



Release Notes 4.8 earlybird 1



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Inhalt

Änderungen in Orchestra seit der Version 4.7.0.0

Zielgruppe

Orchestra Anwender

Vorbehalt

Die Version 4.8.0.0 earlybird 1 ist nicht für den produktiven Einsatz bestimmt.

1. Release Inhalt

1.1. Orchestra 4.8.0.0 earlybird 1

Important

- Due to a changed licensing system, we are no longer allowed to deliver the MYSQL-Connector within Orchestra. Please download and add the MYSQL-Connector by yourself to the library folder of Orchestra.

Known Issues

Human Interaction

General

- The Worklist-Server must be enabled in the Orchestra Monitor before Scenarios with Human Interaction content are deployed, otherwise the WorklistType would not be displayed

Designer

- No Syntax-Checking for XML/XSLT/HTML (at least XML consistency should be checked)
- Human Tasks do not parse Parameters from selected Web Resources, they must be defined by hand for the process model
- Web Resources must have a unique name, even if they are in separate groups
- Human Tasks do not filter types of available "Start Resource" and "End Resource". Currently also css, js, ... files can be selected
- The parsing of WebResources only happens when something in the Human Task is changed
- The URL-Preview in the External HTTP-Mode has some refreshing problems
- When switching from "parameters as messages" to "parameters as simple types" (and back as well) the Credential parameter in the human interaction call in the process-model is not saved. (same when switching back)

Worklist-UI

- Exception when a HumanTask used as a Process-Starter has no EndResource
- EndResources are ignored when a Human Task is finished with the integrated finish button on the bottom

Designer Usability

- Message type editor
- When trying to add already existing key no error message dialog pops up.
- Graphical Mappings
- Edge between two elements cannot be created, if they doesn't fit on a single screen page.

Monitor Usability

- In some constellations it is not possible to remove scenario groups

Orchestra juno

- Download as packaged application doesn't work properly. Use Orchestra_juno_4.8.0.0-earlybird-1.zip instead and add node specific configuration file after extracting archive.

Installer

Monitor Installation

- Tomcat classpath dependencies will not be set. Manually add emds_logging.jar and orchestra_jre_url_extension.jar to Tomcat classpath.
- Filepaths in logging.properties and environment_settings.xml will not be set properly. Manual interaction needed to set up paths.

New/Changed Features

Partnersystem

- The partner system has been extended by the following functions
- Display the changes of environment entries in the table when they are updated in partner system
- filter in the tree of partners
- activate/deactivate grouping of partners in the partner tree
- sort partners in the partner tree by name

Designer

- Copy content of process or activity variables as string to the system clipboard
- Highlight scenario element in Scenario-Element-Tree according to active editor
- Added dialog for copying a scenarios
- Allow importing scenario elements from other scenarios using a wizard
- Changed logging panel to use a monospace font for better readability
- HL7-Parser now uses default namespace without prefix for HL7 messages
- Disable conditional edge label by default (user can enable it with checkbox)
- AS2 service port can be configured for the designer inside "Engine State"
- Conditional edges can now show the condition as label (no need for annotations anymore). The label text can be overwritten by a custom label-text.

Subarea Lookup-Tables

- Lookup tables: The handling of lookup tables configuration can now be imported/exported as text-file

Subarea REST services

- Resources in the Rest Editor are now sorted by path.
- If a WADL file is imported and if a doc element in the WADL has no title but a content, then the description of the element will be the doc content if the text is shorter than 150 characters.

Subarea process models

- Bent style of new edges between elements in the process model that are already connected. Previously, it was possible to create multiple edges from a gateway to an element by accident and without the user being notified. Those connections would overlap, and it would be very hard to notice and fix this condition. Now, when the user tries to create a new connection, and another connection of this type already exists, he is asked for confirmation. If he does indeed want to create a second connection, the connection is created using a different line bend style, so that the connections will mostly not overlap.
- Context menu for process model is displayed, when user clicks right on free space in process model panel.

- Colorize Annotation in process model now possible
- Process model can now be scrolled with mouse wheel

Subarea Channels

- The Database environment entry now allows to set the login timeout for the JDBC driver as well as the c3p0 properties `acquireRetryAttempts` and `acquireRetryDelay` which affect how long a call to `DatabaseConnectionFactory.getConnection()` may hang until an exception occurs.
- The HL7 deserializer can optionally parse encoded hexadecimal data `\Xdd...\`. In most cases this is to decode a tab character encoded as `\X09\`.
- Improved exception handling in FTP listener and File listener channels: If an IO exception occurs and the polling timer is an absolute timer Orchestra retries the read operation.
- Allow testing Serializer and De-serializer configuration
- Added Test button to Serializer and De-serializer configuration for opening test dialog.
- On Serializer test dialog, configuration can be tested with an input message.
- On De-serializer test dialog, the configuration can be tested by giving an input filepath.
- LDAP reader could not interpret `objectGuid (octetstring)` type properly.
- If Attribute's Syntax Name is "Octet String", it will be read as binary (`base64Binary`).
- Added Mapping function `convertBinaryToGUID`: convert `base64Binary` to GUID string
- Added Mapping function `convertBinaryToByteString`: convert `base64Binary` to byte string (can be used in LDAP query)
- added feature `renameWorkFilesOnStartup` for FTP Listener channel (continuing work from last connection is not supported)
- Added a button that allows import of message type from database in `database_reader` and `database_listener`.
- Added fourth page to the IDOC-import wizard which allows modification of selected IDOC release version
- AS2 Outbound Environment Entry Editor's private and public certificate have been of wrong credential type

Subarea Mappings

- In procedural mappings `xsi:nil` and `xsi:type` attributes are always allowed.
- If a graphical mapping is created, where source and target type are the same type imported from a database, then the user can enable a new check box to create a copy mapping which cuts the length of all the mapped string values to the length of the target database column.
- Added a search option in the orchestra mapping for nodes and components

