



Release Notes for Release 7.8.3

November 30, 2016

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1 General Information

Open-Xchange encourages administrators to regularly update to the latest available release. In order to ensure a stable and up to date environment please note the different supported versions. An overview of the latest supported Major, Minor and Public Patch Releases can be found in the Knowledgebase at: http://oxpedia.org/wiki/index.php?title=AppSuite:Version_Support_Committment

Starting with OX App Suite v7.8.3 the Open-Xchange middleware will not expose newly added configuration properties by adding them to existing, or new property files, anymore. This mechanism is tracked as 'lean configuration'. All properties that follow the 'lean configuration' approach will be published on

<https://documentation.open-xchange.com/7.8.3/middleware/configuration/properties.html>

Please note that there is a major Hazelcast library update to OX App Suite v7.8.3. This means that when updating from an earlier backend version, due to the upgraded library, it is not possible to form a cluster of nodes that run previous version of Hazelcast (i.e. existing volatile data such as sessions will be lost during the update). A consistent Hazelcast cluster is needed for cluster-wide cache invalidation. To circumvent problems with database update tasks that need to perform cache invalidation, please follow the steps described in http://oxpedia.org/wiki/index.php?title=AppSuite:Running_a_cluster#Upgrades_of_the_Hazelcast_library. Please also note that session migration is not possible between versions. This usually affects all user sessions that are stored in a distributed map, and will require the users to re-login after the update. Running incompatible versions of Hazelcast within a cluster will result in log entries showing the conflicting node and version information.

With OX App Suite 7.8.3 we're encouraging operators to re-evaluate usage and enforcement of trusted/validated endpoints wherever possible. We've added several options to specify the trust level (e.g certificate validity) and encryption parameters (e.g. cipher suites, protocols). To maintain compatibility with strict settings, OX App Suite can now make use of custom keystores (JKS) where additional certificates can be trusted. Typical scenarios where the use of endpoint validation adds significantly to end-user security are external Mail accounts, RSS feeds and subscriptions. Note however that connections to untrusted endpoints that did work earlier may be refused when using strict configuration. All related configuration properties are handled via the "lean configuration" model, therefore please have a look at <https://documentation.open-xchange.com/7.8.3/middleware/configuration/properties.html> on details how to enable and configure these settings.

Starting with OX App Suite v7.8.3 Open-Xchange deprecates its Munin-based monitoring scripts that are based on parsing the output of command-line tools like `showruntimestats`. In the past two versions of every monitoring script have been maintained, one based on such output and the other based on direct HTTP communication with the OX middleware. From the next version on, planned Q2 2017, only the HTTP-based versions will be available, which use Jolokia (<https://jolokia.org/>) under the hood. Details about Jolokia-based monitoring can be found at http://oxpedia.org/wiki/index.php?title=OX_munin_scripts and <http://oxpedia.org/wiki/index.php?title=Jolokia>.

In accordance with the supported platform policy, Open-Xchange discontinues support for Suse Linux Enterprise Server 11 (SLES 11) and Debian Wheezy with this release of OX App Suite v7.8.3. We encourage administrators to update to the latest operating system version, Suse Linux Enterprise Server 12 (SLES 12) and Debian Jessie. For details of all supported platforms and databases please refer to the requirements page at: http://oxpedia.org/wiki/index.php?title=AppSuite:OX_System_Requirements#Server_Platforms

In accordance with the supported platform policy, Open-Xchange discontinues support for Apple iOS 8 for mobile and tablet devices, with this release of OX App Suite v7.8.3

In accordance with the supported platform policy, Open-Xchange discontinues support for Apple

Mac OS X 10.10 (Yosemite), with this release of OX App Suite v7.8.3

In accordance with the supported platform policy, Open-Xchange discontinues support for Windows 7 and Windows Phone 7, with this release of OX App Suite v7.8.3

2 Shipped Product and Version

Open-Xchange middleware 7.8.3-rev5
Open-Xchange AppSuite frontend 7.8.3-rev5
Open-Xchange OX6 frontend 6.22.13-rev5
Open-Xchange USM 7.8.3-rev5
Open-Xchange EAS 7.8.3-rev5
Open-Xchange Updater 7.8.3-rev5 (6.18.33)
Open-Xchange Drive restricted 7.8.3-rev5
Open-Xchange Documents 7.8.3-rev5
Open-Xchange Documents Frontend 7.8.3-rev5
Open-Xchange Readerengine 7.8.3-rev5 (5.2.3)
Open-Xchange Documentconverter 7.8.3-rev5
Open-Xchange Documentconverter API 7.8.3-rev5
Open-Xchange OXtender for Microsoft Outlook 7.2.24
Open-Xchange Notifier 1.0.6

Find more information about product versions and releases at http://oxpedia.org/wiki/index.php?title=AppSuite:Versioning_and_Numbering

3 Vulnerabilities fixed with this Release

This section provides a summary of security related bug fixes that have been applied subsequently to shipping Release 7.8.2. Solutions for vulnerabilities have been provided for the existing code-base via Patch Releases.

45363 XSS at user name in Review Comments

Adding HTML escaping for date, uid and author in HTML fast load string for OX Text. CVE-2016-4045, Credits to Saeed Hashem (@SaeedHashem4).

45811 XSS when dropping external content

Removed insecure mark-up from incoming HTML before processing it in OX Text. CVE-2016-5124.

46025 XSS at Charts

HTML-signs replaced with the respective HTML entities at OX Spreadsheet. CVE-2016-5124, Credits to sasi2103.

45386 XXE while opening doc files in Drive

Now explicitly using own XMLStreamReader to avoid entity expansion when converting and working with spreadsheets. CVE-2016-4047, Credits to Deepanker Chawla.

46897 Using log sanitization methods

Enabling LogSanitisingConverter by setting the %sanitisedMessage token for OX Documents. Use CVE-2016-5741.

48282 Self-XSS when pasting script code to OX Text

Fixed the regex to control pasted content, made it more generic to capture script code. CVE-2016-7546, Credits to Sumit Sahoo.

47601 XSS on the document setting

Using an escape method when loading data for OX Documents settings. CVE-2016-6842.

47602 XSS when creating a group

When changing a user's name parameter to contain script code, that code got executed when creating a group. The corresponding place now uses a sanitized representation of the user's data. CVE-2016-6843.

47770 XSS for SVG attachments in mail

Nested JavaScript code within a SVG "image" file was executed when opening those files within the browser. We've extended sanitizing of SVG content. CVE-2016-6844, Credits to bugdisclose.

47774 URL input gets reflected on error pages

When requesting a API path that does not exist, the requested path is returned as an error page. That could be used for content-spoofing attacks and has been fixed in a way that we don't return user input on such error pages. CVE-2016-6846, Credits to hackys.

47779 Content-spoofing at App loader

When triggering a direct request to the app loader, provided input gets reflected to the requesting client. This can be used for content spoofing and got fixed by removing user input at error responses. Credits to Ahmed Abdalla.

47781 XSS for base64 encoded data links in mail

Malicious hyperlinks containing JavaScript as payload were not correctly sanitized, this has been solved by also inspecting encoded content for malicious code and dropping support for certain types of hyperlinks. CVE-2016-6845, Credits to Zeeshan (@z33.5h4n).

47790 Tabnapping for mail and drive

Hyperlinks within user-generated content can be used to inflict tabnapping attacks. We solved that by adding parameters like rel="noopener" to links. CVE-2016-6849, Credits to Zeeshan (@z33.5h4n).

47822 Reflected file download for API calls

GET requests to API endpoints can be modified in a way that a download is triggered that contains reflected content from the request. This may be used to run malicious code on client devices and got solved by removing the ability to trigger such downloads. CVE-2016-6848, Credits to Abdullah Hussam (@Abdulahhusam).

47824 XSS with user pictures

When using SVG images as user picture, script code may get embedded and executed when forging specific links. This got solved by denying SVG content as picture and sanitizing existing data. CVE-2016-6850, Credits to kltwd.

47891 RSS reader allows local file discovery

By providing local paths as RSS resource, attackers could validate the existence of arbitrary files based on the returned error code. This has been solved by adding a whitelist for valid protocols and also returning uniform error codes. CVE-2016-6852, Credits to mateuszg.

47898 XSS with mp3 album covers

MP3 audio files allow to store inline images to represent album covers. When using SVG with included JavaScript it was possible to create links to malicious files that would execute script code. This got solved by sanitizing album cover images. CVE-2016-6847, Credits to mateuszg.

47916 Tabnapping in OX Documents

Added rel="noopener" when creating button markup for external links at OX Text and Spreadsheet. CVE-2016-6849.

48061 XSS when pasting a hyperlink with script code to OX Text

Check for valid URL schemes when pasting hyperlinks to avoid inclusion of malicious links.

