dataobjects.MailFolder.ROOT_FOLDER_NAME`. Value left unchanged.

Moreover, constant `com.openexchange.mail.dataobjects.MailFolder.MAIL_PREFIX` has been added, which carries the static prefix used to quickly identify fully-qualified mail folder identifiers; e.g. "default0/INOX".

### **Change #SCR-592 Removed commons-httpclient-3.1**

Removed the `commons-httpclient-3.1` library and used the already existing `httpclient-4.5.x` instead.

### **Change #SCR-601 Changed user feedback Java-API**

Some of the exported classes from the user feedback API have been changed because of a refactoring necessary to easily add new feedback types. This affects the classes exported within the following java packages:

- `com.openexchange.userfeedback`
- `com.openexchange.userfeedback.filter`

### **Change #SCR-612 Deprecated com.openexchange.metrics.MetricService**

With the introduction of micrometer as a metrics framework the `com.openexchange.metrics.MetricService` is deprecated.

### **Change #SCR-616 Introduced OSGi service to obtain HTTP clients**

With MW-1264 and thus efficiently with version 7.10.4 the Middleware introduced a dedicated OSGi service which will manage HTTP clients created to communicate with third parties, like e.g. when subscribing iCAL feeds.

The HTTP clients will be created within the service based on configuration. The configuration is described by newly introduced interfaces, `SpecificHttpClientConfigProvider` or `WildcardHttpClientConfigProvider`. The interfaces will be registered by using the whiteboard pattern. For a reference implementation have a look at `com.openexchange.chronos.provider.ical.properties.IcalCalendarHttpProperties` or `com.openexchange.subscribe.dav.osgi.DAVSubscribeActivator.startBundle()`. With this we are able to configure each HTTP client individual, with own timeouts, etc. Also monitoring and reloading of the properties will all be handled.

For further details please read [https://documentation.open-xchange.com/7.10.4/middleware/administration/http\\_client\\_configuration.html](https://documentation.open-xchange.com/7.10.4/middleware/administration/http_client_configuration.html)

**Change #SCR-619 New parameter "rangeFrom" for method "loadTriggers" in interface AlarmTriggerStorage**

The method "loadTriggers" in interface `com.openexchange.chronos.storage.AlarmTriggerStorage` is extended with an additional parameter of type `java.util.Date` to optionally specify a lower (inclusive) boundary of the requested time range. It is implicitly ignored for triggers of alarms in recurring event series, as such those would potentially re-trigger in the future.

**Change #SCR-620 New parameter "LoginRequestContext" for method "handleRequest" in interface "LoginRequestHandler"**

A new method `handleRequest` with an additional parameter of type `LoginRequestContext` is introduced. This allows to keep track of response specific states (like a metric status etc). A default impl. is present but the original `handleRequest` method is marked as deprecated.

**Change #SCR-625 Added bucket4j-core library to Open-Xchange Middleware**

Added `bucket4j-core v4.9.0` library to bundle `com.openexchange.common`.

**Change #SCR-627 Extended folder interfaces to support `used_for_sync` flag**

Some "folder" interfaces have been extended with methods to support the `used_for_sync` flag:

- `com.openexchange.chronos.provider.CalendarFolder`
- `com.openexchange.folderstorage.Folder`
- `com.openexchange.folderstorage.SetterAwareFolder`

**Change #SCR-634 Upgrade Apache Commons Codec to 1.14.0, upgrade Apache HttpClient OSGi to 4.5.12**

The libraries `apache-commons` and `httpclient-osgi` from project `com.openexchange.bundles` are upgraded to their latest version, i.e. Apache Commons Codec 1.14.0 and Apache HttpClient OSGi 4.5.12

**Change #SCR-642 Trash related changes to InfostoreFacade**

The trash handling was moved from `InfostoreAdapterFileAccess` to `InfostoreFacade`. Thus some changes were made to the `InfostoreFacade` interface in order to make it "trash aware".

- For each `removeDocument` method an overwritten version with an additional "`hardDelete`" parameter was introduced.
- A new method `copyDocument` was introduced to handle cases where documents are copied to the trash folder.
- The `optOriginPath` parameter was removed from the `moveDocument` methods because the original path handling is now handled by the implementation of the interface and not by the caller anymore.
- The `getVersion` method was enhanced by a `folderId` parameter
- A new Method `restore` was introduced to restore documents from trash to their origin.

**Change #SCR-646 Changed exceptions for provisioning**

To enrich provisioning APIs with structured information about affected entities and exceptions, all exceptions thrown during provisioning calls have been modified. Exceptions will now be wrapped into a `java.rmi.ServerException` that is carrying the original exception and a unique exception ID.

**Change #SCR-651 Moved `checkCountsConsistency` method from `OXContextInterface` to `OXUtilInterface`**

The `checkCountsConsistency` method was moved from the `OXContextInterface` RMI interface to the `OXUtilInterface` RMI interface.