Subarea Message types

- The message type editor requests user confirmation if he attempts to delete a field configured as a key.
- New entry in the context menu import a message type from xml file to create a message type matching the xml file.
- New entry in the context menu for creating a target-only or a orchestra-mapping directly from the selected message type
- Enable "Test current element" button for message type and implement test dialog to test validator, serializer and deserializer of message type
- Prevent entering special characters in element names (Message Type Editor).
- Overwrite Message Type from CSV

Subarea Java source

- Invalid characters, in the name of a proxy script, will be replaced with an underscore character
- JavaSource with sample logger added

Subarea Human Interaction

- Button for manually clearing the Worklist Items from inside the Orchestra Designer
- Support for parameters from type 'message', which now can be used together with the existing simple datatypes (e.g. strings) a human task.
- Uploading Files from the Worklist-UI to an Orchestra Process
- Downloading Files from the Worklist-UI (files which are provided by an Orchestra Process)
- Storing and editing web resources directly in an orchestra scenario from the designer
- build in editor for HTML, XSLT, JSON, CSS, Javascript...
- build in preview of images
- templates for newly created files (e.g. HTML) with the build in editor
- groups (folder) for organizing files
- importing web resources from the OS filesystem
- exporting web resources back to the OS filesystem
- XSLT-Files as Start- and End-Resources of a Human Task. With XSLT it is easy possible to iterate through orchestra messages and build html-tables for example
- Usability package
- added tooltips
- improved the look-and-feel
- improved the description and naming of human tasks
- added an URL-Preview of human tasks from type external HTTP
- added an export function for the zip-file contained in an human task. With this function the user can save an existing zip file back to the file system.
- Export of previously imported Zip-Files in a human task back to the file system
- Show error message with cause inside the worklist server, when an error occurs because of an erroneous XSLT mapping
- Parameters like `$(INT:RESPONSE.URL)` can be used inside XSLT-templates the same way like being used in HTML resources
- Added toolbox for adding ready-to-use code-snippets for Human Interaction XSLT or HTML elements
- Prevent designer from creating new message-types when switching between parameter mode "parameters as messages" and "parameters as list"
- Show exceptions from form type "Internal HTML-Form (Zip Container)" inside error dialog instead of printing it to console

Subarea Credentials

- SSH-Username can now be defined in SSH-Credential

Runtime

Updated Libraries

- Updated PostgreSQL Database driver to 42.1.4.
- Instead of the Jaxen XPath engine we now use our own orchestra-jaxen-1.3.jar. It has its own package name soffico.jaxen to avoid name clashes if the original jaxen is in the classpath of the servlet container.
- Updated commons-fileupload.jar to version 1.3.3
- Updated xalan:serializer to version 2.7.2
- Updated tmatesoft:svnkit to version 1.9.3
- Updated apache:poi to version 3.17
- Upgrade as2-lib to version 4.2.1

General

- Refactoring of certificate based authentication
- Overworked emds_logging to improve layout of log messages.

- The emds_logging.jar has now been moved into the orchestra project and completely overworked.
- The log message layout is improved for better readability.
- Channels now show the scenario name and channel name in the log messages.
- Overworked scenario_logging.properties with some comments to ease the configuration.
- Showing the current and total number of activated and installed scenarios during the Runtime Startup in the logfile
- Suspending/Resuming of REST and SOAP Services. These Services can also start process models, so in the Orchestra Monitor they can now be suspended and resumed like the inbound channels or timers for example
- Changed the logging behavior during the startup of Orchestra. Now the log messages, which are just for information on startup, does no longer have the level SEVERE. Instead they have the level INFO which makes much more sense. To stay sure that these startup log-messages are always logged, there is a new entry in the 'logging.properties' file which overrides the global log-level for this specific logger to INFO.
- Added parameter "serverTimezone=UTC" to default URL for MySQL runtime database due to issues of MySQL Versions >5.4 recognizing some server's Daylight Savings Time timezone settings, as well as issues of MySQL in some environments storing timestamps within the "duplicate" hour during the yearly DST switch. If you are updating from an existing Orchestra version, please make sure to re-use your old connection string, otherwise, if your server is not set to UTC, previously stored dates will appear wrong in the monitor.

Subarea KPI-Service

- Added a new option in the 'orchestra_configuration.xml' for enabling/disabling the automatic kpi-aging. Orchestra removed automatically kpi-data from the database when the value didn't change over a long period of time. This period was defined by the windows size. The idea was that this data is no more relevant since the data are older than the allowed window. In rare cases this assumption was wrong. Therefor the automatic aging can be disabled by a

Subarea REST services

- Support HTTP fields *Content-Encoding* and *Accept-Encoding* in REST provider
- Rest-Provider: If the process model doesn't provide a Content-Type nor the MSG has a property Content-Type then the REST provider uses the default Content-Type for a method and compares it with the accepted types presented by the caller. Also change default value of Parameter Content-Type if it doesn't match the media-type pattern.

Subarea Enterprise Service Registry

- Some services (currently only ScenarioInfoService and DeploymentService) are exported also as REST services so they can be invoked by simple HTTP calls.

