IBM Safer Payments
Version 6.4

Release Notes
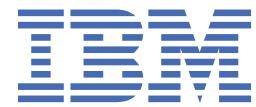
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Chapter 1. Introduction

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments.

How to install and update

For information about how to install and update, see the IBM Safer Payments Implementation Guide.

Versions and PA-DSS certification

For information about versions and PA-DSS certification, see the IBM Safer Payments Implementation Guide.

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Support community

To view and search for troubleshooting topics, alerts, workarounds, and more information, go to the IBM Support Community.

Chapter 2. 6.4.x Known Issue and APAR fix lists

The following Known Issues and APARs were fixed in 6.4.x.

IBM Safer Payments fix packs are cumulative, which means that a new patch contains all of its fixes and all fixes for prior fix packs of that major release. For example, 6.4.2.07 includes all fixes in 6.4.2.07 as well as those in previous 6.4.x fix packs.

As of 6.4.2.07, all IBM Safer Payments APARs were migrated to a new defect tracking system where they are called *Known Issues*. APAR numbers begin with *PO*, and Known Issue numbers begin with *DT*.

6.4.0.00 APAR fix list

PO07255, PO08515, PO08657, PO09104, PO09134, PO09166, PO09196, PO09215, PO09240, PO09281, PO09284, PO09285, PO09295, PO09297, PO09298, PO09300, PO09319, PO09326, PO09331, PO09335, PO09340, PO09350, PO09361, PO09378, PO09379, PO09383, PO09386, PO09397, PO09401, PO09404, PO09408, PO09410, PO09426, PO09428, PO09435, PO09440, PO09441, PO09443, PO09444, PO09446, PO09452, PO09454, PO09455, PO09461, PO09462, PO09469, PO09470, PO09472, PO09477, PO09480, PO09483, PO09493, PO09504, PO09508, PO09509, PO09514, PO09515, PO09522, PO09537, PO09540, PO09545, PO09547, PO09552, PO09553, PO09568, PO09576, PO09577, PO09580, PO09584, PO09607, PO09610, PO09611, PO09613, PO09620, PO09621, PO09639, PO09640, PO09641, PO09661, PO09673

6.4.1.00 APAR fix list

PO09025, PO09399, PO09413, PO09481, PO09525, PO09594, PO09601, PO09619, PO09643, PO09646, PO09664, PO09675, PO09682, PO09686, PO09690, PO09701, PO09721, PO09724, PO09738, PO09742, PO09743, PO09751, PO09780

6.4.2.00 APAR fix list

PO07683, PO08218, PO08856, PO08906, PO09114, PO09205, PO09212, PO09223, PO09236, PO09279, PO09292, PO09387, PO09394, PO09398, PO09484, PO09578, PO09594, PO09630, PO09631, PO09695, PO09714, PO09723, PO09727, PO09732, PO09735, PO09760, PO09769, PO09770, PO09789, PO09805, PO09808, PO09809, PO09813, PO09815, PO09816, PO09830, PO09834, PO09839, PO09845, PO09846, PO09854, PO09867, PO09870, PO09871, PO09872, PO09878, PO09896

6.4.2.01 APAR fix list

PO08111, PO08209, PO09191, PO09445, PO09548, PO09557, PO09570, PO09605, PO09632, PO09674, PO09749, PO09784, PO09790, PO09794, PO09796, PO09814, PO09818, PO09824, PO09831, PO09847, PO09850, PO09852, PO09855, PO09857, PO09865, PO09868, PO09873, PO09882, PO09885, PO09888, PO09891, PO09894, PO09900, PO09901, PO09902, PO09910, PO09913, PO09914, PO09920, PO09934, PO09935, PO09940, PO09942, PO09944, PO09960

6.4.2.02 APAR fix list

PO08429, PO08747, PO08864, PO09359, PO09422, PO09485, PO09756, PO09788, PO09825, PO09859, PO09895, PO09912, PO09917, PO09918, PO09925, PO09927, PO09931, PO09938, PO09949, PO09950, PO09951, PO09955, PO09956, PO09957, PO09958, PO09959, PO09964, PO09967, PO09969, PO09970, PO09978, PO10007

6.4.2.03 APAR fix list

PO09253, PO09492, PO09494, PO09596, PO09842, PO09863, PO09881, PO09933, PO09954, PO09962, PO09965, PO09968, PO09972, PO09973, PO09974, PO09977, PO09982, PO09984,

PO09985, PO09987, PO09988, PO09991, PO09995, PO10008, PO10010, PO10011, PO10014, PO10120

6.4.2.04 APAR fix list

PO08463, PO09324, PO09356, PO09439, PO09466, PO09474, PO09861, PO09869, PO09919, PO09926, PO09948, PO09983, PO09989, PO09992, PO09998, PO10009, PO10012, PO10015, PO10022, PO10025, PO10027, PO10031, PO10049, PO10053, PO10066, PO10162

6.4.2.05 APAR fix list

PO09255, PO09334, PO09575, PO09615, PO09645, PO09853, PO09884, PO09994, PO09999, PO10033, PO10036, PO10041, PO10042, PO10043, PO10044, PO10047, PO10048, PO10050, PO10058, PO10059, PO10061, PO10067, PO10070, PO10073, PO10075, PO10077, PO10082, PO10083, PO10085, PO10087, PO10093, PO10095, PO10100, PO10103, PO10104, PO10114

6.4.2.06 APAR fix list

PO08707, PO09650, PO09719, PO09864, PO10013, PO10017, PO10029, PO10040, PO10101, PO10102, PO10109, PO10111, PO10112, PO10117, PO10121, PO10123, PO10124, PO10129, PO10133, PO10137, PO10157, PO10161

6.4.2.07 Known Issue and APAR fix list
DT261334, DT261601, DT269755, DT378209, PO09366, PO09569, PO09778, PO09851, PO10039, PO10054, PO10118, PO10122, PO10149, PO10154, PO10155, PO10175

6.4.2.08 Known Issue and APAR fix list
DT277055, DT378504, DT379143, DT380010, DT381678, DT386110, DT387182, DT389262, DT389546, DT389548, DT389549,DT391564, PO09835, PO09971, PO10063, PO10065, PO10136, PO10141, PO10147, PO10172, PO10177

6.4.2.09 Known Issue and APAR fix list
DT261093, DT387020, DT389924, DT389975 , DT390202, DT390790 , DT392078, DT392933, DT393963, DT395359, DT394259, DT417292, PO09886, PO10078, PO10167

6.4.2.10 Known Issue and APAR fix list
DT387158, DT391830, DT397122, DT398225, DT398477, DT417690, DT418128, DT421950, PO09883, PO09929, PO10074, PO10105, PO10173

6.4.2.11 Known Issue and APAR fix list
DT406968, DT418104, DT419238, DT419551, DT419652, DT421941, DT423270, DT423897, DT424773, DT435020, DT435179, PO09787, PO10128, PO10143

6.4.2.12 Known Issue and APAR fix list
DT382146

Chapter 3. 6.4.0.00 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.4.0.00.

This release changed the version number from 6.3.0.03 to 6.4.0.00.

What's new

IBM Safer Payments includes new features and enhancements.

Release highlights

- IBM Safer Payments supports Intel Optane memory starting from version 6.4. The performance is similar to DRAM configurations and read/write performance is sufficient for real-time operations. The usage of Intel Optane Memory can be beneficial for configurations with a large memory footprint. IBM Safer Payments currently only supports Intel Optane in memory mode.

- IBM Safer Payments now supports the AVRO data format over the Kafka Message Interface (KMI). Among other advantages, AVRO is compact and enforces data consistency throughout the data exchange lifecycle. Validation and deserialization of incoming AVRO messages is done according to the schema definition of a Kafka topic. One or more schema registries can be configured per message type and IBM Safer Payments will retrieve schemas during runtime over a RESTful interface while processing incoming AVRO messages. For more information about how to configure AVRO, see the online help.

- Case actions now offer an option that is called **simplified view**. It's available for all types of case actions except for template file (.docx).

  Once enabled, a new view is shown to investigators before sending the case action. In this view, the investigator cannot edit the message and subject templates itself. Instead, input fields are shown for all placeholders within those templates. That way, investigators can still adjust the most important contents of a case action without having to worry about the technical details of the underlying message template.

  Only investigators with the privilege to modify case actions are able to edit the fields in the simplified view. If a field refers to encrypted data, investigators can only view and edit that value, if they also have the privilege to view clear values. If they don't have that privilege, the field will be read-only and will show masked values or no values at all depending on the mask level of that user account.

  To further enhance case actions and the newly introduced simplified view we added a new type of element to the case management section of the administration tab: case action inputs. As the name implies, these represent input fields that can be added to case actions using a new type of placeholder. Case action inputs can be used to offer fields to the investigator that don't reflect any values from the case itself but rather must be manually filled out by the investigator.

  An example might be that an organization has a set of reason codes that investigators assign to cases in an external system. This can now be handled by creating a case action input of type **dropdown** and referencing it in a case action. The list of dropdown options can be configured within the case action input itself as pairs of values and labels. Investigators will see this dropdown field in their simplified view and can select the applicable reason code using a descriptive label before sending the case action to the external system.

- Mandator and rule conditions can now consist of more than one group of conditions. All groups are combined with a logical `or` while the conditions within a group are combined with a logical `and`. Rules without any condition group still behave the same as before when no conditions were defined.

Enhancements

- It's now possible to define the execution order of Mergings, Device Identifications, Precedents, Calendars, Patterns, Counters, Events, and Formulas. Furthermore, the aforementioned elements can be enabled or disabled on demand by using newly introduced settings from the respective element page.
- The memory allocation for Compliance lists can now be changed. The parameters for the initial memory allocation as well as the memory increase can now be set in system configuration.
- Counters now support calculation of the minimum value.
- Case classes offer a new option called **Visible to submandator investigators**. By default it is enabled. When it is disabled, the case class and cases that belong to the case class are hidden from the investigators in the submandators. The case class will be visible and usable in Model and Report tabs irrespective of the state of the new option.
- Several new privileges have been added under reports and model. The privileges have been made more specific and split apart so that the individual pages that were previously all under a single privilege now have their own privileges. The new privileges are: individual report type privileges, simulation privileges, individual profiling privileges, individual model component type privileges, and new rule changing privileges. When upgrading, a user role that would've been previously able to perform these actions will be granted the new privileges.