48083 XSS for Drive and Mail attachments

A new pattern was discovered that allowed a bypass of the existing sanitizer and execute script code payload within HTML files. It got fixed by adapting the sanitizer. CVE-2016-6850, Credits to kltwdw.

48173 Self-XSS with signature source-code

When creating signatures its possible to enter HTML code straight away. Since that code did not get sanitized by the frontend it allows to execute script code as well. We're now sanitizing the content at the frontend in addition to the existing sanitizer at the middleware. CVE-2016-7546, Credits to XSS01.

48230 XSS for Mail and Drive files

A bypass has been found for the existing sanitizer, using malformed content-types and base64 encoded payload of "data:" references. This was solved by extending the sanitizer and removing certain types of hyperlinks. CVE-2016-7546, Credits to Zeeshan (@z33.5h4n).

48231 Self-XSS with pasted HTML content

When copying a specific pattern of script code to mail compose, included script code gets executed. This has been solved by extending the frontend-side sanitizer. CVE-2016-7546, Credits to Joel Melegrito.

48282 Self-XSS with pasted HTML content

When copying a specific pattern of script code to mail compose, included script code gets executed. This has been solved by extending the frontend-side sanitizer at OX Documents. CVE-2016-7546, Credits to Sumit Sahoo.

48559 XSS with SVG when altering media-type

A bypass for existing sanitizer rules were found by modifying the media-type of a stored SVG file. This got solved by letting the sanitizer detect the files media-type regardless of the user-provided media-type. CVE-2016-7546, Credits to secator.

48843 CVE-2016-7546

CVSS: 3.1, Credits to Abdullah Hussam (@Abdulahhusam)

49005 CVE-2016-8857

CVSS: 5.3

49014 CVE-2016-8857

CVSS: 5.3, Credits to Zeeshan (@z33.5h4n)

49015 CVE-2016-8857

CVSS: 3.5, Credits to secator

49159 CVE-2016-8857

CVSS: 5.3

49439 CVE-2016-9308

CVSS: 4.1

49639 CVE-2016-9308

CVSS: 2.5

49847 CVE-2016-9309

CVSS: 3.7, Credits to Hugh Davenport (allthethings.co.nz)

49848 CVE-2016-9308

CVSS: 5.7, Credits to Hugh Davenport (allthethings.co.nz)

49912 CVE-2016-9309

CVSS: 4.3, Credits to Lukas Reschke

4 Bugs fixed with this Release

This section provides a summary of bug fixes and changes that have been applied subsequently to shipping Release 7.8.2. Some of the announced bug fixes may have already been fixed at the existing code-base via Patch Releases.

23639 Messaging accounts not removed instantly

When removing oAuth credentials for a messaging account, e.g. Twitter, the related entry at the main menu did not get removed. This has been solved by refactoring the oAuth implementation.

31404 Incomplete documentation on "quota"

Existing documentation about the topic of different quota levels and configuration was partly missing and inconclusive. This has been solved by migrating to a new documentation system and workflow. Please use <https://documentation.open-xchange.com/> as reference for technical documentation.

43342 Resources are not handled with ActiveSync

We've added rudimentary support for resources when using the Exchange ActiveSync (EAS) protocol. The Email address of a resource will be delivered to the client to allow scheduling.

44275 Improved queue handling for DocumentConverter to avoid pending jobs

Some DocumentConverter jobs never got processed by the DocumentConverter backend and remained within the job queue forever due to a missing unlock of the job after the first conversion. This happened under certain conditions like same job conversions for the same source document in parallel. When pending or blocked jobs are within the DocumentConverter queue due to a parallel processing of the same conversion, it is ensured, that those jobs get unlocked after the first conversion of this kind of jobs happened, giving a fast processing and removal of all pending jobs with the same characteristics.

44943 Instant termination of DC backend processes when OSGi bundle is stopped

When stopping the DC server bundle, every single, currently running job is interrupted and terminated; in addition, all DC job queues are cleared

45101 pdf2svg using boundless memory

Added a new config item 'com.openexchange.documentconverter.pdftoolMaxVMemMB' has been added to the 'documentconverter.properties' configuration file. The implementation uses this value to limit the amount of memory for the PDF tool

45457 Incomplete documentation on "filestorage"

Existing documentation about the topic of filestores was partly missing and inconclusive. This has been solved by migrating to a new documentation system and workflow. Please use <https://documentation.open-xchange.com/> as reference for technical documentation.

46098 Logging of invalid cookies on autologin

When enabling the "auto login" functionality, error messages were logged regarding incorrect cookie information. Since users that have not been logged in before will accidentally trigger this message, it has been removed from the default loglevel.

46189 Unable to see Halo or who reserved a resource within the Scheduling tool

No single general solution for all different use cases in this scenario.

Solution: Introduced ui setting 'io.ox/calendar//freeBusyStrict' (default: true), when NOT in

strict mode detail view is available, details for appointments are not displayed.

46285 docx failed to load for editing, Binder not available for this docx, java.lang.NumberFormatException
ignoring this attribute via xslt transformation

46346 Smtplib account information not shown

In the account settings for mail the smtp settings are displayed, but username and password were not shown.

Fixed an enum issue to solve this.

46443 Unable to view specific mails

When forwarding a specific mail structure multiple times, the corresponding sequence ID was miscalculated. As a result some mails could not be displayed anymore. This glitch has been solved by correcting the calculation for nested messages and attachments.

46482 Unable to read mail in Outlook

Email messages with multiple different Content-Transfer-Encoding headers did cause errors with Outlook. Such malformed messages are now sanitized before delivering them to the client.

46677 While subscribing to mail-folders not all "subscribable" folders get displayed

After a AppSuite refresh some "subscribable" folders disappeared.

This has been fixed by dropping "subfolders" attribute if all=false to avoid bad model updates.

46837 Incorrect translation for quota

The polish translation for quota levels had some flaws, those were solved by updating the specific translation.

46968 Upsell-Trigger within "onboarding-wizard" not working

Upsell i-Frame for onboarding wizard didn't work.

Added missing capability file to solve this.

46970 Linked appointment and task within an email cannot be displayed

If a user click on an invalid appointment/task link, he got the spinner.

With this fix, the appointment is displayed or the link is displaying the folder from the link.

47025 Shared mail folders are not displayed

When applying very specific folder permissions, a issue was observed that folders are not show via OX App Suite while being expected to show up. This was caused by a incomplete permission check and got solved by correcting this check.

47083 Incorrect translation for mail filter rules

The polish translation for mail filter rules had some flaws, those were solved by updating the specific translation.

47101 Misleading information on truncated HTML messages

If a HTML Email message exceeds limits for processing, a truncated representation is provided to the user. We added some more details and less confusing description about why this is the case and how a user can handle the situation.

47157 SOAP API does not list guest users

includeGuests and excludeUsers parameters was missing in soap interfaces.

This has been solved by adding includeGuests and excludeUsers parameters to soap interfaces.

47166 Redirect to loginLocation does not work anymore

Redirect to loginLocation and logoutLocation does not work.

With this fix, the custom login and logout Locations are working again.

47182 Separate email addresses with semicolon not working

Separate email addresses with semicolon after two or more were added as one didn't work. This has been fixed by stopping edit more after first model update.

47184 Forwarding mails with cc-recipients automatically opens cc field in mail compose

On model creation data from the original mail was propagated that should have been omitted. This has been fixed by omitting original mail data, now the cc field is not open automatically.

47279 Incorrect findings of `checkconfigconsistency`

The `checkconfigconsistency` tool did report some incorrect findings at `cache.ccf`. This has been solved by considering directories when comparing configuration file content.

47325 User-fields not mentioned as option for search facet

It's now possible to include "optional" fields at contacts to the search facet. This allows searching for those parameters values.

47348 Password dialog for external accounts after update

For some users the "recovery/secret?action=check" call permanently signals that the currently used password is outdated and the new one is prompted. Various DEBUG logging was added to class 'com.openexchange.secret.impl.CryptoSecretEncryptionService', which is supposed to be enabled to affected users using '/opt/open-xchange/sbin/lofconf' command-line tool, also did some other improvements for this. Also see Software Change 3482 below.

47378 Contact csv import: error message very vague

The csv parser is configured to be tolerant and accepts rows in csv files with columns sizes lower than the number of title columns. If a row does not contain enough columns it will add empty columns at the end of the row. If a column in the middle of the row is missing all other entries will be shifted to the left. This leads to an error for the distribution list column, because the importer uses the data of another column for this field.

This has been fixed by adding a new parameter "line.number" to the response result entry in case of an error, because it's impossible to improve the handling of defective csv files.