Subarea CellSystem

- Improved logging of cell system: A new method "getCellStatistics" has been added to the cell-system-monitoring-interface. This method gives a detailed information of about the processing of cell messages. This method can be invoked by the external webservice that can be reached under the URL "http://<host>:<port>/OrchestraRemoteService/CellCommunicationServiceMonitor/Service?wsdl"

Subarea Mapping

- New static method lookupInLookupTable available in procedural mapping. Invoke it like lookupInLookupTable(nameOfLookupTable, key)

Subarea Process models

- Delayed parsing on startup Server causes a long startup time when a lot of scenarios are installed. The reason for this behavior was the parsing of the expressions used in the process model. The parsing is now postponed on server startup to the first execution of the corresponding expression.
- Refactoring of the restart/recovery implementation of the process engine. The process engine has been refactored for a faster restart/recovery behavior of processes
- Implement a new pipeline mode of sequential processes. Fifo scheduled processes had a poor performance since the execution of a process started when the previous process finish. This is a very time consuming behavior since most of the activities within the process are inactive. With the new pipeline mode, a fifo scheduling is possible whereby all activities can work in parallel. In order to make this mechanism work, a designer of a process must ensure that the fifo-ordering doesn't break. (Please see documentation for details)

Subarea Channels

- Improved visual indication of the channel states when the corresponding scenario is paused (the old way with showing the channel in a warning state when the scenario is paused was misleading)
- Create warning message when a paused channel is invoked by a process model
- Show a warning event when a channel is invoked that is currently paused. When a channel is invoked from a process instance and the underlying channel is paused, a warning event is generated that is written to the process log and the system events
- Distribute inbound channels on cluster nodes according to user settings. In the cluster mode it is possible to assign an inbound channel to one dedicated node in the cluster. In this case only the assigned node serves the channel. The other nodes keep the channel in a paused mode. This allows a manual load-distribution. In case of a cluster switch the channel is served by the remaining node. If the target node is active again the channel is moved back to the target node
- New static method `lookupInLookupTable` available in the java channel. Invoke it like `lookupInLookupTable(nameOfLookupTable, key)`
- The File-Inbound-Channel now also work synchronously. The File-Inbound-Channel now supports a synchronous delivery mode. When this mode is configured, files in a directory are delivered one by one to the process engine. When ever a file is processed, the next file is send to the process engine. The new mode has a configuration property "synchronous timeout". When this timeout expires a new file is submitted event without waiting for the last file to be processed. This is necessary since it prevents a blocking of the synchronous mode
- The channels now add their name and the owning scenario name into the log messages for a improved log mechanism

Subarea Cluster

- SAP-Inbound channels can now be bound to only one running cluster node (can be defined in the environment entry). The following modes are supported:
- Execute parallel → Common behavior
- Execute as singleton → Executed by one of the nodes (round robin distribution)
- Execute on master → Executed on the master node
- Execute on node → Channel is executed on a predefined node

Customer API

- Added a new method '`convertTypedBasedMessageToBinary(...)`' to access the "truncate too long fields" option.
- Added a new method '`listFilesForUser(...)`' in the class '`FileAdapter`' of the Orchestra CustomerAPI return a list of name.
- Added a new method for calling a simple stored procedure from a database easier. For more complexer ones please take a look in the help and manual 'best practices'

- Added a new method 'LookupTableAdapter.getEntriesOfLookupTable(...)' to obtain all entries of a lookup-table

Monitor

General

- Improved the lookup tables
- Enabled searching for Business Keys in the Runtime and Long-time-archive at the same time. This mode can be selected in the Process Instance Panel.
- Start/Stop of all filtered scenarios at once
- Suspend/Resume of the triggers for all selected scenarios at once
- Changed the font-family for logging messages to MonoSpace to ease reading the content
- The filter in the Monitor is now case insensitive
- Added the pagination bar also on top of tables like the Scenario-Table
- Support for changing the Scenario Description within the Orchestra Monitor directly. Enable this editing by double-click into the description column
- Removed close buttons from some panels, where not needed

Subarea License management

- Orchestra Monitor now needs a license
- If the current Orchestra node is not licensed, a warning message will be shown in browser
- Licenses for the current Orchestra node can be administered using a new Licensing view
- Allow the upload of licensed scenarios (psx files)

Subarea Lookup Tables

- Internal lookup tables can be edited directly in the orchestra monitor without any need for redeployment

Subarea Documentation

- If the user tried to download the complete Orchestra Scenario documentation, a NullPointerException was thrown. The exception handling was improved to get more info about the NPE.

Subarea runtime

- Fixed that threads are not terminated properly while stopping orchestra-web in TomCat

Subarea system events

- Changed the log description when a user logs in into the Orchestra Monitor
- More detailed information about the House Keeping Jobs in the Orchestra System Info Panel

Subarea Landscape

- Timeout for LDAP-Writer Channels
- Mode for editing the assigned Security Credential in Landscapes
- Added historization for landscape entries

Subarea Scenario

- Added column which provides the creation timestamp of a psc file
- Added paging and filtering mechanism to scenario history view
- Allow direct redeployment of old versions of a scenario

Subarea Human Interaction

- Added a page for restarting the Worklist-Server of the Human Interaction

Subarea Process monitoring

- Allow manual restart of all processes matching the current filter
- Manual restarted processes are sorted according to their original creation order
- Subprocesses, manual restarted processes and processes started by a thrown signal can be viewed in its creation hierarchy

Bugfixes

Designer

- Testing a scenario using a scenario library didn't work.
- Startup of the Orchestra designer with scenarios containing large Message mappings or Service providers is faster now.
- The LDAP channel used to create a message type with the same name as the channel. Now it will replace the channel prefix (everything before an underscore) with "mt_".
- If the import directory is empty during a 'include from library' action, a error message is now shown
- The description element assigned to serviceDeclaration, serviceInterface and serviceProvider on certain operations (e.g. import from file) used to be the default/template element, instead of the actual element from the data. This resulted in loss of information. Now the correct element is assigned, so that the description is retained as expected.
- The comment in the Scenario Details is empty when using Orchestra Cluster
- Fixe issues with autocompleting comments in Java code
- In case trust-store verification is enabled for certificate based authentication, certificate(s) contained in the trust-store are trusted. A certificate is also trusted if any certificate in its certificate chain is in the trust-store.
- Added missing title and description to Annotation's dialog
- Fixed issues with scenario element tree when developer key has been entered in preferences dialog.
- Scenarios which have other scenarios in the Test-Engine included would not be stopped correctly. This caused that the included scenarios will always stay on 'running' if started once which leads to exceptions when start-stop-start is performed.
- Dialogs and popups are opened on different screens under Linux OS
- The button for uploading Messages in the Test-Channel-Dialog is named with three dots. The button is now renamed to 'Import'