  Two new options were also added to the user accounts global privilege, allowing for the option to have some users who can enable/disable accounts and reset passwords without being able to modify all the user's settings.
- Previously, when enabling the **Performance report** checkbox on a rule, the amount of memory used to create the performance report would be calculated based on the system time meta attribute. It is now possible to adjust the number of records used for the performance report on a system-wide level so that the performance report uses less records than the system time attribute. This results in less records being evaluated in the performance report, but will also result in less memory and disk usage. This is configured on the Retention Settings page. See the online help for more information. Note that a user needs to have at least the global privilege to view `Retention administration` in order to see the page in the navigation menu.
- Improvements are made to the data encryption of attributes to offer full and partial data encryption options. In the case of full encryption, all bytes of an attribute are encrypted. With this new option, however, the attribute's length automatically gets increased to a multiply of 16 that might take additional disk space. In the case of partial encryption, only the first 16 bytes of each data point is encrypted. The default behavior is to only encrypt the first 16 bytes per data point that will still ensure full encryption for all IBM Safer Payments attributes whose size is less than 16 bytes. In addition to the previously mentioned changes, now the data of timestamp attributes and numeric attributes with decimals can be encrypted as well. You will find the new settings in the attribute definition form.
- IBM Safer Payments is now capable of creating GDPR and Garante2 compliant logs for every data access by user.
- The MCI settings of a cluster instance now offer an additional setting **Validate client certificate CN**. When enabled, the incoming transaction's client certificate is validated by extracting its common name field and comparing it to a list of allowed values. The list is also configured on the MCI form.

Update information

IBM Safer Payments 6.4.0.00 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.3.0.00 Update information

6.4.0.00 Update information

- SQL notifications previously worked only by manually adding single quotes around attribute placeholders in the message template. This is no longer required and will now result in errors. If you've been using SQL notifications in the past, update them accordingly.

- The look and feel of the login page was updated. If you are using custom styles for the login page, review those styles and make adjustments as needed.

- Python version 2.6 version is no longer supported. If you were using 2.6, upgrade to a supported version. Python 2.7 still works as before. Also, all Python 3 versions starting with 3.2 are now supported.

- The behavior of case variable placeholders in case actions was changed. Certain placeholders like *[ClosedOn]* or *[FollowupOnTimestamp]* can now be `nil` for example if the case was not closed yet. Placeholders whose values are `nil` use the nil value settings of the outgoing channel configuration the same as placeholders for reporting attributes and masterdata. The kind of `nil` value that is used depends on the type of the case variable. Variables like *[ClosedOn]* that map to an ISO timestamp will use the timestamp `nil` value. Variables like *[FollowupOnTimestamp]* or *[ClosedbyUserUid]* that map to a number will use the numeric nil value.

- IBM Safer Payments is now able to detect problems about deferred writing configuration that were previously undetected. More log messages of E 0005 are now printed. The event log message E 0005 also now includes information that you must review after the update.

- It is no longer possible to turn on the **Performance report** setting on preprocessing rules. If the performance report was previously enabled for a preprocessing rule, it is automatically unavailable when you upgrade, and a warning is printed in the logs. However, the DDC file remains on disk and must be manually removed.

Change log

IBM Safer Payments 6.4.0.00 includes critical, major, and minor bug fixes and APARs.

Critical changes

- When using the IBM MQ interface with a response queue, a crash might occur while sending the response (APAR PO09469).

- A crash might occur when starting rule generation manually if the same time rule generation was running in modeling workflow. Additionally, a deadlock might happen when stopping modeling workflow when rule generation was running. Rule generation is now permanently removed from modelling workflows. Rule designer is now re (it had been removed in the preintegrated previous fixpack) (APAR PO09297, PO09295).

Major changes

- The **search** icon in the help dialog didn't give any visual feedback when being clicked. The field to enter the search items was not visible.

- The **search** icon and search field in the help dialog were not visible.

- In rare situations, a crash might occur if the outgoing FLI timed out (APAR PO09610).

- In rare situations, a crash might occur during golive when sending a message without a message ID and having bypass enabled (APAR PO09576).

- In rare situations, a crash might occur on a remote instance when a model element was saved while a simulation was running on the remote instance (APAR PO09552).

- The retention settings page on the administration tab overestimated the memory and disk space needed to perform resizes. The computation assumed that both the old and new requirements need to be satisfied at the same time to perform the resize. This meant that if resource utilization was quite high already, further changes to the retention settings were not possible even if those changes would have overall-reduced memory and disk consumption. We changed the calculation now to be more conservative. During a resize only the larger of the two requirements (old or new) is required as well as an additional temporary buffer only needed during the resizing process itself. The additional buffer is required for both memory and disk space but is always only as large as the data cache of the largest attribute according to the new retention settings. The retention report was adjusted to give a better overview of each mandator's memory consumption, both old and new, as well as a clear explanation of any errors that happened.

- Case actions applied dashed PAN formatting to every masked value of an encrypted numeric attribute even if that attribute did not specify dashed PAN formatting in its settings.

- Case action previews showed masked values to an investigator even if that investigator was not allowed to view any values of encrypted attributes at all. This happened only if the outgoing channel configuration enabled masking of attribute values as that setting took precedence over the masking privilege of the user account. The new behavior completely ignores the outgoing channel configuration's setting within case action previews.

- For systems with many mandators the query performance and simulation performance was improved in case all mandators are selected or in case only a few are selected that only contain a small subset of the overall transactions (APAR PO09639).

- A crash might occur when starting a simulation while saving a model element.

- A crash might occur when running the logical golive.

- Attempting to create an external model would fail due to an error that might be neither seen nor corrected.

- In the user interface, many numeric data fields did not allow numbers larger than 2,147,483,647 (APAR PO09640).

- When remote simulation was used and after saving the rule generation settings, the simulation stopped and needed to be restarted to allow running rule generation. Additionally, changes from saving only showed up after saving a second time.

- Rule generation's **intercepted by existing ruleset** row would count every rule hit (APAR PO09443).

- When a message in HTTP format was followed by messages without an HTTP header on the same MCI thread, the subsequent messages were either not computed correctly or not stored (APAR PO09522).

- A crash might occur if the user disabled MCI while bypass was running or when MCI was already disabled before bypass started (APAR PO09641).

- The order of computation in simulation was different than the real-time computation. In simulation, profilings were not computed mandator wise but type wise, that is, instead of iterating through all profilings of the head mandator first, then moving to the next lower mandator and so on, it would simulate the calendars of all mandators, then the patterns of all mandators and so on. As a result, if there were dependencies across different mandators, the simulation result would differ from the production result (APAR PO09104).
- Attribute can be removed although it is still used by a submandator revision that is waiting for golive confirmation (APAR PO09620).
- When performing a head mandator golive in between simulations of a sub mandator including output or overwritable input attributes of the head mandator, a crash might occur or incorrect simulation results might be produced (APAR PO09611).
- The incrementing of closed cases and not closed cases in investigation reports was incorrect. Cases closed as Genuine would increment the Fraudulent field. The Unknown field also used to increment incorrectly. In addition, the user-defined cases and Created cases were reading their values from the wrong variables (APAR PO09215).
- In rare situations, whether the FLI buffer was full and needed a rollover was miscalculated.
- When updating masterdata manually or from rule actions, the change would be written synchronously to disk when deferred writing was enabled causing additional disk access (APAR PO09607).
- A crash might occur when running multiple simulation reports in parallel, which can happen via rule reports (APAR PO09383).
- A deadlock might occur when deleting a mandator while running a query (APAR PO09331).
- A user without cpp privileges was receiving an error when trying to create a case from an executed query (APAR PO09621).
- In earlier versions, masterdata conditions in case selection page would incorrectly evaluate `not` based operators like `not equal to`, `not starts with` etc. It has been fixed and now masterdata conditions in case selection page would return correct results for `not` based operators (APAR PO09340).
- The case selection, case search, my working queues, defined risk list, and working queues pages in the user interface performed slowly when many mandators and users were defined in the system.
- Remote instances might crash when running a curtail masterdata job (APAR PO09584).
- In rare situations, IBM Safer Payments was temporary blocked and appeared to be in a deadlock state. It mostly happened during high-traffic / high computation situations (APAR PO09661).
- An instance might be invalidated after restart when a revision was created, then the instance was shutdown, the API instance was changed and a golive was triggered on the new API instance.
- When changing pages in the user interface, an Unexpected Error page might occur (APAR PO09240).
- Previously when trying to delete an attribute that no check was performed if the attribute was used in an export job. Now such a check is performed (APAR PO09300).
- Running a simulation with low available memory would show an incorrect error message suggesting that simulation wasn't available rather than one indicating that there was insufficient memory (APAR PO09613).
- The **Private client key password file** label in Bypass settings was duplicated, the first field must be labeled **Certificate private key file** (APAR PO09537).
- The maintenance function `skip current FLI messages` was displayed in the maintenance dropdown even when user privilege `Reset FLI` was missing, causing a popup privilege error when executing the maintenance function.
- In rare situations, a crash might occur if the operating system was able to open a file but might not properly close it (APAR PO09547).
- Earlier log message number zero was used to log `allocation / deallocation of an attribute's simulation MDC`. To keep this simulation logging enabled all the time, a dedicated log message number 826 was added since log message number zero is for development purposes.
- A crash might occur when deactivating MCI while Bypass was enabled (APAR PO09553).