47417 Listing large folders results in IE11 issues

When listing folders with more than 10.000 E-Mails and scrolling through them, IE11 did report script warnings. Those warnings were triggered by long-running JS actions. We optimized the handling of pagination when dealing with lots of mails to avoid triggering those warnings. On very slow machines this might still happen though.

47429 Vacation rule jumps to top

The position of the vacation notice was reseted to the top if this rule has changed. Now the position is kept if the rule was edited.

47438 Standard group guest delete and edit buttons active

Standard group guest delete and edit buttons were active. Now edit or delete for guest group is disabled.

47467 Menu is displayed wrong

Email option menu was displayed wrong if the topbanner was active. This has been fixed by adding proper z-index to top banner.

47503 OX Documents offers email functionality even if webmail is disabled

sendmail button and/or send mail sub items of button group will be disabled from now as soon as there is webmail not available.

47504 OX Documents offers contacts functionality even if contacts are disabled

If contacts is not available the usernames are not longer clickable;

47510 Mobile Web ui only: Mail folder can not be added on Root-Level

Adding an IMAP folder via Mobile Web UI on root level (beside INBOX) does not work. This has been fixed by changing check for virtual folders to allow contextmenu and deny pagechange.

47575 Modifications to logback configuration re-set

When updating OX App Suite, recent default configurations changes to logback.xml were reset. Packaging now considers those changes and makes sure the defaults are maintained when updating.

47576 Rename of OX6 distribution lists not fully working in appsuite

OX6 sets display name and last name while creating a new distribution list. Solution for distribution lists: if display name is updated last name is set to the same value.

47587 Cancelled appointment in Outlook not updated

When cancelling a group appointment in Outlook as organizer, the appointment for participants was not removed in case those participants did have "PIM" access permissions. This was caused by a server-client state conflict and has been solved.

47656 Sort menu not fully visible in horizontal mode

Sort menu was hidden by mail detail view if this part was too small. Now the menu is always on top.

47664 Empty object_permission table causes stale RDBMS connections

A database connection was not returned to the pool under specific circumstances. This has been solved by ensuring database connection is returned to pool.

47676 Contact related content shown for drive-only configurations

In case a user account is configured to only use OX Drive, some functionality was offered that would require the Contacts app to be present, for example contact details. These issues have been resolved by removing links at invite guests or permission dialogs.

47678 OX Drive standalone: Remove "Add to Portal"

added permission for portal

47683 Mail is not displayed correctly - 2 instead of three attachments

The regex pattern to identify the uuencoding wasn't able to handle umlauts. This has been fixed by improving the regex pattern to recognize umlauts.

47720 Missing check for filter rules capability

In case the mailfilter package is not installed, the frontend was missing a capability check and offered to create mailfilters based on existing E-Mail nonetheless. This was fixed by considering those capabilities.

47785 Rate-limit triggered when handling huge distribution list

When working with large distribution lists, usually more than 500 members, OX App Suite UI triggered a lot of unnecessary requests to get member information. Depending on the workflow and amount of members this could exceed the default rate-limit and effectively lock-out a user for several minutes. We have optimized which and how many calls are triggered when editing distribution lists to avoid this scenario.

47873 Filename information is lost when moving files between different file storages

Now setting the filename when moving files across different file storages to solve this issue.

47888 NPE when trying to edit the description of a file in a Dropbox account within the AppSuite

Edit the description of a file in a Dropbox account were not possible with the AppSuite-UI. Un-mangle the file identifier to fix this.

47893 Folders with dots in their names are not queried correctly

It was not possible to retrieving informations from cloud storage folder if they contain a dot in foldername.

Now cid method removed all '.' from the ids to fix this issue.

47932 No free mailstore found causes configdb inconsistencies

When deploying a new cluster, having not yet registered a mailstore, creating a context caused inconsistencies in the configdb.

This has been solved by running delete method of all registered plugins in case of a failure in postCreate of any of the registered plugins.

47944 Error when storing data to Swift backend

When creating a file on a Swift storage backend, the service might respond with HTTP Status 201 instead of 200 which was unexpected. This got fixed by handling this status as well.

47967 High CPU usage by Java process

An infinite loop while trying to determine a folder's reverse path to root folder caused the excessive creation of folder instances all kept in a wrapping java.util.ArrayList instance. It turned out that while loading the path for a folder from a subscribed external IMAP account, the special INBOX folder references itself as parent, consequently rendering the traversing loop infinite.

This has been solved by introducing several safety checks (in case a folder references itself as parent) and guards to prevent from possible such an infinite loop when trying to determine a folder's path to root folder.

47992 Mail content incorrectly displayed

As a side-effect of content sanitization certain invalid E-Mail structures, in this case broken tags like "¡B¿" were removed which led to follow-up issues when displaying the mail. We've made the sanitizer more flexible to avoid such false-positive cases.

48006 IMAP ID is sent after login instead of before

"ID" command gets issued after login happened, breaking Dovecot's session tracing.

This has been fixed by moving signalling IMAP session identifier through "ID" command to pre-login state.

48047 Random OOM during parsing mail

This was caused by excessive creation of (sub-)strings while trying to re-parse a weird, but possible start tag segment.

This has been fixed by improving detection of possibly contained HTML start tag and changed re-parse routine to avoid sub-string creation where possible.

48073 Hover on mail folders is missing after update to 7.8.2

No hover message reporting the total messages and unread messages in email folder.

The missing title is added again is now visible on hovering.

48075 vCard export fails when missing references

In case vCard data information is stored to a external service and that service becomes unavailable, exporting fails. This has been addressed by adding a check if all referenced information is present and accessible before starting to export.

48089 Weekend days were hardly readable

In case the current day is a Sunday, the date label was hardly readable since several shades of red were applied. This has been solved by correcting the priority of shades when displaying the calendar month view.

48109 Special IMAP folders are re-set on first login

When defining special-use flags for IMAP folders, those were not considered when logging in for the first time. The behaviour has been made configurable by change #3524. Now we're considering those pre-defined special-use folders.

48118 Upsell I-Frame does not open in Firefox and IE

Click delegate on premium container didn't work as expected.
This has been solved by using default select handler and call upsell method via custom trigger.

48133 Malformed mail causes warnings

In case a E-Mail contains illegal references to multipart, such as attachments, a warning was raised at the log. To avoid log flooding the situation is being handled in the code without logging a verbose message.

48195 External appointment "You have confirmed this appointment", but is not accepted

New external appointments were displayed as accepted, but are not accepted.
Now new external appointments are not displayed as accepted.

48205 Issues when switching SMTP-Auth

When configuring a external mail accounts SMTP credentials as "As incoming mail server" and changing this configuration to specific credentials, the old credentials were maintained. This has been fixed.

48242 Unable to delete appointment from cancellation mail

When using a CalDAV client like eMClient, some cancellation mails could not be used to delete the related appointment since their ID was missing. We solved that by avoiding a fallback to the "Publish" method when synchronizing.

48243 Report clients stops for corrupt guest users

In case a guest user has a reference to a deleted user, running reports did not deliver any results. This has been solved by handling the absence of the referenced user.

48248 Unable to copy/move mail if target lacks flag compatibility

When copying or moving a mail from a mail backend that supports more IMAP user-flags than the target backend, an error was raised. This has been solved by checking existing flags and convert them in a compatible way.

48292 Usercopy fails with "Unexpected problem occurred"

UseCountCopyTask used a wrong mapping object and tried to copy use counts of internal users and usercopy failed.
This has been fixed by using the correct mapping object and skip use counts of internal users.

48344 User is not able to sent email to users on the same cluster after account is added as external

No filtering based on transport_url for added email accounts.
Only list sender addresses from accounts that have a transport_url now.

48348 Reporting issues with multiple registered servers

When having contexts spread across different middleware clusters but using the same database backends, the report client did not finish its execution. This has been solved by considering such configurations and general hardening of the report functionality in this regard.

48349 'AVERAGE_USER_SIZE' not found in file /opt/open-xchange/etc

The method getProperties was used.
This was fixed by using getUserProperties.

48364 Unable to save mail to "Sent" folder after sending

Getting the standard folders (e.g. for "Sent") failed in case a spam/ham folders were absent but expected. The code has been hardened to deal with situations like this, which may occur when using custom spam handler implementations or configuration.

48380 Unable to remove a directory in Drive

In case a directory contained a hidden subfolder without permissions to the deleting users, removal of that enclosing folder failed without a sufficient error message. We've extended the OX Drive protocol to handle this situation and make clients aware of the root cause.

48394 DOS encoding for paths.perfMap

The file `paths.perfMap` was delivered with CRLF linebreaks, which of course does not make sense on Unix-style environments. We applied proper linebreaks again.

48438 Inconsistent folder order in Archive

The Archive folder did list subfolders in descending date order to make sure the most recent folders are on top. However this did conflict with certain use-cases and added inconsistency, therefore we switched to alphabetically ascending order for all folders except numeric ones.