Subarea Human Interaction

- Fixed that the Human Interaction components are always shown, even if disabled
- Improved localized strings and fixed typos
- Created Human Interaction components can not directly clicked into the process model, the generalized Human Interaction element must be used and then the created one selected from a Dropdown menu

Subarea Message types

- Disabled Append child and Add XML attribute from context menu of attribute node in the message type editor.
- CSV message importer doesn't update view (Column headings) when the encoding is changed.
- import message type from csv crashed when importing with empty separator or quote.
- The option Create Message Type from Object always failed with the exception 'unknown prefix "tns"'
- Store description of attributes used in message types to the filesystem

Subarea Process model

- If the 'create Channel' dialog is canceled and empty 'Channel' element will be added to the process model, which then causes a NullPointerException when called. Now the 'Channel' will not be added if 'cancel' is clicked
- If the user adds a variable in a message mapping used by a database target channel then the variable currently does not appear as a parameter of the channel in the process model. The user has to manually update the channel.
- Fixed that 'Scripts' will be added to the process model, even if 'cancel' is clicked on the creation wizard

Subarea Timing

- Invalid timer configurations of older scenarios are not mentioned until you open the timer configuration directly
- the timer configurations are now checked periodically
- invalid configurations are shown in a dialog when saving

Subarea Channels

- Additional Filter in File Inbound Channel: The dialog "*Change filter*" was resizable, but the text field inside didn't change its size.
- Added missing carriage return to default acknowledges script (caused problems with Windows OS)
- AS2 Outbound Channel now supports private keys encrypted with a password different from the keystore password
- Removing brackets from AS2 message caused a NullPointerException if the message was empty
- AS2 channel's now have implemented getState() method to prevent NPE in monitor
- AS2 Outbound channel now supports unsigned MDN messages
- Selecting JSON serializer in channels no longer causes NullPointerException
- AS2 Outbound Environment Entry Editor's private and public certificate had wrong credential type

Subarea Environment Entry

- SAP Server environment entry - corrected typos inside validator.

Subarea Message Mapping

- Fixed some issues that the XPath-Editor did not show up

Runtime

General

- Rework of the suspend/resume handling of input triggers (used for starting orchestra processes). Previously setting a input trigger to 'suspend' was the same than deactivate a input trigger. If you have for example an inbound channel which is activated and a inbound channel which is deactivated and now you set all input triggers to suspension state 'suspend', the activated channel will also deactivated. In this case the origin activated/deactivated state of the channel was overridden by the suspension state. If now the suspension state of the input triggers will be set to 'resume', both channels are activated, never-mind which activation state they had before

Subarea Timer

- Periodically-Timers with the 'repeat count' set to '1' are not scheduled during server startup in rare cases and affects other timers. This situation occurs when the timer has a 'repeat count of 1' and the Base Settings 'Valid from' and 'Valid to' are set in a way that the timer would not fire, the planing for the startup messed up, which also prevents other timers from firing at the startup.

Subarea REST services

- If a REST service explicitly defined a HEAD method no Content-Type and Content-Length were returned even if they were defined as Header variables and the values were set from the process model.
- In case of a missing message the REST service provider returned the status code 204 "No Content". But this is a success code! Therefore now we return the error code 500 (internal server error).

Subarea Message types

- If a mapping is configured to validate the result message and a content is assigned to an element whose type defines no child elements but an attribute, then the validation failed with the error message "invalid text content in <node name>". This error message is wrong, because it is correct to assign a simple value to an element even if the element has an XML attribute.
- Some XML schema files led to a NullPointerException when expanding it. Specifically this occurred if a namespace declaration was locally overwritten. In this case Orchestra used the namespace declaration of the root element (the "schema" element) instead of the local declaration.

Subarea CellSystem

- Improved robustness of cell system: Internal tests have shown that in rare situations the cell system is unstable.
- Ingoing cell connection stops working: When an ingoing cell connection receives an error during initialization, this could result in a blocking connection that never was renewed. Furthermore the remote host that establishes the connections blocked indefinitely since the received socket was not closed.
- Invalid state between cell system and queuing: Whenever signals are sent over the cell system, each signal is stored in the underlying queue. When a cell connection is disconnected, the queue is paused and no signals are sent over the cell. When the connection is established again, the queue is resumed and the signals are sent. This synchronization between cell state and internal queuing run out of sync in rare cases. It was changed that this situation can not occur anymore. Orchestra now checks the cell and queue state and sets the correct state.
- Automatic re-connect after a long period of inactivity: When a cell-message is executed by the remote peer, it may occur that the execution blocks/hangs over a long time. This indicates a situation where some of the operation blocks. Now such a situation is detected. When longer than

a defined no message over the cell system is received, an automatic re-connect is down. This should normally not happen, since a cell sends regularly a ping message.