- Switched OpenSSL 1.1.1.k to OpenSSL 1.1.1.l as a countermeasure against CVE-2021-3711 and CVE-2021-3712.
- A deadlock might occur during golive if the Status Alarm Indicator or Key Performance Indicator of type `retention usage` was computed in parallel (APAR PO09455).
- Improved the performance on the user interface when performing changes in the forms for configurations with many mandators.
- The `setOffline` request did not close files obtained by the application, which caused problems during backup of an instance after using the `setOffline` request. Now, after the `setOffline` API request is run, all files obtained by the application instance except the backtrace file will be closed. The request `setOffline` will re files.
- The End of day job performance was improved during index purging for configurations with many mandators (APAR PO09426).
- Any string containing `+/()[]{}` in a rule condition would throw a validation error. These characters are now supported when the attribute being set is of type Text (APAR PO09580).
- When an attribute was displayed in a query result and its data was not available and it had categories enabled, the columns would be shifted in the user interface (APAR PO09568).
- A crash might occur shortly after manual case creation or creating cases from a query (APAR PO09515).
- Added a checkbox named **Include byte order mark in CSV exports** to the user account page. If this checkbox is enabled, byte order mark (BOM) is included in CSV files that are exported using the user interface. The setting does not affect CSV files that are exported using jobs. By default, byte order mark is not included in CSV exports. For new user accounts, its default can be configured using the setting **Include byte order mark in CSV exports for new user accounts** on the settings page.
- An investigator was able to execute case transitions while not belonging to the transition's user group. Also, the assignment of closed investigation cases to working queues was not done properly and as a result of that in some scenarios it was not possible to reopen a case (APAR PO09509, PO09514).
- When a user clicked **Work case** it might happen that an already closed case (belonging to a working queue that was configured to contain closed cases) was loaded as the next case to work on. Now, clicking **Work case** always returns an open case (APAR PO09493).
- Model test (sandboxing) functionality was not working for PMML models and internally trained models.
- It was possible to do certain changes, for example copying/deleting elements via context menu, on a revision that was waiting to perform a golive, for example, if interlock was enabled and the instance had to wait for the required number of instances to be available. In that case, a remote golive might have failed, causing the remote instance to shut down and become invalidated (APAR PO09477).
- When saving the settings page, it would always say that the watchdog and persistent connections thread pool values had changed even though there was no change to these settings.
- A crash might occur when a cluster was updated while an instance was shutting down. It might, for example, happen during a restore on the restore recipient instance (APAR PO09480).
- A crash might occur if an MCI interface shutdown and MCI connection request occur simultaneously. Closing an MCI connection during deactivation of the MCI might be slower than before if the sending side keeps the connection to IBM Safer Payments open until the MCI is deactivated. In a worst case scenario, the overall additional time it takes during the deactivation of the MCI might be the number of connections * 1 second (APAR PO09435).
- A crash might occur if a simulation was started while saving a revision element (APAR PO09483).
- Query results might contain invalid JSON, if the query did not include the DDC and the CSV export options for nil values were set to `empty value` and the query returned data that was only available in DDC but not MDC. Under these circumstances the query result would not load and produce an error on the user interface (APAR PO09452).
- The retention administration page might only be fully utilized by users that had the role privilege to either view the model tab on all mandators or to view the mandator administration for all mandators. Additionally the user also needed the global privilege to view the system configuration. Now only the global privilege for retention administration is needed. Note though, that this privilege still allows a user to view the hierarchy of mandators on the retention page.

- The retention settings page on the administration tab was hard to use because too much content was visible at the same time. The layout of the page was changed and individual parts split up into sub-pages that can be viewed one at a time without the others being visible on screen. To make the form more intuitive the behavior of the **Reset** button was changed. When performing this action the pending settings are overwritten by the active settings and a corresponding audit trail entry is produced. Apart from this, the remaining workflow and API requests have not been changed.
- When having more than one instance in the cluster, filtering the status alarm indicators in the dashboard would cause some SAIs to be duplicated (APAR PO09440).
- The detail view of a defined risk list entry did not initialize the **Expires at** field properly when being opened from the **Risk list hits** widget on the case investigation screen.
- When starting a rule report `without context`, a complete simulation would be started instead of just simulating the elements relevant for the simulation of this particular rule like it was in the old user interface.
- The tables in the user interface now have borders around each cell to make reading densely packed tables easier.
- Tabs, for example, in cluster settings or latency report page did not display correctly if they extended over the screen edge.
- It was possible that index entries and entries in index using elements such as masterdata, events, calendars, and device identifications were duplicated after running a recreate index job with deferred writing enabled (APAR PO09454).
- The date selector in the user interface did not allow the definition of hours, minutes, and seconds in the following places: defined risk list import page for expires / starts at, case transition **follow-up on** field, defining a timestamp reporting attribute in create CPP from a query. Additionally, the timestamp that was saved was not at 00:00:00 of the user's timezone as expected.
- Investigation cases from different Index Based Evaluation case classes using the same index were not consolidated (APAR PO09444).
- Users using encoded categories with PMML might only encode data of type double. This behaviour restricted users from using other types of data in encoded format.
- When starting an instance of IBM Safer Payments, whether the system was ready to process transactions was incorrectly handled. The result was a wrong evaluation of the number of active instances in a cluster for the interlock functionality (APAR PO09462).
- The privilege check for `unreserveCase` request was simplified to avoid unnecessary no privileges errors (APAR PO08515).
- The justification code was missing in the data sent to the server with the request of a bulk case transition, which prevented the transition from being executed in the case of a mandatory justification code (APAR PO09470).
- IBM Safer Payments now supports all Python 3 versions starting with 3.2.
- When a PMML model component is copied, the uploaded PMML file wasn't copied which led to errors (APAR PO09379).
- A crash might occur if an output attribute was replaced when saving the same model element twice at the same time (APAR PO09446).
- On the Case Investigation screen, when case action confirmation was turned on, previewed case actions of type SMTP were triggered and sent before the confirmation was given.
- While an instance is offline, it was possible for its interfaces to become active when cluster update action is performed. Now interfaces of an offline instance would not be activated even after cluster update actions. Also, a new status named `Offline` is added to indicate the status of an offline instance in the cluster settings page (APAR PO09284).
- In rare situations, a crash might occur when deleting a Key Performance Indicator.
- A backtrace might occur in index based evaluations due to outdated condition references.

- A deadlock might occur when a modeling workflow was running in a challenger revision and at the same time the revision was deleted or taken over by a user who did not have simulation memory assigned (APAR PO09461).
- A golive might get stuck when using cluster interlock if restore was in progress within the cluster. Now golive proceeds if the minimum active instances condition is satisfied (APAR PO09378).
- When simulating rules, more rules than necessary might have been simulated leading to prolonged simulation times. Rules that alter the same outputs and are computed before the simulated rules are automatically included. However, rules that are computed after the simulated rules were also simulated although not required to get valid simulation results (APAR PO09428).
- If the `noTrueChildStrategy` set in PMML boosted tree model is `returnLastPrediction` and if there is no child node that meets the criteria, IBM Safer Payments does not use the score attribute value in the parent node (APAR PO09196).
- In attribute settings of the user interface after changing storage type to `not stored` the attribute might only be saved if the DDC capacity had already manually been set to 0.
- The default storage type and xdc capacities defined in system configuration in the user interface were not used when creating new attributes in counters, profiles, and device identification. Additionally, when changing storage type in an attribute definition, capacities might have been predefined to zero instead of the default value (APAR PO09397).
- Large redundant data was stored in the configuration file when the storage type in an attribute definition was changed and saved in the user interface (APAR PO09410).
- Running the common point query was not working.
- MCI Bypass did not work for TCP messages with binary header. IBM Safer Payments dropped the binary header before forwarding the message to a remote instance, and the remote instance might not process the message without it (APAR PO09408).
- The user interface might become unresponsive due to a defect in the outgoing persistent connection.
- Highlighting of a case's consolidated alarms in query results did not work correctly when more than one alarm was present. Only the current master alarm was highlighted.
- The result pages of reports did not utilize the full width of the page.
- When an external query response did not contain a key for an attribute or a masterdata that is mapped in the response mapping, the value would be overwritten by an empty value. Now, the value remains unchanged (APAR PO09404).
- PMML string arrays were not correctly parsed in case the values inside the array were not enclosed in double quotes.
- Removing an MCI endpoint might have caused a memory leak or crash.
- Saving the modeling section or the revision general page caused a running rule generation on a remote instance to be stopped and might have caused wrong simulation results (APAR PO09285).
- Unique message ID is required for bypass. A crash might occur when bypass processed incoming messages with identical message IDs.
- The time to replicate defined risk list entries uploaded from file has been reduced substantially on remote instances. Additionally the time to delete entries on remote instance has been reduced (APAR PO09401).
- A crash might occur when starting simulation while a pmml model was being uploaded (APAR PO09281).
- In rare situations, when many investigation cases were added or archived, there might be an issue for working queues that worked on the same cases.
- A crash might occur when deleting a challenger in which rule generation was running.
- When a user changed their password, IBM Safer Payments did not invalidate the old session ID and other session related tokens.

- It was possible to change the label of an encoded input category while it was being referenced in a PMML model or external model component. This led to unrecoverable errors during golive. To recover a re-golive on the retired revision was necessary.

- Corrupted FLI message when the MCI message size is larger than 10000 characters and external model component is active (APAR PO09350).

- Improved how MCI threads in various statuses are monitored and displayed in the user interface. Defined a new KPI that allows the user to monitor MCI threads in a given state (idle, reading, waiting for processing coordinator and writing response) per MCI inbound endpoint. Additionally, defined a user-configurable network idle connection timeout on the inbound endpoint that allows the user to define the time after which inactive connections must be closed. Included more information in the logs when an MCI connection fails.

- It was not possible to save external model components that included conditions (APAR PO09472).

- The case audit trail now contains a button in each comment cell allowing the user to open the comment in a popup in which the text is displayed formatted as originally entered including line breaks. Related case action histories, which already offered this button before, showed some unexpected behavior when using it: Instead of opening the popup the user would be navigated to a different case if the clicked row happened to belong to a different case.

- If the FLI checksum check was enabled and transaction data contained a double quote followed by a closing curly bracket, the FLI might get stuck (APAR PO09335).

- The internal calculation of available/used memory on RHEL systems has been improved by fixing a 32-bit integer overflow problem and taking into account `MemAvailable` or the `SReclaimable` field values from `/proc/meminfo` to provide more accurate results (APAR PO09166, PO07255).

- Clicking on a row in the case histories and aggregated audit trail tables changed the URL of the page but did not load the case that belonged to that URL.

- The MCI was temporarily deactivated during cluster page save when it was not necessary (APAR PO09361).

- It was not possible to add a new MCI endpoint with SSL set up to read certificate passphrases through the console. The application would not ask for a passphrase and fail to open the new endpoint. Only during startup might certificate passphrases be entered.

- There was a potential deadlock while computing index and updating KPI which might block incoming computation and block the instance from shutdown.