48463 Multiple honorific prefixes are comma-separated

When using honorific prefixes, suffices or additional names at contacts, those details were transferred and serialized as individual attributes which led to display issues on some CardDAV clients. This has been solved by putting this information to single attribute.

48495 New arriving mails are sorted somewhere into existing mails in list view

Sort handler was called before models were drawn and list were messed up.

This has been solved by skipping sort when queue contains items and sort manually once the queue has been processed.

48598 Incomplete delete events sent when removing appointment series

When deleting a recurring appointment, the related event mechanism did distribute events which refer to the recurring appointment but did not contain any pointers to exceptions of that series. We're now sending more sophisticated objects that allow to gather references to exceptions of that recurring appointment.

48618 Portal tiles show hidden files

After displaying "hidden" files was disabled, they did still show up at the Drive portal tile of App Suite. This got solved by applying the correct filter to the tile as well.

48629 Appointment jumps one day back if time changed more than 12h

Local date instead of internal utc date were used in one calculation.

This has been fixed by sticking to utc-based calculations.

48630 Missing attachment preview for very special mails

When sending a mail to a mailing list and using a X.509 signature plus another attachment, that attachment could not get previewed in App Suite. This has been solved by avoiding to fetch ignorable parts of the mail.

48631 Unexpected compression headers for SAML

When using HTTP redirect bindings for single logout responses, our implementation did expect zlib headers while raw gzip was returned. This has been solved by handling this kind of input.

48654 SpamExperts GUI page not displaying fully for SpamPanel

The container element of settings pages doesn't have a fixed height. This broke percentage-based height specification of its children.

This has been fixed by using absolute positioning to make percentage-based heights work again.

48663 No signature selected in settings after upgrade

Missing signature handling for update.

Introduced central helper function which considers the different states, value of `defaultSignature` (compose/reply) is now used as new default value for `'defaultReplyForwardSignature'`.

48681 Mail not displayed correctly on Android

The mail contains two parts of type text/plain. The second part contains the greetings. USM handles only the first part for sending the mail in plain text format to the client (used by Android). With this fix USM concatenates all text/plain parts together.

48687 Carddav data with xD at the end of all lines

The underlying org.jdom library adjusts line endings during serialization, for inline vCards in multi-status responses this led to duplicated carriage return characters. While usually the receiving side is in charge to normalize line endings during parsing, one particular client is not able to do so. Solution: Serialize inline vCards in CARDDAV:address-data property as CDATA.

48729 Archive folder visibility

In case users got provisioned with a specific name for the "Archive" folder, there was no way to remove that information afterwards. We've removed a sanity check for empty folder names and instead add "null" to the users mail configuration in case that folder shall be empty. As a result no folder will show up as "Archive" anymore. Note that using this functionality makes it mandatory to disable archive functionality as a capability for the user. Otherwise there will be inconsistencies and unexpected behaviour on the user-interface level, including re-creation of the "Archive" folder with its default values.

48748 Distribution list view inconsistent, saving such a list does not work

The error is caused by two update operations on a contact off the distribution list. If a contact off the distribution list is within the address-book of the user, then the entry within the distribution list will reference this contact. In case the email address referenced by the distribution list is removed the entry within the distribution list is also updated (now empty). If then in a next step the contact is deleted the entry within the distribution list will be changed to a contact without a reference. In this case the mail address within the distribution list will be used, which is still empty. In this case the distribution list is invalid because of this missing mail address. The exception message now tells the user which contact is causing the error and therefore he is able to solve the issue himself.

48778 Contacts tab opens with ~20 Seconds Delay, Display-Errors after Tab Change Contacts to Calendar and back

The new user setting "Start in global address book" (default: true) conflicts with an extremely slow loading of address book.

This has been solved by checking if the user setting is configurable. If not, the user doesn't see the setting. This fix neither accelerates the loading process nor does it avoid the invalid UI state if users go back and forth.

48851 Zero-minute reminders not respected in public calendars

When using public calendars and setting reminders to "0", this value is treated as "no reminder". This has been solved by signalling 0 as a legal value for appointments at such folders.

48883 logconf -l com.openexchange.usm does not filter for UID/CID

The logback filtering works in conjunction with the MDC properties, meaning that in order for a log filter to work, the userId, contextId and (optionally) sessionId have to be present in the MDC. In this case, the previous mentioned MDC properties were only applied upon a login request, hence the only DEBUG log entry that was visible in the log was that of the login request.

This has been fixed by applying the MDC properties 'userId', 'contextId' and 'sessionId' (that is the USM session id and not OX session id) to the MDC when getting the USM session from the Session-Storage (which happens on every USM/EAS request).

48927 Customization for contacts identity circle

In order keep the list at the address-book picker in sync with the Contacts app, identity circles can now be customized with regards to name initials. See SCR #3602.

48928 Customization for contacts identity circle

In order keep the list at the address-book picker in sync with the Contacts app, identity circles can

now be customized with regards to color. See SCR #3602.

48940 Autologout setting is not hidden when protected

Not all settings are implemented to configure via yml-File.
Now this setting is supported for property- and yml-file.

48949 Sometimes printing fails with "Drucken ist beim Starten des Druckvorgangs fehlgeschlagen." on Preview

Only affects calendar views as they are external, i.e. loaded from the server and was quite rare.
This has been solved by implementing a delay to let the browser breathe. The delay is not really perceivable so it won't annoy end-users.

49007 Address picker shows inaccessible folders

When using the recipient picker for Email the second time while not having access to public and shared folders, those were shown as an option nonetheless. We fixed that by cleaning caches so the correct folders are provided as options.

49055 FLD-0008 exception 'Folder 0 does not exist in context 1'

Appointment object is missing the action folder id.
This has been solved by adding action folder id to appointment object.

49057 Incorrect dates provided by WebDAV clients

When mounting Drive using WebDAV, some clients provide incorrect creation times for files. This was caused by a incompatible date format and has been fixed by providing RFC1123 dates instead.

49074 Appointment cancellation mail loop with iOS

In rare cases the iOS Mail/Calendar clients decide to send out repeated cancellation mails. While the behaviour is triggered by the client we try to counter this behaviour by blocking cancellation mails at replies at OX App Suite when synchronizing.

49083 E-Mail-Folder Action 'delete all messages' ignores OVERQUOTA

Copy command was able to run into overquota.
This has been fixed by using move operation for clear folder command in case move operation is supported by IMAP server.

49086 About 1600 Mails can not be deleted at once, Script Timeout in Browser

Removing the mails one by one takes very long.
With this fix all mails are handled together and it is quite faster.

49091 Show requests for read receipts setting is not hidden when protected

Configurability for all settings is not available.
Extend checkbox-related code in mail settings pane to consider configurability for this setting.

49103 No additional address books loaded in picker on mail compose

Too many contacts thus hitting the default limit of 10000 contacts.
Now exclude the global address book from the picker to avoid an unresponsive dialog. New settings is: io.ox/contacts//picker/globalAddressBook=true/false.

49141 Mail content only displayed on reply/forward

Mail content were not visible in all mails, actual mail content nested inside <head> element, which is removed for embedded display of foreign HTML content.
Transfer non-head child elements to body to make the content visible.

49196 Users can not be added to group

It was not possible to add an user to a group containing a space in the name and were created by the command line tool.
This has been solved by using CHECK_GROUP_UID_REGEX property for group name validation during http-api calls.

49207 Missing filenames for pasted screenshots

When passing a screenshot to mail compose, an attachment without filename got created. We now assign a default filename to such content to avoid compatibility issues.

49210 Marked mail(s) disappear when hitting # 1 key on Numpad

AppSuite using a shared keypress handler for the numpad key and the 'a'. In combination with ctrl or another special key all messages get selected. A missing check in archive action allowed to archive a message with the numpad key. Now checking for 'a' key before archive.

49231 Filter rules: From condition "is exactly" doesn't work on email addresses

To filter for email addresses in a more comfortable way "Sender address" were included as condition type.

49236 Huge amount of Mail folder could not be found on mail server messages for non-existing folders

The message for "Mail folder could not be found on mail server" were known, actually by design, but not expected to happen that often.

The fix just excludes the inbox from the obfuscation, to reduce the amount of error messages.

49254 ShareService not starting up

In certain cases the ShareService did shut down during bundle startup, this has been handled to avoid signalling "stop" events during startup.

49259 Attachment corrupted when open in browser

Generic detection for possible XML content leads to accidental XML escaping.

This has been fixed by excluding application content from XML escaping.

49265 Dropbox storage offers to add descriptions

When including Dropbox as a storage account, Drive did offer to add descriptions to files, which is unsupported by Dropbox. We're now adapting available Drive features in accordance to capabilities of those external storage providers.