Subarea Queue Engine

- Signals and Cell-Messages stop working in cluster mode in rare cases
- Fixed the SQLException: 'The value is not set for the parameter number 4' which was caused by optimized sql-statements to reduce the amount of deadlocks. In rare situations, where the statement doesn't match a target record it is re-executed. In this case the above exception occurs when parameters with binary-data are used within the statement.
- Fixed a class-cast-exception which occurs in rare cases when a delayed work-item is given to the wrong queue for re-execution

Subarea Enterprise Service Registry

- If a WSDL has imported or included other schemas, it could not be imported using soapUI. The reason was that soapUI for a URL <http://host:port/basepath/name?wsdl> created further request like <http://host:port/basepath/<schemaLocation>> to load the imported schemas.
NOTE: The import works only, if the service URL was not changed to a user defined URL.
- Process stops working when service provider is redeployed: If a scenario containing a service provider was redeployed, sometimes the service clients have been aborted. This occurred, since orchestra tries to find an appropriate service provider. If such a service provider was not available, the invocation was aborted, since orchestra assumed that no provider was available. Now the situation is handled different. When such a situation occurs now the client call is re-executed.
- An intermediate event of type "catch signal" didn't support correlations: If an intermediate event of type catch signal was used, all signals were handled independently of the configured correlation condition. Due to this fact, a process instance could receive data, that should be processed by another process instance.
- Prevent transparent authentication in case of NTLM-Authentication in HTTP-Connection: In case of NTLM-Authentication, Java implemented a transparent user handling. This means independent of the provided credentials, Java always uses the current Windows user before using the credentials provided by orchestra. With this change, this behaviour is disabled and always the orchestra credentials are used.

Subarea Process engine

- In rare cases, if the log information of a process was loaded a NullPointerException was thrown. This occurred in process models having an or-join.

Subarea human interaction

- If a Worklist user doesn't exist a NullPointerException occurred. Now an appropriate error message is displayed.
- Added missing request token to generated escalation email

Subarea Cluster

- Fixed a race-condition when volatile-with-recovery processes are recovered after a cluster switch
- Fixed wrong counting of process KPI values when a correlated process is executed on the wrong cluster node

Subarea Process-Engine

- The Process activity "receive" throws a NullPointerException when process and channel variables are correlated
- Fixed a race-condition which can lead to duplicated UIDs for the scenario process token which then could cause processes to get stuck in a loop

Subarea Logging

- The Log-Level for the Scenario-Logging has no effect. The parameter 'emds.log.scenario.level' was ignored and the level INFO was used instead. Now the specific level is used
- Enabling the scenario logging is listed in multiple configuration files. All redundant settings are removed, so the only place where the scenario logging can be enabled is now in the masterdataservice.

Subarea Alerting

- Alert system does not execute all actions after changing one of the rules or actions anymore
- Show description of KPI values in alert system monitor UI
- Show tooltips of KPI values as mouse-over during selection in alert rule wizard

Monitor

- The 'No Filters' option in Scenario Tables only works when switching to another panel and then go back
- If Orchestra Runtime is started with an wrong configured Landscape, the error dialog has no content
- The Scenario History was updated properly when redeploying a scenario
- A self-developed Channel can crash the Runtime on startup

Subarea Scenario

- The 'modified at' and the 'deployed at' timestamp was different on the initial (first) deploy of a scenario
- The message 'Internal Server Error' was displayed when deploying an already existing scenario instead of the true problem

Subarea Timer

- The Timer validity date (Valid From, Valid to) is not displayed

Subarea Process monitoring

- Filtering for Processes in a time-slot has no effect until also the date is set. Now the input field for entering the time is locked until a date is set correctly

Subarea Landscape

- disable combobox and select "use local setting" if the scenariolibrary doesn't exist on orchestra monitor.

Subarea GUI Settings

- If in the GUI-settings the field "Stage label size" was empty, changes were not stored but no error message was displayed!
- Added validation of number fields: There are 3 fields of GUI setting which must contain numeric values and minimum and maximum values:
 1. Label size: Default value is 30, Limit value between 1 to 110
 2. Message Panel Threshold: Default is 15, Limit value between 1 to 100
 3. Message Panel Delay (seconds): Default is 5, Limit value between 1 to 600

Subarea Human Interaction

- Worklist Credentials: Group Entry disappeared while editing the description.
- The Delegate was not refreshed after changing a Delegation rule

Subarea User Management

- User Credentials: Changes of authentication types are stored now.

1.2. Orchestra 4.7.4.2

Bugfixes

Designer

Subarea Rest services

- If a user role was selected, the REST Service Provider was not marked as changed, so the change could not be saved without making other changes in the interface.

Runtime

Subarea Web services

* Ensure a reasonable error message if a scenario having a SOAP service provider is activated where another service provider has the same public service name.

Subarea Rest services

- There was a bug which allowed to start two scenarios containing REST Providers with the same base URL. The following happened:
 - Scenario 1 starts and registers its URL
 - Scenario 2 starts and tries to register the same URL, it gets an Exception "failed to register servlet ..."
 - Because the start of Scenario 2 failed, it is deactivated; while doing this the base URL was removed from the Map of registered URLs; therefore it was possible to start Scenario 2 afterwards without errors! But then Scenario 1 was not reachable anymore!!!

To solve the problem, we now ensure that a servlet is deactivated only if it was activated previously!

- Rest client didn't recognize status codes as error if they were no standard errors (e.g. 422).
- A request with unknown certificate was rejected, even when the option "Allow access for anonymous certificates" was set.

1.3. Orchestra 4.7.4.1

New/Changed Features

Designer

- When exporting structured messages from test dialogs UTF-8 will be used as encoding instead of ISO-8859-1

Monitor

Subarea Channels

- Database target channel: The scripting language now has a function toDateTime to parse a string in a certain format and transform it to a dateTime value which actually is an instance of java.sql.Timestamp as required by JDBC.
e.g. \$TS = toDateTime(\$DateTimeString, "yyyy-MM-dd HH:mm:ss"); the seconds parameter is in the format of Javas SimpleDateFormat.
- DICOM inbound channel aka DICOM worklist server:
- Additional configuration property to decide if the internal filter for ScheduledStationAETitle is set always or -as before- only of the calling modality has no filter set.
- New configuration field "request timeout" to set the request timeout on the DICOM network connection.
- New channel "DICOM Modality" used to send queries to a DICOM worklist server, so Orchestra acts as a Modality.

Bugfixes

Runtime

- Error in queue processing - if a work item was requeued, a class-cast-exception occurred.