- The MCI didn't accept new connections after disabling SSL

- During deferred writing it was not checked correctly whether the chunk about to be written was within the safety margin of the MDC. Potentially records outside of the MDC were written to DDC.

- A crash might occur during shutdown, potentially leaving sockets open without being properly closed. This did not result in data loss as all DDC files were already written after `163 Shutdown completed successfully` was printed in the log.

- External callouts fail to parse the response if more than one response is received at the same time.

Minor changes

- A redundant check-in case search was removed with no change in functionality.

- When multi value masterdata was started with limits, the limited value might be persisted on disk, if a revision write operation was triggered; for when copying a revision or performing, for example, a golive. Multi value masterdata also uses the `limit_index` parameter that might result in unexpected capacity values. A dedicated start-up parameter `limit_multi_value_masterdata` was introduced to limit the capacity to the desired value (APAR PO09673).

- An instance might become stuck if multiple value masterdata is corrupted. This might be due to various causes, for example, a previous crash and infinite loops in their internal structure.

- When trying to select multiple rules and enable or disable them, an error would occur if any of the rules had a condition regarding an encrypted attribute

- Archiving case audit files when they are already archived overwrites the archived .latest case file.

- SQL notifications might not be executed due to the attribute placeholders being replaced with the attribute's value. A potential workaround was to include single quotes in the message template to surround each attribute value. In this version, the behavior was changed to not require single quotes in the message template to be consistent with SQL case actions.
- Before the fix disabled PMML models were parsed during Sandbox testing. Now only enabled PMML models are parsed by IBM Safer Payments during Sandbox testing. The fix also disables Sandbox compute button while Sandbox testing is still running.
- Preprocessing and final rules tables were redirected to the wrong table after enabling or disabling rules via toolbars.
- Users might previously interact with certain pages under the Model tab without the associated privilege to edit a page. Interactive components within model pages are now set to read-only mode and cannot be interacted with if the user doesn't have the required edit privilege.
- It was not possible to generate the French and Portuguese manual (APAR PO09577).
- Lists must always have at least one output value and condition, but in the user interface it was possible to delete the last value or condition and still save.
- Users who did not have the `Modeling...` privilege on their role were still able to see the **Modeling** pages within a revision.
- The numbers in the FLI status `Reconnecting` were shown incorrectly, and the numbers in the FLI status were displayed as floats instead of integers.
- The user interface was attempting to parse any response as JSON and would fail. For example, when a Proxy/CDN returned a non-JSON response, the message `Unexpected token < in JSON at position 0` was given. This behavior is now replaced with a more informative modal (APAR PO09504).
- Added help text for two settings, **Use IP address for session binding** (`EnableIPSessionCheck`) and **Use HTTP header X-Forwarded-For for session binding** (`EnableXForwardedForCheck`), in Authentication Settings within the Administration tab (APAR PO09508).
- A new event log id 827 was added for errors from file closing, instead of using the event log id 0.
- The persistent connection occ is cluster dependent. Its configuration of connection pool priorities was not adapted to the cluster change.
- Case investigators might see case transitions that they had no execution privilege for.
- On the transition to the `Followup` case state, the transitioning user was able to select a followup user belonging to a mandator higher up in the mandator hierarchy than his own. Now he is limited to users assigned to his own or descendant mandators, being in accordance with the user selection on the case selection form.
- When using a shared NFS folder for DDC, the file `ddc/lock.iris` was not unlocked automatically when the operating system crashed and rebooted. An option called **Check for other instances** was added to system configuration to skip the lock to allow an easy restart when using a shared directory for DDC. This option is true by default to not change the current behaviour.
- The IP addresses of internal interfaces SCI, ECI, and FLI were not updated in case that domain names were used and the DNS server changed the address resolution to a new IP unless the cluster page was saved again. IP addresses are now reloaded after receiving a to be ignored IP, if the IPs have not been reloaded already during the last 10 seconds.
- The Login page was changed to a brighter version closer aligned with other IBM products.
- Writing large numbers in the time field of a date picker field caused the selected date to change to a value further in the future (APAR PO09540).
- The application's built-in help did not explain how privileges to change a given type of element on one mandator affect other mandators. The change privilege on one mandator implies a view privilege on higher mandators to avoid creating duplicate elements. A hint was added to the online help for user accounts.
- The ability to filter the Status Alarm Indicators by instance on the dashboard was missing from the user interface.

- Position settings for Status Alarm Indicators were not reflected on the dashboard page (APAR PO09326).
- The charts of the dashboard wouldn't automatically refresh after the configured refresh interval. The values were also not reloaded after manually refreshing the page (APAR PO09319).
- On the inbound page, the label and check boxes of the Kafka instance failover priority selection appeared on different lines of the form.
- It was not possible to delete a modelling workflow, if it was used in a simulation of a challenger or a retired revision within the same mandator. It's now possible to delete workflows as long as they are not used within its own challenger or challengers of submandators (APAR PO09298).
- Normally users that can change an element on a lower mandator automatically are allowed to view this element type on higher-level mandators. This behavior was not true for index-based evaluations. The table did not include higher-level mandators if the requesting user only had the privilege on a lower-level mandator.
- Sending the `ConfirmGolive` API request with an invalid revision uid caused the API instance to create a backtrace and a unrecoverable error log message (APAR PO09386).
- On all pages where a date selector is shown a hint is shown now which timezone the date and time is in.
- The icon of the **count number of records** action available for simulation and investigation queries was changed to an uppercase sigma.
- The revision general page did not show the revision status information correctly. Also, the menu bar showed incorrect information text that the revision would be editable during golive report.
- In reports, if every value of a report result row is 0, a hint text is displayed now instead of a pie chart with invalid data.
- In the case workflow definition it was possible to set a comment for a case transition as mandatory, but not allowed, which might block the user from submitting the case transition.
- In the General Revision Settings page, a pie chart will be displayed only after a user clicks a value in the Memory Statistics table. Now the **MDC memory consumption** column is selected by default. Users can still click other columns to change the displayed chart. Additionally, a misleading text was displayed when the selected column did not contain enough data to display a pie chart.
- For model revision elements, the **New element** button is active for inherited elements, even though that is not possible.
- The **Logout** and **My account** menu options were separated into their own icons.
- The version information was removed from `getUserProfile` API request. There was no further impact for the user interface or server.
- Typographical errors in the online help and user interface have been corrected (APAR PO09441).
- When using the Ctrl+S shortcut in the user interface, changes to date fields were not saved if the field was still focused.
- The limitation on reports pages to only allow filtering for time ranges in the past was removed. Additional validation was added for the time ranges.
- In the user interface, when adding a new common point query it was not enabled by default.
- It was not possible to filter for defined risk list entries that were last edited by deleted users. Entries from all users will now be displayed when no user is selected in the filter (APAR PO08657).
- In attribute definition and in the default xdc capacities setting in the system configuration in the user interface, whether MDC is smaller or equal to DDC capacity was not validated. However, it was validated on the server. Additional validation behavior was improved in attribute and index sequence settings.
- Kafka failover was not triggered when removing instance from cluster.
- When trying to delete a simulation query using the form button the browser would navigate to the revision selection page and show a deletion confirmation popup to the user. Clicking on **Confirm** then resulted in a `Cannot find model revision` error message. The query was not deleted.
- The `libxml` library printed additional unwanted error messages to the stderr stream when parsing errors occurred.

- On Administration>System>Configuration>Interfaces>Application Programming Interface the meaning of the option **Use default HTTP headers** was backwards. To actually use the default HTTP headers, the setting had to be disabled. It was also not possible to enter multiple HTTP headers as the form only supported a single-line text input.
- The online help was updated to note that the ephemeral port range must not be used for the interface ports of the IBM Safer Payments instances (APAR PO09134).

Download instructions

Download IBM Safer Payments 6.4.0.00 from IBM Passport Advantage.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_0_00.zip

  ```
  dc34a6867d1fe5c92a49782e8abe7589fa860a7e218ca319941113dd7d873ec1
  ```

- MD5

  SaferPayments_6_4_0_00.zip

  ```
  0e35da6390d965dbeb5db6ef6616735d
  ```

Chapter 4. 6.4.1.00 Release Notes

The Release Notes contain information about update information, fixes, and known issues in IBM Safer Payments 6.4.1.00.

This release changed the version number from 6.4.0.00 to 6.4.1.00. It contains low impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.1.00 includes enhancements.

Release highlights

- None

Enhancements

- Improved the performance for specific counters. Specific unnecessary computations were optimized for counters that don't calculate amount computations.

Update information

IBM Safer Payments 6.4.1.00 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information

6.4.1.00 Update information

- A warning was added when running encrypted import file jobs without AES-CTR, as the previously used AES-CBC had known security issues. It is recommended to switch encrypted import jobs to AES-CTR.
- The remote wait factor was considered redundant with the introduction of interlock. It is recommended to use interlock because it ensures that recreate index jobs are not executed in parallel on multiple instances.
- To use external models, it is required to have the meta attribute `primary urid` and `urid computation complete` as well as the fraud mark index.
- The following API requests now enforce to use a POST request. Any potential scripts that use these requests must also use POST: `Login, ChangeAuthAddress, InsertPin, ChangePassword, CreateDefinedRiskListImportSettings, GetCaseAction, IsPasswordValid, PathExists, Save, SendCaseActionFromPreview, SetMasterdata, SetQuickSearchCasesTablePreference, SetUserExportPassword`.
- To avoid remote code execution in spreadsheet applications, CSV exports are now prepended by a single quote when text values start with `=, +, -, @, `, tab, or return. You can still switch to the old behavior by disabling **sanitize CSV exports** in **Administration** > **System Configuration** > **Misc**.
- Since version 6.0.0.10 IBM Safer Payments has created a backtrace file every time it starts (called `backtraces_starting_at_[InstanceID]_[YYYY-MM-DD].iris`). This file was previously empty until a crash occurred. The file now has a line stating the version.

  If you have automated file management processes which move older log files to a separate directory then you must ensure that the backtrace files are not moved along with the logs. All backtrace files must stay in the logs directory, and if any of them contain more than a single line then they must be shared with IBM support.

- If the option to **Resolve uncached reporting attributes** is enabled, it will no longer show values for reporting attributes in the cases table that are not selected in the case class of the respective case. If you want to see additional reporting attributes, enable the respective attributes in the case class. For existing cases, the values for the additional reporting attributes will be loaded from transactional data.