49304 Crash on all Groupware Nodes

A newly introduced login handler stored an user attribute on each login operation, and the corresponding cache invalidation event was distributed remotely throughout the cluster, which lead to an increased number of unnecessary events.

This has been updated by only updating user attribute if it actually was changed, skip cluster-wide invalidation.

49374 Bad organizer mail address when inviting through the calendar

Under certain circumstances, the organizer value was built from the user's display name when serializing to iCal.

This has been fixed by using the user's e-mail address as organizer value if "primaryMail" is configured.

49417 IMAP issue with empty x-originating-ip content

When sending NIL values for the "x-originating-ip" parameter, certain IMAP servers run into problems. This has been worked around to ensure no NIL values are sent by App Suite.

49491 IMAP session Timeouts after switching the IMAP backends

Mutually exclusive access to shared instances of 'javax.mail.internet.MailDateFormat' prevent concurrent threads to parse IMAP INTERNALDATE/ENVELOPE fetch responses.

Deal with possible locked shared instances of 'javax.mail.internet.MailDateFormat' to not block concurrent threads that attempt to parse IMAP INTERNALDATE/ENVELOPE fetch responses.

49543 Show hidden files and folders is not hidden when protected

No generic support to hide each user setting.

This has been solved by adding support for this particular setting.

49572 Dropbox/box.com: upload a new version overwrites file

Add new version overwrote the original file.

Properly add new file revision in case of explicit "Add new version" call and make "file_versions" capability available via folder API through field "supported_capabilities".

49575 Google drive: filename in version info not updated

Wrong file-name/title advertised to client when querying version/revision history for a file.

This has been fixed by setting proper file-name/title when retrieving version/revision information for a file.

49693 OX error- Message could not be found in the folder

Adjusted logging to not flood log files and have a more adequate log level for common cases in which an image cannot be retrieved.

49799 Accept/decline buttons are preserved in Mail

When using the "Accept/Decline" buttons in mail and switching mails, those buttons kept showing up despite the appointments status has already been updated. This was solved by properly re-drawing mails that offer those buttons.

49832 Geotagging issues for CalDAV

When importing CalDAV events with geolocation information, parsing failed in case float values were used for longitude and latitude. We made parsing less strict in this regard to allow importing.

49869 Upsell not triggered in onboard wizard for updater

No handling for caps with digits.

Adjusts regex and adds error message when trying to use commas in params.

49903 Recipient missing in to: on reply-to action the second time

If the lastname of the user is set to a single whitespace, the displayname was set to a single whitespace too. Tokens are trimmed and therefore, this token was not shown but still attached to the mail.

This has been fixed by trimming participant display name before checking emptiness and add email address to tokenfield if displayname is empty.

49909 Filename encoding wrong in drive mail

File name contains possible mail-safe encoding rendering shared item unreadable to user.

Safety check for possible mail-safe encoding and appropriate decoding solved this issue.

49920 Quote get single lined when using drive mail

Wrong text formatting on explicit plain text transport.

Solution: Proper text formatting in case user wants to send a plain-text message.

49937 Pasting multiple address result in single recipient

When taking over Email addresses from popular Office productivity suites by copy&paste, those were detected as single recipient. This happened since that software does not detect the kind of data but simply provides a string without delimiters. We've added support for more delimiters than comma and semicolon to work around this issue.

49958 Print preview of mail is always HTML

Despite the users configuration print previews for mails were always using the HTML part of the message. This has been changed to respect the users configuration with regards to displaying HTML mail.

49964 Drive mails using main account name instead of alias

Display name is always determined by associated user.
Now choosing proper full name by given mail address.

50038 Incorrect expires header for fallback pictures

When requesting a fallback image for a contact, for example when reading mail, the corresponding value of the `expires` response header was incorrectly set to a past date. This disabled caching of the response and led to unnecessary resource consumption. The problem has been solved by setting a future (+1 hour) date as value for the `expires` header.

50073 Issues with specific sharing link configuration

When using sharing links that contain an expiration date, recipient and password, some links fail to generate and are not sent. This was caused by an incompatible order of database statements and has been solved.

50078 Exception when changing passwords using override

In case the `oxadminmaster` account is configured to override `oxadmin` accounts, changing the password for `oxadmin` failed with a NPE. This was caused by incorrect cache invalidation in case `oxadminmaster` credentials were used and got fixed accordingly.

50091 Parsing errors for broken HTML mails

Converting certain broken HTML mail to their plain-text representation failed due to compatibility issues with the used library. This has been solved by extending conversion support for that kind of mail.

50094 IMAP ghost-folders cannot be unsubscribed

Depending on the mailbox format, folders might contain only other folders but no mails. When subscribing a subfolder and then deleting the parent folder, the subfolders remain subscribed and cannot be removed in App Suite. This has been solved by extending the IMAP folder consistency check.

50101 Vague error messages when uploading versions to Dropbox

Some storage providers use file path as that files unique identifier. When adding a new version of the same file but with a different filename in OX Drive, that version will be created as a new file at the storage service and return vague error messages. We solved this by using unique names of additional files when adding a version. At the same time we dropped support for versioning, see Change #3756.

50174 Empty mail addresses lead to validation errors

When storing empty values as mail address, certain provisioning code failed when changing a different parameter. This has been solved by allowing empty values in addition of `NULL` values when validating a change.

50203 Too many open files

When using `systemd` instead of `sysv`, the configurable limit of "open files" was not correctly applied. This has been solved in combination with Change #3773.

5 Changes relevant for Operators

5.1 Changes of Configuration Files

Change #3408 New property for RSS feeds to define allowed schemes

Added a new property to allow the definition of supported schemes for RSS feeds.

- Key: `com.openexchange.messaging.rss.feed.schemes`

- Description: Defines the URL schemes that are allowed while adding new RSS feeds. An empty value means all (by URL supported) schemes are allowed.
- Default: `http, https, ftp`
- Version: 7.8.3
- Reloadable: `false`
- `Configcascade_Aware`: `false`
- File: `rssmessaging.properties`

Change #3447 Changed default value of `com.openexchange.imap.imapSearch`

Changed default value of `com.openexchange.imap.imapSearch` to `force-imap` to increase full-text search performance.

Change #3470 Maximum concurrent user connections for mail attachments

Added property `com.openexchange.file.storage.mail.maxAccessesPerUser` to file `filestorage-maildrive.properties` (Default: 4) to specify the max. number of connections a user may use concurrently.

Change #3477 Make chunk size for multipart uploads configurable for S3 filestore

The configuration option `com.openexchange.filestore.s3.[filestoreId].chunkSize` (Default: 5MB) has been added to `filestore-s3.properties`.

Change #3482 Added property to enable/disable the fast crypt token check

Enhanced file `secret.properties` by the property `com.openexchange.secret.recovery.fast.enabled` (Default: `true`) to control whether fast crypt token check is enabled or not. That mechanism is used to check the validity of user's current secret in a fast manner and is used when triggering the `recovery/secret?action=check` call.

Change #3506 OAuth 2.0 and API v2 for Dropbox

In June 2016, Dropbox announced the deprecation of their API v1 (<https://blogs.dropbox.com/developers/2016/06/api-v1-deprecated/>). The old API will be available until June 2017. Therefore, the access to Dropbox via the AppSuite was updated to use the API v2. That was an opportunity to upgrade to OAuth 2.0 as well.

All existing Dropbox accounts in the AppSuite that use OAuth 1.0 tokens will not work right out-of-the-box. The reason for that being the access tokens which are encrypted with the user's password. This means that users that wishes to continue using the Dropbox feature inside of AppSuite, must re-authorise their Dropbox accounts via "Settings > Accounts > Dropbox account > Reauthorise". This way, the new OAuth 2.0 token will be fetched. This is the only step required from the user in order to upgrade to OAuth 2.0 and continue using that feature.

For operators two new properties were introduced at the `dropboxoauth.properties` file which designate the redirect/callback URL for OAuth 2.0 (similar to other `*oauth.properties` files) and the application's product name (which can be found in <https://www.dropbox.com/developers/apps>). Two new properties `com.openexchange.oauth.dropbox.redirectUrl` and `com.openexchange.oauth.dropbox.productName` are now available.

Change #3524 Configuration to prevent the middleware from setting special-use flags

It is now possible to prevent to middleware from setting special-use IMAP flags.

- Key: `com.openexchange.imap.setSpecialUseFlags`
- Description: Defines whether the OX middleware is allowed to set special-use flags. If set to `false` the OX middleware will never set any special use flags on folders on the IMAP server. If set to `true` the OX middleware will only set special-use flags if no special-use flag of that type exist yet.