Subarea REST services

- The default value of a query parameter is set if no parameter is set by the caller. This behaviour worked in Orchestra 4.6 but disappeared in Orchestra 4.7.
- Failed to get WADL if a resource was defined as /{variable}. The WADL generator also created an invalid content type!

Subarea Web services

- Missing Element <soapenv:Header/> in SOAP-calls has lead to NullPointerException

Subarea Human Interaction

- Charset encoding of given HTML resources is detected automatically. Detects encoding by charset-meta tag, or if none is given tries to guess the encoding.

Subarea Channels

- Database target channel: If a static java function was called with return type or parameter types java.sql.Date or java.sql.Timestamp a syntax error was thrown " type <typename> not allowed".

- If the DICOM Worklist server was configured with both default filters, the filter constraining the procedure step start date did NOT work!
- AS2 Channel: Stream filters can be used
- AS2 Channel: Remove surrounding angle brackets from AS2 message ID and AS2 MDN message ID

Monitor

Subarea deployment

- Skip psc files when creating deployment files. This prevents a potential recursion bomb when storing psc file in scenario directory.

1.4. Orchestra 4.7.4.0

New/Changed Features

Designer

Subarea Channels

- In the scripting language of Database target channel you can call static java methods like `java.lang.System.currentTimeMillis()`;
- Improve error handling in Database target channel:
- scripting language has new functions `getErrorCount()` and `getLastError()`;
- scripting language has new statement `throw <expression>`;
- user defined error handler in the trigger scripts, e.g.
on SQLERROR do
 if `getErrorCount() > 2` then
 throw `$$SQLERROR`;
end
- New AS2 Inbound and Outbound Channel for sending and receiving AS2 messages

Subarea mappings

- Procedural mapping has new visible function `adjustMessage()` to support creation of message lists with typed target. In typed target mode the created DOM tree does not support all DOM methods. Therefore the procedural mapping calls `adjustMessage` before leaving. If the message is added within the procedural mapping into a message list the user has to call `adjustMessage`, e.g. `MSGLIST.add(adjustMessage(MSG))`;
- Procedural mapping has new functions `getMappingName()` and `getScenarioIdentifier()`

Subarea Message types

- Import message types from xml and json sample files

Runtime

Subarea Channels

- DBTarget channel:
- If Valuation message types are updated from the database dictionary, the attributes are now compared by comparing the column/table names, the attributes are no more renamed.

- if "cancel operation" is called in the before trigger, then the column expressions are no more evaluated. This new behaviour is particularly helpful to avoid the generation of unique Id using the newID function because these IDs are not used when "cancel operation" was called.
- Implement interface TransactionalConstructor in BoMessageConstructor to ignore errors in records. That means that now, if a message mapping is configured having the transaction mode set, the channel can handle each record as a transaction where information about failed transactions is written into a special output message named "SKIPPEDRECORDS".
- In modes "Replicate changes" and "Update changes" the name of the "client" attribute now is case insensitive. That means that these modes don't throw an error if the client attribute is named "CLIENT" instead of "client".

Monitor

- Fixed height of alert dialogs to half of the windows height.

Bugfixes

Designer

Subarea REST services

- If a WADL file containing nested resources was imported, the resource paths of the nested resources were simply connected to the parent path resulting e.g. in the path "api/2/settingsbaseValue" instead of "api/2/settings/baseValue"

Subarea Enterprise Service Registry

- Export wsdl file with explicit namespace prefix "wsdl" used by all wsdl elements: In previous orchestra version, a wsdl file was exported with the default namespace "<http://schemas.xmlsoap.org/wsdl/>". In the special case, if a parameter of type message is used that references an XML schema without a namespace, the resulting WSDL couldn't be imported by other tools.

Runtime

Subarea Scriptlets

- Skriptlet "Message splitter" configured to split at level 2 worked only if all the records had the same parent node.

Subarea Rest services

- Orchestra didn't retry a RestClient invocation if an IOException (e.g. timeout) occurs

Subarea Channels

- DBTarget channel: The method DatabaseMetaData.getSQLKeywords() of the JDBC-Driver of SQLServer doesn't deliver "KEY" as a key word, but complains that KEY is reserved. Therefore we added key as an additional keyword to allow columns with name "KEY".

Monitor

Subarea Business view

- When using the general scenario selector, business key view will recognize this selection.

Customer API

- MessageAdapter.createMessageFromResultSet: BLOB values were not translated to Base64Binary; they were translated to a String like oracle.sql.BLOB@4f5d0717

1.5. Orchestra 4.7.3.2

New/Changed Features

Updated libraries

- Updated jcifs Library to jcifs-ng 2.0.5 (SMB2 support)

Bugfixes

Designer

- The layout of the Designer (position and size of the panels) is now saved together with the program version to avoid corrupt/empty layout if opened with different orchestra versions.
- Fixed NullPointerException if an exception occurred during startup of the test environment

Subarea Process models

- If the message type was changed in a procedural mapping, a reference to the old message type was still stored in the call activity in the process model. Therefore it was not possible to remove the old message type from the scenario.

Runtime

Subarea Webservices/ HTTP Inbound Channel

- The Webservice provider and the HTTP inbound channels return new parameters SSL (boolean) and REQUESTURL. Using these values the process model can find out with which protocol it was called.
- SOAPOutbound - configuration AllowAnyHeaderElement was missing for response

Subarea Channels

- The JSON serializer now writes a JSON null if a simple element has the attribute xsi:nil="true". In case of generic mode an extra check box "consider xsi:nil" has to be enabled for this behaviour. Also the JSON deserializer adds the attribute xsi:nil="true" to the created XML element if a JSON null value is read and the configuration property "Create NULL values" is set.
- Fixed NPE if in a database target channel with OSISOFT PI PI JDBC Driver was used
- Added support for exporting incoming mails as binary message in EmailListener channel.
- E-Mail Listener now supports signed emails (S/MIME signed)
- E-Mail Listener now supports nested E-Mail attachments:
Subject is used as attachment filename if subject is empty unknown-attachment-<index> is used (index is the attachment index).