  If you are experiencing slow loading times for the cases table, it is recommended that you disable the **Resolve uncached reporting attributes** and **Include DDC to resolve uncached reporting attributes** options, if they are not necessary for your use case. For more information, see the online help for more information.

- After a crash occurs, an instance is now automatically invalidated. Use an additional cli parameter `after_crash=start` to continue previous behavior.
- In case you use channel names with 20 characters, reduce the name to 19 characters to prevent MQ from connection issues for this channel.

Change log

IBM Safer Payments 6.4.1.00 includes critical, major, and minor bug fixes and APARs.

Critical changes

- The **Attach** button in case investigation was always deactivated. The drop and drag functionality was not working.

Major changes

- The following elements allowed a user without the privilege to view unmasked data to create conditions to enumerate encrypted data: simulation data selection and target conditions, rule generation training and verification data selection and rule generation predefined conditions, random forest training and verification data selection, reporting query performance indicator, which is defined risk list entries, and defined risk list upload alert lists.

- In certain situations, cases with masterdata on category attributes might not be displayed in case investigation (APAR PO09780).
- A backtrace or crash might occur after a golive if the data from the champion to retire was accessed from a query, case investigation, and so on (APAR PO09619).
- Improved restoration times on the Receiving side by optimizing the parsing functionality.
- The application crashed when trying to save a model generated by the random forest generator after it was stopped manually (APAR PO09721).
- Empty double quotes appeared in the response object if more than 10 rules were mapped from a client response. The fix introduces a sorting function to handle those scenarios (APAR PO09690).
- In rare situations, a crash might occur when conducting multiple save operations on a case. It can happen when a CPP or memo is saved multiple times for the same case during a short timeframe, for example, by double clicking the save button (APAR PO09701).
- An option was added to load encrypted file jobs that use AES-CTR as cipher. The online help was updated to use this algorithm.
- In rare situations, the FLI connection hangs (APAR PO09686).
- The remote golive factor has been removed from the recreate index job form (APAR PO09682).
- Saving attributes with computation impact did not invalidate an active simulation, causing possible access to invalid data. Additionally when saving revision elements a warning popup is shown when there is an active simulation (APAR PO09525).
- Maximum latency, FLI rate, and latency violations SAIs did not work correctly because the option, for instance, selection was missing from the user interface (APAR PO09751).
- Computation results were inconsistent between instances when using external models with mergings recomputation (APAR PO09743).
- In rare cases where a deadlock prevented a simulation from being stopped, it would prevent the API being disabled, which might result in two instances having an API enabled. This change prioritizes deactivation to prevent that scenario (APAR PO09481).
- Running a curtailing masterdata job might have caused a deadlock when index entries were update at the same time in parallel (APAR PO09664).
- The login request and other PADSS sensitive API requests were not rejected by the server when sent as GET instead of POST request. The requests that now enforce POST are: `Login`, `ChangeAuthAddress`, `InsertPin`, `ChangePassword`, `CreateDefinedRiskListImportSettings`, `GetCaseAction`, `IsPasswordValid`, `PathExists`, `Save`, `SendCaseActionFromPreview`, `SetMasterdata`, `SetQuickSearchCasesTablePreference`, `SetUserExportPassword`.
- Random forest generation within IBM Safer Payments ignored the conditions configured during data selection. This caused inconsistency in the number of records being processed during a simulation and random forest generation (APAR PO09646).
- In attribute settings, the table had incorrect data types.
- Compliance lists did not hit a record when the list used the metaphone setting and a search was done for more than one name (APAR PO09643).
- The missed cases report included cases whose generation time was within the selected time range, although the reference parameter is set to case closed time.
- During recreate index job the MCI, MQI, and KQI interfaces were not closed when bypass was activated or when close during golive option was activated. This might have caused redundant deferred writing (APAR PO09594).
- In rare situations, a crash occurred if an analysis was deleted while being accessed by another part of the code. This change introduces protection to prevent a crash from occurring in that scenario (APAR PO09724).
- The table on the report page can sometimes show an extra column of data, misaligning the regular columns with their headers, and causing some columns not to be displayed.

- Generating a reporting query by a job resulted in a report that did not contain any headers for the columns. Now, the correct headers are included. In addition, CSV files that are exported from reporting queries and group by queries had the header for the grouping attribute as `Grouping attribute value`, this also has been changed to reflect the actual name of the attribute. For both reporting queries, and group by query reports when they are used for rule performance, the header of the first column was changed from **rule performance** to **rule**.
- The icon and text of the simulation progress component did not indicate that the simulation had started and was undergoing initialization. Now, a distinct icon and text line makes that transition is more apparent (APAR PO09601).
- CSV exports that are generated by IBM Safer Payments might trigger remote code execution when opened with an external stylesheet application that was vulnerable for remote code execution.
- To facilitate issue investigation, added a release string to the backtrace file (`backtraces_starting_at_[InstanceID]_[YYYY-MM-DD].iris`).
- The options to enable/disable **Resolve uncached reporting attributes** and **Include DDC to resolve uncached reporting attributes** were not available on the user interface. Added them to Administration > Configuration > Case Investigation. The default is false for new configurations.

  In addition, the cases table no longer show values for reporting attributes which are not selected in the case class of the respective case, as this might cause negative performance impact (APAR PO09399).
- The default timestamp for notices was previously set to a date far in the past. Now it is set to the current date and time (APAR PO09675).
- Users with mask level `must not see values` can still see constant values in clear text in the expression fields of conditions that use encrypted attributes.
- Salts for export jobs have been generated with a weak random number generator on client side, when not modified by user. Additionally, when not refreshing the browser, newly created export jobs got the same salt value.
- The latency report shows redundant computation element unknown and prints 0 instead of `External Model`.
- On encrypted instances, a popup error might have appeared when opening a case creation page.
- Multiple buffer overflows have been fixed:
  - Configuring the MCI incoming buffer smaller than an incoming message causes the message to be written into invalid memory regions.
  - Configuring the MCI incoming buffer smaller than an incoming message causes the message to be written into invalid memory regions.
  - Configuring the MCI response buffer to be smaller than 80 leads to the application writing parts of the response into invalid memory regions.
  - Configuring the FLI buffer to be less than 80 Bytes lead to a buffer overflow whenever a configuration update or transaction message is synchronized.
  - Triggering a case action from the **Potential first parties** section of a collusion case causes a null terminator to be written into invalid memory when the case action message placeholder `[Firstparty]` is used and the value for the first party has the maximum length of the first party attribute.
  - Configuring the IBM MQ interface to use more than 256 characters for most fields causes a buffer overflow inside the MQ library.
  - The value for MQ Channel is not 0 terminated, possibly leading to security problems. The maximum length for the MQ Channel name is now 19 characters.

  Buffer overflows in general can have severe security impact although it is hard to judge how exploitable the aforementioned overflows really are. Buffer overflows can also cause the application to crash in rare cases.
- An instance is now automatically invalidated after a crash occurs. This was changed because a crash usually causes broken data and data loss. Added a button in cluster user interface settings to force

an instance to startup. Added an optional command line argument `after_crash` to enforce different startup behaviors.

- If a user swiped over a component with a tooltip on a read-only page, the tooltip message box remained open after the user moved the cursor away. The tooltips now disappear as expected (APAR PO09413).

Minor changes

- When restoring one instance from another, the checksum calculations for each file are slower than necessary as they are only performed by single thread.
- Updated the online help as follows: removed the manual restore steps, added further information about simulation load balancing and server time zone setting, and replaced the word *blacklisting* with *blocklisting* (APAR PO09742).
- Updated the online help: improved the description of **Model Factory's Relax All Up Threshold**.
- Number of selected items is not shown in query result table (APAR PO09738).
- The UID assignment code for some elements was slightly refactored to remove the possibility that some elements might claim more UIDs than necessary (APAR PO09025).
- Code around the usage of conditions, internal model, random forest and lists computation was streamlined without a change to functionality.
- Sandbox records and modeling workflows might be deleted without the required privileges. Also, it didn't require the proper privilege to create modeling workflows.
- Users would occasionally be presented with an incomprehensible error message when attempting to encrypt an attribute. This would occur when a rule conclusion existed that would overwrite or change the attribute in some way. The error message now provides easily readable information about which rule conclusion is blocking the change to encryption status.

Download instructions

Download IBM Safer Payments 6.4.1.00 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.1.00 download link	13 Apr 2022	English	160.58 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  `SaferPayments_6_4_1_00.zip`

  `b40d3de5d91388e8d0895022def729b97994874aa833ed8a33b17a88562c6c69`

- MD5

```
SaferPayments_6_4_1_00.zip
```

```
98b4f765d95cb2d041d4d22617d7137a
```

Chapter 5. 6.4.2.00 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.00.

This release changed the version number from 6.4.1.00 to 6.4.2.00. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.00 includes enhancements.

Release highlights

• None

Enhancements

• Added **Forward all attributes** to external model component definitions. When it is enabled, all input, output, and profiling output attributes are included in a request message. The mappings for those attributes are generated automatically during golive. They can be viewed and edited from a new tab on the Mappings page.

• Persistent connection timeout settings are now configurable for each pair of Safer Payments instance and message target address.

• Safer Payments can now dynamically select an outgoing channel configuration for an external model component based on an ID attribute. During the computation of a transaction, the external model component reads the value of the selected attribute from that transaction and tries to find a persistent connection with that ID value. If it fails, a log message is printed, and the external model component is skipped.

• External model components no longer forward attributes that are not present in the incoming transaction to an external system. However, attributes that are present in the incoming transaction but empty are still forwarded to an external system. Safer Payments assigns default values to them based on the attribute's data type.

• External model components now offer an option to capture `IRIS` and `RulesFired` metadata from a response and include them in the local response.