- Default: `false`
- Version: 7.8.3
- Reloadable: `true`
- `Configcascade_Aware`: `true`

Change #3528 Added code tag to `whitelist.properties`

HTML code tag gets removed when returning sanitized content, therefore added `html.tag.code=""` to `whitelist.properties`.

Change #3541 Added `USER_FIELDS` group to `com.openexchange.contact.search.fields`

There was no easy way to add all `USERFILEDXX` fields to `com.openexchange.contact.search.fields`, this has been solved by offering this as a configuration option at `contact.properties`.

Change #3544 Added report chunking and storage with configurable multithreading

The report at its earlier state used too much memory in the process of creation. Also the current multithreading feature was not configurable by the user. Several optimizations have been implemented.

Chunking and storage

The report can grow pretty large on bigger deployments, therefore parts of the report are stored in chunks on the client storage. After all data gathering is finished, the report is composed and send, stored or displayed to the user (depending on the used command). The report is never kept completely in memory, which reduces the needed resources dramatically. Two new parameters enable the user to configure this new feature at `reportclient.properties`:

- `com.openexchange.report.appsuite.fileStorage` (Default: `/tmp`)
- `com.openexchange.report.appsuite.maxChunkSize` (Default: 200)

Multithreading was not configurable so far

The user might want to use a distinct report node and therefore may want to configure the maximum size of the threadpool and the thread priority. New options were added to `reportclient.properties`:

- `com.openexchange.report.appsuite.maxThreadPoolSize` (Default: 20)
- `com.openexchange.report.appsuite.ThreadPriority` (Default: 1)

Storage location

Saving the report (`-f`) will no longer store the JSON-File at the clients `/tmp` folder but use the `com.openexchange.report.appsuite.fileStorage` property.

Change #3548 Support of unsolicited SAML responses via configuration

Support for unsolicited SAML responses can now be configured at `saml.properties` using the `com.openexchange.saml.allowUnsolicitedResponses` (Default: `true`) property.

Change #3550 Moved Presenter configuration to the corresponding file

Moved the OX Presenter configuration from `documentconverter.properties` to `documents.properties`. The setting `com.openexchange.presenter.maxParticipants` allows to set the maximum number of participants for a presentation. Users who want to join the presentation, if the maximum is reached, will receive an error message. Note: Handle the value with care as a big number of participants raises the network transfer between backend nodes.

Change #3554 Possibility to let IMAP auth perform a lower-case look-up for user/context

Added option `LOWERCASE_FOR_CONTEXT_USER_LOOKUP` (Default: `false`) to file `imapauth.properties` Once

enabled, the user/context information used for performing user/context look-up is automatically transformed to lower-case.

Change #3556 Upgrading all OAuth related services to OAuth 2.0

All existing Yahoo! accounts in the AppSuite that use OAuth 1.0 tokens will not work right out-of-the-box. The reason for that being the access tokens which are encrypted with the user's password. This means that users that wish to continue using the Yahoo! subscriptions inside of AppSuite, must re-authorise their Yahoo! accounts via "Settings > Accounts > Yahoo account > Reauthorise". This way, the new OAuth 2.0 token will be fetched. This is the only step required from the user in order to upgrade to OAuth 2.0 and continue using that feature.

For the operators two new properties were introduced at the `yahoooauth.properties` file which designate the redirect/callback URL for OAuth 2.0 (similar to other `*oauth.properties`) and the application's product name (which can be found in <https://developer.yahoo.com/apps/>). Hereby, the two new properties

- `com.openexchange.oauth.yahoo.redirectUrl`
- `com.openexchange.oauth.yahoo.productName`

are added.

Change #3567 Added configuration options for the Dovecot `doveadm` REST interface

Added lean configuration options needed to connect against the Dovecot `doveadm` REST interface. Introduced lean option `com.openexchange.dovecot.doveadm.endpoints`, which specifies the URIs to the Dovecot `doveadm` REST interface end-points, for example "`http://dovecot1.host.invalid:8081`, `http://dovecot2.host.invalid:8081`, `http://dovecot3.host.invalid:8081`".

Moreover connection-related attributes are allowed to be specified to influence HTTP connection and pooling behavior

- `com.openexchange.mailaccount.dovecot.endpoints.totalConnections` (Default: 100) The number of total connections held in HTTP connection pool.
- `com.openexchange.mailaccount.dovecot.endpoints.maxConnectionsPerRoute` (Default: 0) The number of connections per route held in HTTP connection pool; or less than/equal to 0 (zero) for auto-determining.
- `com.openexchange.mailaccount.dovecot.endpoints.readTimeout` (Default: 2500) The read time-out in milliseconds.
- `com.openexchange.mailaccount.dovecot.endpoints.connectTimeout` (Default: 1500) The connect time-out in milliseconds.

Also introduced lean option `com.openexchange.dovecot.doveadm.secret` that specifies the API secret to authenticate against the Dovecot `doveadm` REST interface.

Change #3585 Introduced `com.openexchange.oauth.modules.enabled.[oauth_provider]`

It wasn't possible to disable some of the modules for an OAuth provider. It is now possible to enable only specific modules for an OAuth provider. For this purpose a comma separated list of module identifiers can be configured for each individual OAuth provider via the `com.openexchange.oauth.modules.enabled.[oauth_provider]` property.

If no list is configured, which is the default, all available scopes are retrieved. Therefore on upgrade we now require that the configured OAuth application has the permission to request the according mail scope (see https://developer.yahoo.com/oauth2/guide/openid_connect/getting_started.html#getting-started-setup for example).

If you don't want to extend the permissions of your configured OAuth applications you have to configure this property for every provider with the old set of modules. See the configuration documentation for more informations.

Change #3589 Enable editing OX Guard encrypted documents with OX Documents

For enabling a user to edit OX Guard encrypted documents, an additional property is needed: `com.openexchange.capability.guard-docs=true` This is needed in addition to the regular configuration that allows the user to use OX Guard with OX Drive.

Change #3605 New config option to specify Web Socket timeout in milliseconds

Introduced new lean config option `com.openexchange.http.grizzly.wsTimeoutMillis` (Default: 900000) to specify Web Socket timeout in milliseconds. The value is specified in milliseconds.

Change #3606 Added lean config options for Web Sockets configuration

Added lean config option `com.openexchange.websockets.enabled` (Default: `false`) to enable/disable Web Socket support. That property is responsive to `config-cascade` and reloadable as well.

Added lean config option `com.openexchange.websockets.grizzly.remote.delayDuration` (Default: 1000) to define time in milliseconds a message (that is supposed to be transferred to a remote cluster member) is queued in buffer to await and aggregate equal messages that arrive during that time. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.websockets.grizzly.remote.maxDelayDuration` (Default: 3000) to define the time in milliseconds a message (that is supposed to be transferred to a remote cluster member) is at max. queued in buffer to await and aggregate equal messages that arrive during that time. So, even if there was an equal message recently, message is flushed from queue to avoid holding back a message forever in case there are frequent equal messages. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.websockets.grizzly.remote.timerFrequency` (Default: 500) to specify the frequency/delay in milliseconds when the buffering queue will be checked for due "remote" messages (the ones exceeding `delayDuration` in queue). Reloadable, but not responsive to `config-cascade`.

Change #3607 Added lean config options for Push Notification Service configuration

Added lean config option `com.openexchange.pns.delayDuration` (Default: 1000) to specify the time in milliseconds a notification is queued in buffer to possible aggregate with similar notifications that arrive during that time. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.timerFrequency` (Default: 500) to specify the frequency/delay in milliseconds when the buffering queue will be checked for due notifications (the ones exceeding `delayDuration` in queue). Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.numProcessorThreads` (Default: 10) to specify the number of threads that concurrently handle due notifications that were transferred from buffering queue to processing queue. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.maxProcessorTasks` (Default: 65536) to define the buffer size for due notifications that were transferred from buffering queue to processing queue. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.transport.apn.ios.enabled` (Default: `false`) to enable/disable the APNS transport. Reloadable and responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.transport.apn.ios.feedbackQueryInterval` (Default: 65536) to define the frequency in milliseconds when to query the Apple feedback service to check for expired and/or invalid tokens. Reloadable, but not responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.transport.gcm.enabled` (Default: `false`) to enable/disable the GCM transport. Reloadable and responsive to `config-cascade`.

Added lean config option `com.openexchange.pns.transport.wns.enabled` (Default: `false`) to enable/disable the WNS transport. Reloadable and responsive to config-cascade.

Added lean config option `com.openexchange.pns.transport.websocket.enabled` (Default: `false`) to enable/disable the Web Socket transport. Reloadable and responsive to config-cascade.

Change #3616 New property at `mail-compose.properties`

Added property `com.openexchange.mail.compose.share.preview.timeout` (Default: 1000) to configure timeout for preview images generation in Drive Mail.