Subarea Rest client

- RestClient with proxy works now (Proxy Type was not correct)

Subarea Process engine

- When redeploying a scenario some type checks were missed. Now all of them are done.

Monitor

- Process details of a remote node can be viewed again.

Subarea re-/deployment

- Reasonable error message if the user tries to redeploy an Orchestra Scenario which was created with a newer Orchestra version.

Subarea Health Check

- Fixed Null Pointer Exception if a check had a timeout during execution.
- If the user tried to delete a check, an exception was thrown, if the check already had been executed.

1.6. Orchestra 4.7.3.1

New/Changed Features

Customer API

- Class to get access to your components configuration and configuration type outside of the component browser/configuration editor. For Details see the Java Doc (needs Component Architecture API 2.24 or greater)
- Added helper method to create new DynamicJavaEndpoint to be used with extended Java components (see the JavaDoc for details)

Runtime

- File-Inbound-Channel should work synchronous:
The File-Inbound-Channel now supports a synchronous delivery mode. When this mode is configured, files in a directory are delivered one by one to the process engine. Whenever a file is processed, the next file is sent to the process engine. The new mode has a configuration property "synchronous timeout". When this timeout expires a new file is submitted event without waiting for the last file to be processed. This is necessary since it prevents a blocking of the synchronous mode

Bugfixes

Designer

Subarea REST services

- Failed to import a WADL file if a <doc> element contained not only simple text but XML or XHTML.

- Failed to import a WADL file if it contained a grammar section containing XML schemas or if a parameter element contained a doc element.

Subarea Channels

- DatabaseReader Channel: If message type was changed you could not save the change without editing the where clause or the database environment entry.
- LDAPReader: It was not possible to import Objects with SSL if no Trustee was set

Subarea Versioning

- If the user opens the team synchronization view the first time, on some systems it was not possible to edit the detail description

Subarea Testengine

- Fixed NullPointerException occurring if the test engine was started and the folder "talog" (TransactionLog) was missing

Subarea MessageTypes

- The user can create an XML document from a messagetype. If the messagetype had elementFormDefault="qualified" and no target namespace was defined an invalid XML document was created.

Runtime

- If the Scriptlet "Message splitter" was used with the parameter WANTROOT = true, then the source nodes were removed from the source message!

Subarea Channels

- MLLP channels: More information for message "Idle time of the connection has expired. Freeing resources. Closing connection." Also the log level was changed from warning to info.
- The LDAPReader converts all binary attributes to Base64Binary instead of new String(byte[]). An exception from this rule are the AD Attributes objectGUID and objectSID which are transformed to its String representation.
Thus conversion of images (e.g. thumbnails) works now.
- After execution of script activity or java channel an invalid class loader configuration remained.
- If a java method is invoked by a java-channel or script activity, orchestra normally sets the context-class loader to a value that corresponds to the classloader that is used when the script is compiled. In order to ensure that other java libraries work correctly this has to be reset. This reset was missing.

Subarea REST services

- The Method OPTIONS no more requires authentication.
- If in a Request only "dynamic query parameters" were configured but no other query parameters were defined, the parameter named "DYNAMIC_QUERY_PARAMETERS" was empty.
- The Rest-Client didn't set the Read timeout correctly.

Subarea Web services

- Better error message if message assigned to SOAP header had no namespace.

- Sending a SOAP message with MTOM elements failed with certain receivers; the receiver complained a missing Content-ID

Subarea Java Extended Components ServiceClient

- The service client for Extended Java Components now supports the use of a DynamicJavaEndpoint to select the instance of the component

Subarea Human Interaction

- ensure valid XML tagnames in the message returned by a Human interaction element.
- Changed the Human Interaction logo: removed "by soffico"

Monitor

- If the Scenario documentation was exported from the Monitor sometimes a NullPointerException occurred.
- The messages contained in a message list could not be viewed in the process detail view in the monitor

Component Architecture API 2.24

- ApplicationPackage.getComponent did not return null if the component instance was not found.
- ApplicationPackage.getComponent did return wrong instance (original component not DecoratedManagedComponent) if requiredClass was ManagedComponent and not ManagedComponentBase
- Standard implementation of Configuration Interfaces are now serializable. DecoratedManagedComponent now implements ManagedComponent and ManagedComponentBase.

1.7. Orchestra 4.7.3.0

New/Changed Features

Customer API

- Customer API: New method getSize() added to the class FileAdapter. The method returns the size of the specified file.

Bugfixes

Designer

- Creating a local git repository failed under linux
- Copy of response values from the process model test panel using Ctrl-C failed, it caused a ClassCastException
- Error in the test panel for channels or process models: If there were two message parameters and the user you clicked on the second message parameter (button "...") the message was assigned to the first message parameter instead of the second

Runtime

Subarea Channels

- In the LDAP writer the operation rename didn't work. Now it works if the element to rename has the XML-Attribute newName, e.g. <uname newName="James">Jim</uname>

Subarea longtime archive

- The ZIP files of the processes in the longtime archive were overwritten and all process detail information was lost.

1.8. Orchestra 4.7.2.0

New/Changed Features

Designer

- If in an intermediate signal an invalid expression was assigned to a parameter and this assignment was stored, the expression was no more visible if the assignment panel was opened again. But if the process model was validated, an error was displayed complaining about the invalid expression.
- Input assignment were deleted or overwritten under unknown conditions.

Bugfixes

Runtime

General

- Length of a persistent binary message was stored as int, which doesn't work for a stream if the size exceeds 9 GB!