**Change #SCR-653 Updated jsoup library**

Updated jsoup library from v1.11.3 to v1.13.1

**Change #SCR-666 Changed type 'com.openexchange.capabilities.CapabilitySet' from a class to an interface**

Changed type com.openexchange.capabilities.CapabilitySet from a class to an interface to hide extensions that were introduced to track the history of a compiled set of capabilities for a certain user.

**Change #SCR-670 GAB modus for GABRestorerRMIService**

The GABRestorerRMIService has been extended by the newly introduced GABMode. This will enable the service not only to restore the original GAB permissions within the DB, it will also allow to switch between individual permissions for each user and a global permission for "all users and groups". The modus will directly influence the size of the response for the GAB folder permissions.

**Change #SCR-680 Bouncy Castle Packages updated to latest release version**

Bouncy Castle packages updated from v1.62 to latest release version v1.65. Needed to support the elliptical curve encryption.

**Change #SCR-685 Upgrade jackson libraries**

The following jackson libraries are upgraded to the latest stable version:

- jackson-annotations-2.11.0.jar
- jackson-core-2.11.0.jar
- jackson-databind-2.11.0.jar
- jackson-dataformat-xml-2.11.0.jar
- jackson-jaxrs-base-2.11.0.jar
- jackson-jaxrs-json-provider-2.11.0.jar
- jackson-jaxrs-xml-provider-2.11.0.jar
- jackson-module-jaxb-annotations-2.11.0.jar

Also upgraded dependency:

- stax2-api-4.2.1.jar
- And added dependency: jaxb-api-2.3.1.jar

**Change #SCR-689 Moved commonly used methods to basic Sessiond interface**

Moved commonly used methods from c.o.session.SessiondServiceExtended to basic c.o.session.SessiondService interface. Namely:

- Session getSession(String sessionId, boolean considerSessionStorage)
- Session peekSession(String sessionId)
- Session peekSession(String sessionId, boolean considerSessionStorage)
- Collection<Session> getSessions(int userId, int contextId, boolean considerSessionStorage)

**Change #SCR-701 Updated json-sanitiser from v1.2.0 to v1.2.1**

Updated json-sanitiser provided through bundle "com.google.json" from v1.2.0 to v1.2.1

## 6.3 Changes of provisioning APIs

### Change #SCR-671 Introduced GABMode for SOAP context interfaces

To be able to set the GABMode during the creation of a context, the SOAP definitions for Context classes have been extended by the gabMode field (as String). This applies for all Context definitions of SOAP. The mode will influence if individual permissions for each user or a global permissions for "all users and groups" will be saved in the DB. This will influence the size of responses for the GAB and its permissions.

Per default no value is set which will be interpreted as "individual" permissions for each user (like before).

Changed SOAP classes in detail:

- com.openexchange.admin.soap.context.dataobjects.Context
- com.openexchange.admin.soap.group.dataobjects.Context
- com.openexchange.admin.soap.resource.dataobjects.Context
- com.openexchange.admin.soap.taskmgmt.dataobjects.Context
- com.openexchange.admin.soap.user.dataobjects.Context
- com.openexchange.admin.soap.usercopy.dataobjects.Context
- com.openexchange.admin.soap.reseller.context.soap.dataobjects.Context
- com.openexchange.admin.soap.reseller.group.soap.dataobjects.Context
- com.openexchange.admin.soap.reseller.resource.soap.dataobjects.Context
- com.openexchange.admin.soap.reseller.service.soap.dataobjects.Context
- com.openexchange.admin.soap.reseller.user.soap.dataobjects.Context

## 7 Tests

Not all defects that got resolved could be reproduced within the lab. Therefore, we advise guided and close monitoring of the reported defect when deploying to a staging or production environment. Defects which have not been fully verified, are marked as such.

To avoid side effects, the shipped packages have gone through automated regression test on both, a Continuous Integration System and a dedicated server set-up for system and integration testing. All changes have been checked for potential side-effects and effect on behavior. Unless explicitly stated within this document, we do not expect any side-effects.

## 8 Fixed Bugs

OXUIB-112, OXUIB-343, OXUIB-329, OXUIB-348, OXUIB-183, OXUIB-252, OXUIB-86, OXUIB-319, OXUIB-303, OXUIB-89, OXUIB-75, OXUIB-27, MWB-94, MWB-130, MWB-174, MWB-462, MWB-475, MWB-13, MWB-31, MWB-53, MWB-69, MWB-72, MWB-79, MWB-80, MWB-103, MWB-127, MWB-129, MWB-134, MWB-149, MWB-161, MWB-235, MWB-273, MWB-323, MWB-419, MWB-437, MWB-503, 66622, 66771, 67184, 67325, 67692, 67718, 67883, 68091, 68105, 68150, 68163, 68205, 68285, 68343, 68351, 68397, 68421, 68424, 68435, 68444, 68501, 68507, 68510, 68516, 68522, 68539, 68584, 68606, 68612, 68615, 68629, 68666, 68684, 68689, 68734, 68744, 68762, 68773, 68803, MWB-289,