Change #3635 Exclude global address book from address book picker

In case the global address book contains a massive amount of users which exceeds the default limit of the address book picker (10.000), you can now exclude the global address book from the dialog to ensure low loading time and a responsive UI. The new settings is: `io.ox/contacts//picker/globalAddressBook`.

Change #3636 Removed default values for `*.ssl.protocols` and `*.ssl.ciphersuites`

New SSL configuration should be used as system-wide default. Removed default values for `*.ssl.protocols` and `*.ssl.ciphersuites` from `imap.properties`, `pop3.properties` and `smtp.properties`. Values for those services will overwrite the system-wide default.

Change #3637 New default value for `com.openexchange.connector.maxRequestParameters`

The previous default value of 30 was too strict and led to functional issues if, for example, a Email with a larger number of attachments was forwarded. The property `com.openexchange.connector.maxRequestParameters` at `server.properties` is now set to 1000 by default.

Change #3653 Added configuration for cluster-wide Web Socket orchestration

Added new Hazelcast map configuration `hazelcast/grizzlyws.properties` for cluster-wide Web Socket orchestration. That map keeps track for each user what Web Sockets connections exist on each cluster node.

Change #3665 The file `document.properties` got enhanced by the `maxDocumentFileSize`

The file `document.properties` got enhanced by the property `com.openexchange.office.maxDocumentFileSize` (Default: 100). It allows to limit the maximum document file size that can be loaded. Document larger than the configured value will result in an error message (document size limits are exceeded). The system will also check that the current JVM memory consumption allows to load a document. The file size value is interpreted as MB.

Change #3676 Added `DEFAULT_TIMEZONE` configuration as fall-back

Added `DEFAULT_TIMEZONE` (Default: Europe/Berlin) to file `AdminUser.properties` to change the fall-back time zone to set in case not specified in arguments on user creation.

Change #3773 File descriptor configuration for `systemd`

For `sysv` based init systems the file `ox-scriptconf.sh` specifies the default "Maximum number of open Files for the middleware" which can be adjusted by admins via the `NRFILES` variable that defaults to 8192.

For `systemd` based init the default value can't be overridden via this config file so we provide a additional "drop-in" config for `systemd`. Therefor we added an example `limits.conf` file at the `/etc/systemd/system/open-xchange.service.d` directory which allows operators to easily override `systemd` defaults.

5.2 Changes of Database Schema

Change #3301 Added `oAuth` column to the mail account tables

Added the column `oAuth` to the tables `user_mail.account` and `user_transport.account`. Related

update-task: AddOAuthColumnToMailAccountTableTask.

Change #3529 Inconsistent values for unlimited/not set quota

Replace NULL values with -1 for `quota_max` column in `user` and `del_user` tables. Related update-task: `MakeQuotaMaxConsistentInUserTable`.

Change #3650 Option for user mail accounts without initializing standard folders

Added the possibility to create users having mail accounts standard folders initialized with null values to let them be auto-detected on first login. In order to create such users standard folder related columns of the table `user_mail_account` are changed to explicitly allow NULL values. Related update-task: `AllowNullValuesForStandardFolderNamesUpdateTask`.

Change #3651 Need for an update task to remove orphaned locks from Drive documents

Introduced special update task that removes inconsistent locks held in database. Related update-task: `com.openexchange.tools.oxfolder.RemoveInconsistentLocksUpdateTasks`.

Change #3652 Need for tables to store push notification subscriptions

Created new tables to store push notification subscriptions.

- `pns_subscription` Holds the main subscription data such as associated user/context, token, client and so on.
- `pns_subscription_topic_wildcard` Stores such subscription that advertise interest for notifications by specifying a wild-card pattern; e.g. "ox:mail:*".
- `pns_subscription_topic_exact` Stores such subscription that advertise interest for notifications by specifying an exact topic name; e.g. "ox:mail:new".

Related update-task: `com.openexchange.pns.subscription.storage.groupware.PnsCreateTableTask`.

Change #3656 Introduced a new `scope` column to the `oauthAccount` table

Due to the requirement of the increment access implementation, seven OX OAuth scopes were introduced to map a subset of OAuth specific provider scopes:

- `mail`
- `calendar_ro`
- `contacts_ro`
- `calendar`
- `contacts`
- `drive`
- `generic`

Those are the possible values that will be stored as a space separated list in the newly introduced column `scope`. Besides the new column, this task also performs a migration and mapping of the already existing OAuth provider specific scopes to the OX scopes. Related update-task: `OAuthAddScopeColumnTask`.

Change #3667 Additional index for the `publications` table

A new index named `entity` for the table `publications` is added, including the `cid`, `module` and `entity` columns. Related update-task: `PublicationsAddEntityIndex`.

Change #3669 Renamed the LinkedIn service identifier

Due to the incremental access and some general house keeping procedures, we had to rename the the service identifier of the linked in to conform with the rest of the OAuth services. The service identifier of the LinkedIn OAuth service is being renamed from `com.openexchange.socialplugin.linkedin` to `com.openexchange.oauth.linkedin` for every OAuth account in the database. Related update-task: `RenameMigrateLinkedInServiceIdUpdateTask`.

Change #3670 Drops OAuth access tokens for all Dropbox OAuth accounts

Drops all OAuth 1.0 access tokens for every Dropbox OAuth account in the database. This is part of the migration/upgrade path from OAuth 1.0 to OAuth 2.0 for Dropbox. Related update-task: `OAuthDropboxDropTokensTask`.

Change #3671 Introduced an optional new `clusterLock` table in the user database

Tokens for accessing external services via OAuth are cached. If the tokens change, due to automatic refreshing or manual re-authorization, proper cache invalidation is needed. There might arise situations where two clients perform operations on two different nodes, having different instances of the same OAuth accounts in cache. Now if the token is refreshed on node X and node Y performs an operation against the external service before the local cache was invalidated, the operation will fail due to an invalid access token. The handled exception might in turn lead to another refresh operation. That's where we could end up in cycle of two OAuth account instances that mutually invalidate their tokens until at least one operation is delayed until proper remote cache invalidation. A theoretical and highly unlikely scenario. Nonetheless it is solved with the acquisition of a cluster wide lock for a specific task. If Hazelcast is enabled, then it is used as the cluster lock storage. If not then the fall-back solution kicks in, that of the database and the new table is created. Related update-task: `ClusterLockCreateTableTask`.

5.3 Changes of Command Line Tools

Change #3437 Introduced `runallupdate` tool

Introduced command-line tool `runallupdate` which triggers updates of all available DB schemas.

Change #3440 Added tool to list blocked or outdated schemas

Added `checkdatabase` command-line tool to list those schemas that need an update or are blocked by a running update.

Change #3446 Added command-line tool to unblock database schemas

Added command-line tool `unblockdatabase` to unblock all or dedicated database schemas.

Change #3517 Making `getuserconfigurationsource` option more consistent

Changed user option to accept `-i/--userid` for `getuserconfigurationsource` command-line tool.

Change #3578 Support config reload of service `open-xchange`

Open-Xchange already deploys the following CLTs:

- `listreloadables` To list config properties that can be reloaded without a server restart
- `reloadconfiguration` To reload those properties

After SCR 3565 removed the need for admin credentials when using `reloadconfiguration` we incorporated this feature into our init scripts for the open-xchange server so that operators can use the known init script commands for reloading configurations, e.g. `systemctl reload open-xchange.service`. The command-line tool `triggerreloadconfiguration` has been created in the process and is invoked by the init script.

Change #3579 Adapt bash lib to new Java versioning scheme

The function `detect_minor_java_version` was moved to `detect_java_version` to better reflect the intention of finding what people normally expect when looking for the "java version". This is primarily preparation for Java 9 and later.

Change #3609 Added `createschema` CLT to create schemas manually

Added a CLT which creates a new schema in the given database if possible. In case the ID parameter is missing the best suitable database is selected automatically. Please notice that the created schema will not be available for the automatic schema select strategy. Instead use the

--schema-name parameter for context creation.

Change #3672 Removed OXaaS-style reports from core

OXaaS has its own report solution. The core report client does no longer support OXaaS specific features.

5.4 Changes of Behaviour

Change #3436 change event in Settings is now only triggered if the value actually changed

The change event of a settings object (`io.ox/core/settings`) is now only triggered if the value actually changed. The check is a simple `JSON.stringify(current) vs. JSON.stringify(new)` within the `set()` method.

Change #3481 ConfigurationService.getFile(String) is now deprecated

Added `@deprecated` to `com.openexchange.config.ConfigurationService.getFile(String)` as due to "lean configuration" initiative this method might return a `Properties` instance that does not contain all of the properties that are expected to be contained, as the specified file might miss those properties whose value does not differ from associated default value. If the denoted file is known to exist and does contain expected content, this methods may be safely.