Subarea Channels

- According to HL7 standard chapter 2.7.6 the hexadecimal escape sequence (\Xdddd...\) contains pairs of hexadecimal digits (0, 1, ... , 9, A, ... , F). Therefore the HL7 serializer now writes hexadecimal digits in uppercase

Monitor

Subarea Component Browser

- Dynamic Picklist Parameters are now fully supported in Component Browser both in Designer and Monitor

1.9. Orchestra 4.7.1.0

New/Changed Features

Runtime

Subarea Channels

- Some mail servers could not handle mails created by Orchestra correctly because they misinterpreted the header "Content-Description" as "Content-Disposition". Now the Orchestra Mail writer channel no more writes the field "Content-Description" into the mail header.

Bugfixes

Designer

General

- In Orchestra 4.7.0 signals are exported with the name <name>.signal.xml but on import it searches for files with extension .signal, thus the stored files are not found. The extension was accidentally changed to signal.xml in Orchestra 4.7.0. Now, as before, the file is exported with the extension .signal
- scenario logging didn't work when testing a scenario in the designer.

Subarea Process model

- display of default configuration of error handling in process activities was wrong.

Runtime

Subarea Channels

- The DBTarget channel sometimes caused an SQL exception: If a key value was null, a DBTarget channel after startup was invoked at least two times and in the first record of the second invocation a key value was null while in the last record of the first invocation this key value was not null than an SQL exception occurred.
- In rare cases in the MLLP Listener channel a new protocol handler had to be initialized, because a TCP connection was pending. In this case an Exception occurred complaining that no RuntimeContext was configured.
- LDAP reader channel: decoding an objectGUID didn't work correctly.

Subarea Web services

- MTOM attachment id was not unique if the elements to be transformed to MTOM references had not the same parent.

Subarea Mappings

- Within a graphical mapping calling a lookup table or a channel while using the result from another invocation of a lookup table or a channel didn't work.

Subarea Cluster

- Changed table names to upper case; so the MySQL parameter `lower_case_table_names` is also not necessary for Orchestra cluster

Monitor

Subarea Component Browser

- If the type definition contained group types with same name in different groups, the wrong group was added in the component browser.
- Lock components configuration so only one user can edit it.
- Save only possible if components configuration has no validation errors.
- Add new groups/parameters automatically if added after the creation of the configuration.

1.10. Orchestra 4.7.0.1

New/Changed features

Designer

Subarea Channels

- IDOC Import - FIELD_SEGMENTTYP is set as an annotation to the generated message type
- IDOC Import wizard - Parameter PI_RELEASE must be empty to get all IDocs if the RFC function IDOCTYPES_LIST_WITH_MESSAGES is called
- RFC Import wizard - Logging improved and prevented NullPointerException for call of RfcNameAdapter.makeXMLName()

Subarea message types

- When updating a message type from the database, parameter fields are no more deleted.

Runtime

Subarea Human Interaction

- In case of "Simple form":
- Orchestra uses check boxes and returns boolean values for boolean parameters
- Orchestra validates the values in integer and double fields and returns appropriate values to the process model. Also integer and double fields cannot be empty they contain the value 0 resp. 0.0 by default.

Subarea Event system

- Some smtp servers need special configuration properties, otherwise the Email event processor doesn't work because it cannot send mails. Therefore now the Email event processor considers System properties when connecting to the SMTP server

Monitor

General

- In case of a "Internal server error", the ip addresses are included in the error message

Bugfixes

Designer

General

- Copying of signals didn't work correctly because the public interface name was not changed. This is essential because the assignment of signals to the matching signal receiver is done through this name.

Subarea REST services

- Show reasonable error message if the status codes in a method response doesn't contain a valid, space separated list of numeric status codes.

Subarea Message mappings

- If the mapping test window was closed by clicking on the "close window" ([X]) button and the user then changed the mapping and started the test again, the change was not in effect.

Subarea Human Interaction

- If the worklist service initially was enabled in the User settings panel it worked only after restarting the Orchestra designer.

Runtime

Subarea Channels

- If the XML serializer was configured with the option "*Always write default namespace*" the ampersand (&) was not escaped as & leading to invalid XML!
- OS process executor - process is now destroyed *after* streams are read, not *before*
- If the Email listener channel cannot parse a mail content the error handling is executed, meaning that the mail is deleted or moved to another folder. Previously the processing stopped and no error handling was done.
- The method FileUtils.makeUniqueFilename() was changed to prevent an NumberFormatException if the filename starts with a sequence of numbers (e.g. 3183617266_1703199801.txt), the number is ignored if the string contains more than 9 numbers.

Subarea Component architecture

- When calling a method in a managed component and the result contained a Throwable where the message was null a NullPointerException occurred.

Subarea REST services

- The HTTP Content-Length can be larger than INT_MAX. This had the effect, that the REST provider processing a POST call, created a Message where the property ContentLength had a negative value.
- Method OPTIONS now can start a process model.
- Transfer-Encoding "chunked" didn't work with the REST service provider.
- The FHIR authorities changed the correct mime type from *application/xml+fhir* and *application/json+fhir* to *application/fhir+xml* and *application/fhir+json*. Therefore the REST provider didn't find the JSON serializer anymore.

Subarea Mappings

- The scriptlet "Message splitter" didn't work for certain message structures.
- The Orchestra Runtime created an invalid XML document if for an XML attribute the prefix was not declared. Such messages can be created by a procedural mapping if the source message contains attributes with namespace not declared in the namespace section of the mapping and not contained in the target message type. Typically these are xsi attributes. Now, if the namespace is not bound we search for an unbound prefix in the local context and write an according declaration.

Subarea Enterprise features

- Syslog client component: Maximum message length was 32 KB, but for some ATNA messages this was too short because we want to have an ATNA message in one line and not splitted over several lines. Therefore now we set the maximum message length to 32MB except for UDP.

Subarea Human Interaction

- In case of "Simple form": If the user clicked on button1 or button2 (Yes/No/Cancel dialog) and parameters were defined, a null pointer exception occurred and the activity was not performed