Update information

IBM Safer Payments 6.4.2.00 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information

6.4.2.00 Update information

- To use external models, it is required to have the `Primary URID`, `Primary instance ID`, and `URID computation complete` meta attributes and the fraud mark index.
- After the update, model revisions that are not champions do not have the newly introduced external model mappings. When a golive is performed on these revisions, new external model mappings are created for the attributes that are owned by that revision. These are the same mappings as the ones that were automatically generated for the champion revisions but they show up as new elements in audit trails and when comparing revisions. To avoid this inconvenience, delete non-champion revisions before you do the update. After the update, create new challengers by creating new copies of the champion revisions.
- If retention by records was used and manual rule performance data cache sizes was set before the update, the rule performance capacities after the update might be slightly larger as they are now rounded up to the next multiple of 8. The application does this automatically, no user action is required. Memory requirements of the models are not affected because internally the system already used rounded up values.
- Review the definition of remote look up indexes. Ideally, the remote lookup index should provide a value for every transaction. Otherwise, it is possible to see occasional empty values for reporting attributes in case investigation (cases table, case history, case actions, external queries, CPPs) when values are not stored in the case data but need to be read from the transactional data of the case alarm. This does not affect embedded investigation queries.
- The option of record purged entries is automatically enabled if the purged outdated entries is enabled.
- The attribute *system time* of the server response of a message of type JSON now uses the same date format as messages of type XML. This means that the format changed from `yyyy-m-d` to `yyyy-mm-dd`, so days and months with a single digit now contain a preceding 0.
- In past versions, unnecessary attributes were simulated, resulting in additional memory requirements because rules and final rules were automatically added to the simulation if they change the same conclusion attribute as a rule selected for analysis. Now, only selected rules are simulated. If all rules affecting a certain attribute are required (the previous behaviour), make sure to explicitly enable this attribute for simulation in **Model** > **Modelling** > **Attribute settings**.

Change log

IBM Safer Payments 6.4.2.00 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- IBM Safer Payments hangs and some operations never finish. Certain operations, for example, disabling or changing FLI, SCI, or MCI, are more likely to cause the problem even though they themselves might not hang (APAR PO09870).
- Retrieving data for reporting attributes from transactional data during case investigation takes too long if the remote lookup index cannot be used to find the unique record IDs (URIDs). Now, the search is omitted and it is assumed that the remote lookup index provides a URID for each case. As a consequence, it is possible to see occasional empty values for some attributes if a case (alarm) does not have a value for the remote lookup index (APAR PO09813).
- Broken multivalue masterdata is erroneously detected during data deletion that involves relationship attributes (APAR PO09809).

Major defects and changes

The following major defects were fixed and major changes were made:

- Computation results of counter and precedent on remote instance are missing when external models exist.
- Data is inconsistent due to the omission of the primary instance ID in external model synchronization.
- Data is inconsistent due to a defect in the index search for external model synchronization.
- A crash occurs if a defined risk list is concurrently queried and modified (APAR PO09854).
- In the user interface, it is not possible to set multiple emails as to address in notifications (APAR PO09398).
- Now, simulation automatically detects rule condition attributes that need DDC access and informs the user in the report (APAR PO09839).
- Deferred writing is needlessly interrupted when mandators, messages, working queues, key performance indicators, status alarm indicators, charts, case classes, case close codes, case workflows, case states, case user groups, notifications, external queries, or reminders are saved (APAR PO09594).
- Added a button to the System Internals general page to export the page to a zip file.
- When manually setting the rule performance data cache sizes on the retention settings page, the manually entered capacity values for retention by records are not validated to be a multiple of 8. Since the back-end anyway rounds the capacity to be a multiple of 8, the configured capacity and the one used by the back-end might be different.
- Fraud mark report column references are sometimes created from challengers and invalidated revisions instead of from champions (APAR PO09846).
- The preview for case investigation attachments does not display images (APAR PO09114).
- A crash might occur when analysis is stopped multiple times (APAR PO09723).
- The user interface unnecessarily displays `is true / false` in the expression field for conclusion operators (APAR PO09630).
- When a malformed transaction message is received, the system issues a misleading log message that FCD data stream is faulty even though the message type is not FCD (APAR PO08856).
- Broken multivalue masterdata is erroneously detected during data deletion (APAR PO09808).
- Updated OpenSSL to 1.1.1n.
- The **Manually set rule performance data cache sizes** setting on the retention page is automatically set to false when an instance is started, and rule performance MDC and DDC retention values are set to their default values.

- MCI bypass connections fail with a certificate error when the target MCI endpoint validates client certificates. This problem is caused by the bypass connection not sending the configured client certificate.
- In rare situations, a backtrace or crash occurs after a golive if the data from the champion to retire is accessed from analysis, reports, simulation, query count, or some maintenance functions.
- A crash might occur during case investigation and escalation-related operations when a golive is run in parallel (APAR PO09205).
- Remote instances crash during startup after another instance prints the log message: `513 Could not initialize incoming socket for StatusControlInterface` (APAR PO09878).
- A crash might occur due to an out of memory error during computation. Now, required memory is calculated to avoid such a crash, and the peak memory usage for random forest generation is reduced (APAR PO09735).
- The timed rollover setting for calendars is not available in the user interface.
- The system information page can show a wrong number of open MCI connections if multiple MCI connections get opened or closed at the same time (APAR PO09834).
- Documentation for maintenance function `Create conclusion expression pair list` is missing in the online help (APAR PO08906).
- My account preferences **Ignore Cases in Search**, **Print view for individual elements**, **Copy view for expressions**, and **Set ignore cases as default** are not saved after being saved (APAR PO09830).
- The maintenance function `create conclusion expression pair list` does not work in the user interface (APAR PO09292).
- Scheduled jobs are potentially run twice instead of once (APAR PO09769).
- When revisions are compared, the message `changedNoImpact` is shown as a comparison result for an index even though no field is shown as changed, and the index has indeed not changed (APAR PO08218).
- Realtime interception code for the conditions field shows an invalid verdict even with the valid code (APAR PO09484).
- When revisions are compared, changes to FCD mappings display only if both start and length were modified. The change is excluded if either start or length was modified (but not both). Now, the change displays if either or both start and length are modified.
- For security reasons, fields for entering sensitive data now explicitly set autocomplete to off.
- When comparing revisions and using the audit trail, the following attributes are missing: **Retry mergings**, **Max merging attempts**, **Retry wait time**, Update calendar profiles, and events fields for **Mergings**. Even if **Enforce time** is cleared, **Tolerance days** incorrectly displays in the revision compare (APAR PO07683).
- Removed the version information of libraries from `main.js`. This change was made for security reasons.
- The constants of encrypted conditions in rule or random forest generation display as encrypted values instead of clear text.
- It is possible to create reports with an invalid data range by using a script (the from date value is larger than the to date value).
- Added the `SameSite=Strict` directive to the Http cookie that is set during the user login. This change was made to reduce the risk of Cross-Site-Request-Forgery (CSRF) attacks.
- An error occurs when a reporting query is run with rule performance checked.
- Now, additional information is logged to more closely investigate and monitor the simulation operation.
- When comparing revisions, an error is issued if changes to an external model were made between these two revisions (APAR PO09896).
- List element is shown as changed in revision comparison result if it has more than two output values, even though there is no change between these two revisions (APAR PO09760).

- Now, data loading when a doublet is detected is only performed on the primary instance (APAR PO09815).
- Enhanced the index performance after index size is increased. Fixed a potential buffer overflow after index size is decreased (APAR PO09578).
- Using retention by time can lead to increased computation latencies for huge configurations. Now, there is no difference in the computation flow between retention by records and retention by time. To limit the visibility of data to the configured retention periods, the end of day job removes outdated values from the data caches in a process called *trimming*. For more information, see the online help for Administration>System>Retention settings (APAR PO09816).
- Saving rule generation settings with a condition that uses an encrypted attribute fails. This problem leads to an invalid revision being sent using FLI, causing remote instances to remove all elements in that revision (APAR PO09805).
- In rare situations, a crash occurs when simulation data selection is saved while rule generation is running.
- When messages in JSON format are used, the server response from the message contains an inconsistent format for the attribute `system time` compared to when messages in XML format are used. In the JSON response, changed the format from `yyyy-m-d` to `yyyy-mm-dd`, so days and months with a single digit now contain a preceding 0 (APAR PO09279).
- Errors that occur when a profiling element is used in the condition of another profiling element of the same type with a later priority issue vague error messages.
- In rare situations, a crash occurs when a case is exported from a cases table export while the working queue of the case is unassigned from it, for example, because a user started investigating the case (APAR PO09223).
- The responder URL field on the MQI configuration page is erroneously marked as required (APAR PO09727).
- Extract query data functionality is missing in query result tables in the user interface. Validation for the extract query template is also missing. Now, the whole extracted data can also be copied with the Confirm button in the pop-up window (APAR PO09714).
- A crash might occur when a defined risk list entry is saved while it is being computed. This problem is due to a read access violation (APAR PO09631).
- In past versions, unnecessary attributes were simulated, resulting in additional memory requirements because rules and final rules were automatically added to the simulation if they change the same conclusion attribute as a rule selected for analysis. Now, only selected rules are simulated. If all rules that affect a certain attribute are required (the previous behavior), make sure to explicitly enable this attribute for simulation in Model>Modeling>Attribute settings.
- Now, group by queries can use all valid attributes in conditions (APAR PO09212).
- **Include DDC** cannot be enabled for Counters and Precedents.
- Model elements like counters and events do not display the peer index aspect attribute when the form is opened from within a challenger (APAR PO09732).
- Creating cases manually with Boolean reporting attributes always results in a validation error.
- Modified the purging mechanism to replace outdated values with constant values that are easier to compress. This change increases the performance of the restore (APAR PO09871, PO09872).
- When data is exported, the attributes that are stored only in DDC are ignored even if the **includeDdc** checkbox is checked. Now, data for the attributes that are stored only in DDC can be exported (APAR PO09695).
- A crash might occur if successive simulation reports are not explicitly canceled by clicking the **Stop simulation** toolbar action before leaving the page. Now, simulation check report cancellation requests are automatically sent when leaving the report page, regardless of the means (APAR PO09394).
- Condition operators `same`/`distinct Bnet`/`Cnet` had no short string representation in table columns and other places. The short string representation for conclusion operator `is (if not empty)` was slightly adjusted.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- Text is missing in the Model Rules deletion dialog.
- If simulation is interrupted, a false Fatal Error code might be logged.
- The golive report and retention report can fail unexpectedly when the `limit_mdc` or `limit_ddc` command-line arguments are used to start IBM Safer Payments. The report compares the unlimited rule performance capacities with the limited system time capacities and produces an error if the former happens to be larger than the latter.
- When a retention report is generated, the user interface crashes if there is at least one error, and either rule performance MDC or rule performance DDC does not cause an error.
- Backtraces are written to multiple different files, and old empty backtraces are not deleted during startup.
- The mdc or ddc storage capacities of an attribute are incorrect in the audit trail. The values of `limit_mdc` and `limit_ddc` command-line arguments are shown (if applied) instead of the capacity that the user defined.
- The **Show reference** button for attributes of patterns causes an error. Removed the **Show reference** button for counters because counters cannot have references. Also, the **Show reference** button for attributes of events incorrectly shows untranslated text (APAR PO09867).
- Streamlined the code in PMML (Predictive Model Markup Language) without a change to functionality.
- If the simulation of a PMML (Predictive Model Markup Language) random forest model is stopped and simulated again, the model is not simulated, which causes empty output attributes (APAR PO09236).
- Some formulas in the online help display incorrectly, for example, formulas in Summary Statistics, Masterdata, and Calendar Profiles (APAR PO09387).
- In Model, final rulesets and rules are visible even when they are not enabled in the mandator.
- Values in the **Account** and **Period** columns incorrectly show in the reporting query results table (APAR PO09770).
- For rebuild index, added a log message that indicates progress when nilifying large sequence attributes. For reset index, improved the log message to indicate progress. The new log messages for nilifying sequence and reset index have log ID 841 and 840, respectively. Log messages for rebuild index and reset index are now also in the console log (APAR PO09789).
- Improved tooltip text for Reserved RAM in System Internal > General Information, Enable extended authentication, Case consolidation, and Message for MQ Queue. Added more online help information for KPI type of FastLink message rate, Heartbeat, Case consolidation, and Message for MQ Queue. Added Reporting query to the online help. Updated the pop-up warning message about master key change.
- Added an option to the System configuration that allows compression to be disabled during a restore.
- Rule performance MDC/DDC sizes on the retention page can be set to bigger than the MDC/DDC sizes of the System Time meta attribute.