Change #3487 Use flags in folder select events

The detail-part of the triggered event changed. Please see <https://documentation.open-xchange.com/latest/ui/features/metrics/09-events.html> for more details.

Change #3545 Remove the feature of processing a report via Hazelcast nodes

This feature was introduced to process bigger reports faster by distributing the work on all nodes of a cluster. During extensive load-tests, a significant increase in processing time for larger deployments was observed, compared to the local processing. That makes the use-case for this feature invalid and therefore it has been removed.

Change #3617 Settings now use backbone events

This allows to use settings in combination with `listenTo`. This also deprecates `createModel()` which never really worked as expected. Just use `listenTo` with the proper change events.

Change #3655 Changed accent colors on Portal

Some colors had an insufficient color contrast, e.g. orange and light green, to comply with WCAG Level AA. Those got changed for accessibility compliance.

Change #3662 Signatures are not recognized as Attachments

Since a signature is not an attachment that the receiver should have a look at and most of the time has nothing to do with the email content, it should not be handled and displayed as an attachment. This has been implemented by not interpreting `ContentType application/*-signature` as and actual attachment.

Change #3747 Unfinished Mail is saved as draft on logout

LocalStorage is used to store unfinished mails. Since we empty the localstorage on a logout because of security reasons, those unfinished mails are lost. To fix this issue we saved mails via JSlob. Since this was found to be insecure as well we decided to save the unfinished mail as a draft, so the data is not lost. Those drafts cannot be used to automatically restore the Mail app on the next login yet. A user has to select and edit the draft manually.

Change #3756 Dropping versioning support for all cloud storages

There are certain API limitations from the different cloud storage providers which prohibit the correct and flawless integration of those storages with the Infostore/OX Drive regarding versioning support. Their versioning scheme and/or versioning logic differs a lot from the Infostore/OX Drive's logic. Their data models in conjunction with their APIs provide (different from every provider) subsets of functionality that Infostore/OX Drive requires to correctly and seamlessly support that fea-

ture.

5.5 Changes of Packaging

Change #3613 New packages for WebSocket-based push

Added new packages for WebSocket-based push:

- `open-xchange-websockets-grizzly`
- `open-xchange-pns-impl`
- `open-xchange-pns-transport-websockets`

6 Changes relevant for Developers

6.1 Changes of the HTTP API

Change #3536 Extended mail `threadedAll` action with `categoryid` parameter

Added additional parameter `categoryid` to `threadedAll` action. If set, only conversations which contains as least one mail from this category will be retrieved.

Change #3542 Added a STATUS call for IMAP folders

Need to retrieve STATUS information from a certain IMAP folder, such as UIDVALIDITY, number of contained messages, UIDNEXT etc. Therefore the `/ajax/mail?action=examine` call has been added.

Change #3625 Added an `exclude_folders` field to the contact search action body parameter

Added the `exclude_folders` field to the `api/contacts?action=search` body parameter. If a list of folder identifiers or at least a single folder identifier is given, those folders will not be searched for contacts.

Change #3639 Added interface to add/remove notification subscriptions

Added end-points to add/remove notification subscriptions associated with a token for certain topics. Please see "PNS" section inside the HTTP-API documentation available at <https://documentation.open-xchange.com/>.

Change #3714 Support for special `date (661)` column

Support for special `date (661)` column to represent the date of a mail message. As configured, either the internal received date or mail's sent date (as given by "Date" header). Supposed to be the replacement for `sent_date (609)` or `received_date (610)` to let OX Middleware decide based on configuration for `com.openexchange.mail.preferSentDate` property what to consider. Supported at both - columns parameter and sort parameter.

6.2 Changes of the Java API

Change #3537 Extended `ISimplifiedThreadStructureEnhanced` and `MailServletInterface`

The interfaces did lack the possibility to retrieve conversations for mail categories. This has been solved by adding the `SearchTerm` parameter.

Change #3564 Support for SAML SP-initiated single logout via http-redirect binding

The method `com.openexchange.saml.validation.ValidationStrategy.validateLogoutResponse` (`LogoutResponse`, `HttpServletRequest`, `LogoutRequestInfo`, `Binding`) was extended by the `HttpServletRequest` parameter, to allow checking of URI signatures.

Change #3604 Deprecation of annotation-based API documentation

The approach of having an annotation-based documentation of the HTTP API was never really used, so the corresponding annotation definitions and associated interfaces are going to be removed completely in a later version, presumably v7.10.0. For now, all documentation-related annotations and interfaces are marked as deprecated. This also includes the `com.openexchange.documentation.AnnotatedServices` interface declaring the `com.openexchange.documentation.AnnotatedServices.getSupportedServices()` method, which is widely used since it's inherited by `com.openexchange.ajax.requesthandler.AJAXActionServiceFactory`.

Change #3711 Support for more sort fields

The MAL API is enhanced by additional constants for the `c.o.mail.MailListField` enum class and `c.o.mail.MailSortField` enum class respectively:

- Flag `\Answered`, Column=657, Name="answered"
- Flag `\Forwarded`, Column=658, Name="forwarded"
- Flag `\Draft`, Column=659, Name="draft"
- Flag `\Flagged`, Column=660, Name="flagged"

Thus it is possible to retrieve mail messages sorted by other flags than only by `\Seen`. Note: Sorting by Flag `\Forwarded` requires the mail service to support either a `\Forwarded` system flag or user flags. In case of IMAP the user flags capability needs to be supported in order to sort by that field.

6.3 Changes of the SOAP API

Change #3435 Added `include_guests` and `exclude_users` parameters

The SOAP interface now allows to include or exclude guest users for shares. Therefore `include_guests` and `exclude_guests` parameters are available for `OXUserServicePortType` and `OXResellerUserServicePortType` endpoints and their `list` and `listAll` calls.

Change #3449 Added calls for checking and unblocking database schemas

The `OXUtilService` endpoint got extended by `checkDatabase` and `unlockDatabase` calls. They allow to check the database schema consistency status and unblock a locked database schema respectively.

Change #3611 Extended `OXUtilService` with a method to create schemas manually

The new call `createSchema` has been added to `OXUtilService`. It allows to pre-provision database schemas in order to speed up future context creation.

6.4 Changes of the RMI API

Change #3448 Added methods for checking and unblocking database schemas

RMI interface `com.openexchange.admin.rmi.OXUtilInterface` has been enhanced by two method declarations.

- `checkDatabase` Checks databases by schema consistency with regard to update tasks
- `unlockDatabase` Unlocks specified database schema (schema name is given) or all schemas of the database in case marked as being updated for too long. That is schema is locked for more than 24 hours.

Change #3610 Extended `OXUtilInterface` with a method to create schemas manually

When using the new `createSchema(final Credentials credentials, Integer optDBId)` method, a new schema in the given database is created if possible. In case `optDBId` is null the best suitable

DB is selected automatically. Please notice that the created schema will not be available for the automatic schema select strategy. Instead use the `--schema-name` parameter for context creation.

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 behaviour. Unless explicitly stated within this document, we do not expect any side-effects.

8 Fixed Bugs

23639, 31404, 43342, 44275, 44943, 45101, 45457, 46098, 46189, 46285, 46346, 46443, 46482, 46677, 46837, 46968, 46970, 47025, 47083, 47101, 47157, 47166, 47182, 47184, 47279, 47325, 47348, 47378, 47417, 47429, 47438, 47467, 47503, 47504, 47510, 47575, 47576, 47587, 47656, 47664, 47676, 47678, 47683, 47720, 47785, 47873, 47888, 47893, 47932, 47944, 47967, 47992, 48006, 48047, 48073, 48075, 48089, 48109, 48118, 48133, 48195, 48205, 48242, 48243, 48248, 48292, 48344, 48348, 48349, 48364, 48380, 48394, 48438, 48463, 48495, 48598, 48618, 48629, 48630, 48631, 48654, 48663, 48681, 48687, 48729, 48748, 48778, 48851, 48883, 48927, 48928, 48940, 48949, 49007, 49055, 49057, 49074, 49083, 49086, 49091, 49103, 49141, 49196, 49207, 49210, 49231, 49236, 49254, 49259, 49265, 49304, 49374, 49417, 49491, 49543, 49572, 49575, 49693, 49799, 49832, 49869, 49903, 49909, 49920, 49937, 49958, 49964, 50038, 50073, 50078, 50091, 50094, 50101, 50174, 50203, 45363, 45811, 46025, 45386, 46897, 48282, 47601, 47602, 47770, 47774, 47779, 47781, 47790, 47822, 47824, 47891, 47898, 47916, 48061, 48083, 48173, 48230, 48231, 48282, 48559, 48843, 49005, 49014, 49015, 49159, 49439, 49639, 49847, 49848, 49912,