Download instructions

Download IBM Safer Payments 6.4.2.00 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
Safer Payments 6.4.2.00 download link	29 Jul 2022	English	153 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_00.zip

  ```
  69b3a3fbcbc12298a8c49d0a8ec1621abc1cea3c0f2a39d387b83e129e8d32fe
  ```

- MD5

  SaferPayments_6_4_2_00.zip

  ```
  fb4862e008cc36f4cdc175bd94760d2c
  ```

Chapter 6. 6.4.2.01 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.01.

This release changed the version number from 6.4.2.00 to 6.4.2.01. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.01 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.01 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information

6.4.2.01 Update information

- After the update, transactions always use only a single FLI message for synchronization. When external model components are involved, the FLI message is sent after all external model components have been processed. This increases the time until other instances in the cluster are made aware of a transaction. If aggressive fail-over mechanisms are employed for the online data interfaces and a transaction that does not compute in a given amount of time is resent to another instance in the same cluster, the same transaction might be computed on multiple instances because neither instance can properly detect the doublet. All instances will thus perform the full computation, including the execution of external model components. You must consider the additional traffic in your external system setup. In cascaded horizontal scaling environments, where external model components are used to target other IBM Safer Payments clusters, those clusters should now enable doublet detection to avoid problems caused by the same transaction being sent in from different instances of the primary cluster. When upgrading the cluster, you must disable FLI on all instances and enable it only on instances that have been upgraded.
- Added MCI response error code 1017. It is used for MCI messages that cannot be correctly computed due to index deletion issues.
- Log message 0490 now displays more often, usually in cases where 0361 was previously printed.
- When updating a cluster or a persistent connection type outgoing channel, it takes about five seconds to process after the **Save** button is clicked. It will be improved in a future fix pack.
- If version 6.4.2.00 was used before the update, remove duplicate UIDs from the configuration before the first start up. Contact IBM Support for assistance.
- Added more and stricter error checking for JSON mappings. Now, mappings that were previously accepted might be rejected, which might prevent startup. After the upgrade is complete, look for error message E0526 in the startup logs. If you find the error message, return to your configuration backup. Fix the incorrect mappings and attempt the upgrade again.

Change log

IBM Safer Payments 6.4.2.01 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defect was fixed:

- The CPU usage of an instance can reach 100% if more realtime threads are used than the number of CPU cores (APAR PO09914).

Major defects and changes

The following major defects were fixed and major changes were made:

- The unrecoverable error message `Attribute reference in condition not found` displays if case selection attributes are added that do not belong to the selected mandators (APAR PO09632).
- During startup, the `iris_sql_util.so` file cannot be loaded and an error message is displayed. On RHEL7, the message is `/lib64/iris_sql_util.so: undefined symbol: initImpl`. On RHEL 8, the message is `iris_sql_util.so: cannot dynamically load position-independent executable`.
- Errors about loading external fonts display in the browser debug console (APAR PO09191).
- Certain operations that require maintenance mode, for example, golives or saving a mandator, appear to hang in the user interface. Now, when a user performs an operation that requires maintenance mode (except for golives) and the instance is performing another operation in maintenance mode or cannot enter maintenance mode, the operation is canceled. The user is warned and must retry later. When a user performs a golive when maintenance mode is active, the golive is queued and the user is warned. In addition, the maintenance mode status was added to the cluster page and the revision information page. Help text was updated to better explain maintenance mode (APAR PO09570).

- An unrecoverable crash might occur if certain invalid mapping definitions are used to generate a message report or if those definitions are in use when a message is received. An example of an invalid mapping definition is a JSON element name that contains double square brackets (APAR PO09847).
- In the formulas under model components, saving the form by using the Ctrl+S keyboard shortcut while the focus is on the expression field does not save the formula expression correctly.
- Exporting a case table with masked data to CSV can result in incorrect columns. The defect happens when the user cannot see the masked values and the value is smaller than 10 characters. All the characters get replaced by X, including the separator (APAR PO09674).
- Cases and case audit files on a remote instance are stored as temporary files in an arc directory rather than as case files in an inv directory when the case is transferred over FLI. As a consequence the case cannot be worked on that instance (APAR PO09831).
- Expression elements that are generated from expressions that were pasted from Excel sheets do not remove special characters (white space, newline, and so on) from the expression. The user interface might crash if more expressions are added or if the newly generated ones are sorted manually by the user (APAR PO09445).
- If any number of rules are changed within a ruleset, revision comparison displays every rule in the ruleset as changed.
- Form fields that contain a message or body template are too small for most use cases. The user must manually resize them to be usable (APAR PO09818).
- When the option `format values` is used in an Outgoing channel configuration or case action/ notification, the decimals for the amount attribute are lost (APAR PO08209).
- For some dropdowns on several pages, for example, conditions in model elements, the text that is entered to filter the dropdown options sometimes reverts to the initial option that was selected.
- When extended authentication is enabled, after a user logs in with two-factor authentication, the navigation menu is not displayed. Additionally, the initially selected tab is not the **Start on tab** that is defined in the user's profile settings (APAR PO09796).
- The attributes that are available on the left side of merging conclusions depend on the system configuration setting **Mergings may use DDC** in Administration>System>Modeling. If the setting is not enabled, attributes that are stored only in DDC are not available in merging conclusions. In fact, the system setting should affect DDC access only for merging target conditions and termination conditions.
- In rare situations, a crash occurs when simulation data selection changes to a smaller URID range and the save hangs. Then, in the same moment, the user opens and runs a simulation report in another tab (APAR PO09850).
- A crash can occur during the end of day job if an index is corrupted and the index entry is purged (APAR PO09784).
- SSL handshake blocks the system when it waits for the response from external server (APAR PO09605).
- In the user interface, improved the performance of the external model page (APAR PO09749).
- The filter at the top of the model components page does not initialize correctly. If the filter selection is changed, the results are not updated correctly.
- When output attribute values are included in doublet detection responses, the output values might have random data. Added a checkbox that is named **Access protection for outputs**. If it is selected, access protection is applied to doublet detection. Also, **Retry** in access protection of mergings was renamed to **Attempt** (APAR PO09868, PO09814).
- On the Own Input Attributes page, default storage options are displayed for existing inputs and outputs rather than the saved options.
- In rule conclusion under model revision, if the attribute's data type is anything other than numeric or timestamp and a Python function without parameters is added in the expression field, an error message displays and the conclusion cannot be saved.
- A crash might occur if a broken timestamp in YYYYDDDhhmmss format, for example 2022000000000, is sent (APAR PO09882).

- Golives can hang if there is a simultaneous case action activity in the user interface to send case actions or display case action previews (APAR PO09888).
- In rare cases, the FLI buffer gets corrupted and messages hang if the message header or the complete message exactly hit the buffer end during rollover (APAR PO09873,PO09900).
- In case investigation, actions like Followup and Close cannot be completed in Case History (APAR PO09857).
- Save and execute simulation query fails and stops simulation when simulation is running on a remote instance. Refresh simulation query result fails when simulation is running on remote (APAR PO09855).
- In case investigation, when an attachment comment in the attachments table is edited, the newly entered value is displayed in the table only after the page is reloaded.
- Improved message synchronization so that transactions use only a single FLI message. Up until now, IBM Safer Payments used two FLI messages to synchronize a single transaction when that transaction involved the execution of external model components. This method of synchronization led to data loss and data inconsistencies due to the complexity involved in merging the two messages. Notably, in the gap between the two FLI messages, profiling elements like counters produced wrong results by counting (or not counting) unfinished transaction records (transaction records for which the second FLI message was not yet handled).
- When a multiline value is present in the title or explanation field in the compliance list xml, only the first line of the text is displayed on the Compliance List Hits pop-up. The appearance of the pop-up for entry details is inconsistent across several pages (APAR PO09557).
- The results of group by queries and reporting queries show incorrectly formatted values for timestamp grouping attributes. Also, the results do not take the IBM Safer Payments time zone into account if the system time meta-attribute is used (APAR PO09894).
- Messages that are sent through outgoing channel configurations do not adhere to all attribute formats even if **Format values** is enabled. For numeric attributes, the **ID** formatting is ignored. For text attributes, the **PAN (dashed format) formatting** is ignored. Additionally, encrypted attribute values are never formatted in case action previews even if the user has the privilege to view values in clear-text. It's also not possible to configure which digit group and decimal separator should be used for the numeric formats that are working. Now these separators can be set under Administration>System>Configuration>Interfaces>Alert message interface.
- If aggressive fail-over mechanisms are employed for the online data interfaces and a transaction that does not compute in a given amount of time is resent to another instance in the same cluster, multiple instances might compute the same transaction at the same time. In rare cases, both instances end up with the same transaction but with different primary instance IDs and URIDs. This leads to problems when fraud marking is performed. The likelihood of this happening is increased when external model components are used. Now, doublet detection handles these cases by correcting the primary instance and URID of the found doublet. The system always takes the smaller primary instance and the corresponding primary URID and stores them in the doublet.
- It is not possible to send a case action by using simplified view if that view contains an encrypted, numeric attribute and the investigator is not allowed to see unmasked values.
- In case investigation, the query result table sometimes resets the table preferences if the page is refreshed (APAR PO09902).
- Tables that contain cases and the **Consolidated alarms** table within a case display wrong values for encrypted timestamp attributes when viewed by a user with the privilege to see clear-text values.
- Case action previews and sent messages do not contain the correct values for query results or consolidated alarms that are attached to the case action if those values are masked for the investigator.
- The case action simplified view does not correctly handle masterdata values with decimals. The digits are correct but the decimal period is lost.
- Added data to the log message for corrupted FLI buffers (APAR PO09891).
- A crash might occur if rules are enabled or disabled while an analysis is running (APAR PO09910).
- Performance issues and errors occur in the user interface because queries are not correctly cleared from memory (APAR PO09920).

- If the simulation instance is set to an instance that is not the API instance, the `getRevisionStatus` request is forwarded to the simulation instance. It might contain trailing zeros or more characters at the end of the response that can cause 503 errors in combination with some proxies and load balancers (APAR PO09913).

- A crash might occur during rule generation if the page is refreshed at the same moment that the **Stop rule generation without saving** button is clicked or a rule is committed (APAR PO09885).

- Mandator memory limit is calculated with revisions that are not running (APAR PO09548).

- When a case is opened, the case history table is not displayed for the selected reporting attributes. It is displayed only after the selected reported attributes are changed (APAR PO09865).

- A reporting query might access invalid memory if it runs in parallel with golive (APAR PO09901).

- In case investigation, when an attachment comment in the attachments table is edited, the attachment comment editor does not render correctly and is not visible during editing.

- Simulation MDC is created for overwritable inputs when data for that input is already available in MDC.

- Masterdata update might be lost when it is transmitted by using FLI (APAR PO09940).

- The connection to IBM MQ times out if MQ definition values, for example, the channel name or queue manager name, is longer than 19 characters (APAR PO09942).

- When bypass is enabled and the MCI uses SSL, a crash might occur during a structural golive. The crash occurs if the golive takes a short amount of time, for example, a few milliseconds if it is the initial golive of a new mandator. It is caused when the instance is establishing the SSL handshake while the golive completes and shuts down the bypass connection (APAR PO09934).

- A crash might occur if simulation data selection is saved multiple times and the analysis that is included in the simulation is defined to use simulation data selection (APAR PO09935).

- During the end of golive, external models get no response from external systems.

- At the beginning of golive, MCI does not respond even if bypass is enabled (APAR PO09960).

- At the end of golive, MCI does not respond even if bypass is enabled.

- A crash might occur when disabling MCI if bypass is applied earlier.

- Golive is blocked due to starting bypass while MCI is inactive.

- After upgrading to 6.4.2.00, the first startup of an instance creates elements using duplicate UIDs in the configuration.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- The audit trail report does not include MDC and DDC retention values. Now, the fields are included (APAR PO09944).

- Improved the online help. Added information about multi-relations workflow, model revision golive, index internals, and latest latency violations. Added more details to information about batch jobs, MCI bypass, MCI XML format, and conditions. Corrected tooltip text for Show uncomputed simulation elements, CPP > Case group, Highlight CPP attributes, and Archive sent messages. Also, the error `This entry must be greater than or equal to 1` is now printed if the number of records is set to 0 in query definitions.

- An unrecoverable error occurs during startup if a revision has an invalid PMML model (either the attachment is missing or it is invalid) (APAR PO09824).

- If an error occurs during the sending of a notification, log message 0361 contains an invalid path to OCCM. Now, log message 0490 is listed after log message 0361. It contains the correct OCCM path along with the case action name and case UID, if available (APAR PO08111).

- The **Show on dashboard** checkbox on the Administration tab does not toggle the display of Key Performance Indicator (KPI) tiles (APAR PO09794).

- PMML scorecards that do not end in a newline character cannot be imported. For cards that can be imported, there is no notification that an import was successful. There is no warning that all the rules of

the ruleset for which the scorecard is being imported will be overwritten by those that are parsed from the scorecard (APAR PO09852).

- In the Outgoing channel configuration page, the **Show references** toolbar button displays a reference list with a nonexistent Case class reference.
- External model reference items do not have a link to a corresponding external model definition.
- When model profiling is copied, the output keeps the same name as the copy source.
- The number of active FLI connections counter can turn negative when FLI threads hang while FLI is disabled and enabled again. This in turn can cause a wrong system time output (APAR PO09790).
- The configuration form for collusion and index based evaluation case classes contains the settings **Manual case creation** and **Highlight case alarms in queries**. The settings apply only to regular case classes.
- It is not possible to delete multiple outgoing channel configurations if at least one of them is of type HTTP. The API always responds with NO_PRIVILEGES and aborts the deletion after it encounters the HTTP channel configuration.
- Enhanced the error logging for API requests, for example, interruptions. Now, log message 0459 is written by default in the system logs

Download instructions

Download IBM Safer Payments 6.4.2.01 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.01 download link	2 Nov 2022	English	153.69 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_01.zip

  66f94b8d60908eaef412c7111da8fc462918ef61843c97d0aad8480ee09ea52d

- MD5

  SaferPayments_6_4_2_01.zip

  920337e069db8ccae21bdc5c49c256e9

Chapter 7. 6.4.2.02 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.02.

This release changed the version number from 6.4.2.01 to 6.4.2.02. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.02 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.02 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.02 Update information

- Added log messages 850 and 851 to monitor disk access of attributes. Log message 850 is enabled if deferred writing is enabled. No action is required if there is no external log monitoring.

- Now, report generation jobs use globally configured decimal and field separators when reports are written to an outgoing channel configuration. Previously, those settings were taken either from the user who started the job or from the default values for new user accounts for jobs that were not started manually. The new settings are on **Administration** > **System** > **Configuration** > **Interfaces** > **Alert message interface**.

- Now, when a message is recomputed during merging, the computation results and the standard computation results are the same. Previously, the results were different because profilings were calculated for each mandator during recomputation. Then, formulas and rules were computed separately for each mandator. Now, formulas and rules are computed together with profilings for each mandator, which is the same process that is used during standard computation.

- Now, white spaces are omitted in JSON responses on MCI, MQI, KMI, and BDI. Before the update, test that all systems can receive the JSON responses from the interfaces. If they cannot, delay the update and wait until a fix pack is available that allows you to control the white spaces.

Change log

IBM Safer Payments 6.4.2.02 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defect was fixed:

- A crash or data corruption can occur if asynchronous mode is enabled on MCI endpoints (APAR PO09359, PO09964).

Major defects and changes

The following major defects were fixed and major changes were made:

- When external models call systems that reply with the message ID in the response body that uses slightly different JSON formatting, the response is not recognized by IBM Safer Payments and the callout fails. The problem occurs even if, for example, the white spaces between JSON keys and values are different.

- Unconsolidated alarms can cause the application to hang during shutdown.

- In rare situations, a crash occurs with external model components after a remote EMC server is enabled or disabled.

- A deadlock can occur if a simulation is running on a lower-level mandator when a mandator higher up in the subtree runs a golive (APAR PO09978).

- PCI DSS-relevant event log message number 834 is not automatically enabled for audit logs on fresh installations.

- The user interface might crash if an input attribute with categories is added while, at the same time, a compare revision is done.

- A no privilege error is issued if a case moves to another nonexclusive working queue for which the user has no privileges from the **My working queues** page (APAR PO09485).

- On **Cluster** > **Interfaces** > **Inbound**, the thread priority selection options are not limited by the respective thread priority limit in the system settings. An option to set a thread priority limit for Kafka endpoints is missing in the system settings. If the thread priority limit for MCI or KMI is lowered, the respective values of inbound endpoints are not updated.

- Mergings cause direct disk access even if deferred writing is enabled.

- Report generation jobs that use outgoing channel configurations mask values of encrypted attributes according to the starting user's privileges and ignore the masking setting of the outgoing channel

configuration. Jobs that are not triggered by a user always mask values and also ignore the setting of the outgoing channel configuration (APAR PO08864).

- If an empty cookie is sent in the HTTP header, it can cause incorrect responses.
- The deletion of large bulk defined risk list entries is slow on the API instance (APAR PO09895).
- If a table filter is activated, the table's vertical scrollbar overlaps the contents (APAR PO09825).
- A crash can occur when rule generation data selection is saved multiple times (APAR PO09925).
- A crash can occur during restoration because the case service is not stopped (APAR PO09950).
- Rule generation creates too many threads, which cause real-time processing to stop for a few seconds (APAR PO09859).
- A crash occurs if a data export is run after the EOD job and it contains a condition or column attribute that is owned by a mandator who ran a logical golive before the running of the EOD job (APAR PO09912).
- A crash can occur if rule generation settings are saved while it is running (APAR PO09917).
- An error message is logged by the donor of a restore if IBM Safer Payments is started with Python 3.x support and at least one Python script is uploaded. The error message ID is 0354 and the text states that a folder named `__pycache__` is skipped for the transfer. Now, the folder is skipped but the error message no longer displays. The restore itself is not impacted.
- If numerous case investigations exist, some cases do not have a working queue (APAR PO08747).
- IBM Safer Payments closes the connection early when it receives a SHUT_WR TCP message on the MCI. This can prevent sending an MCI response. It happens mostly when MCI Bypass is enabled and active (APAR PO09918).
- Stopping deferred writing in system configuration or during shutdown might lead to loss of data.
- If you generate rules, and then click **Explore all indicators**, percentages in the **Amount**, **Hit rate**, and other columns are incorrectly rounded depending on the decimals of the attribute (APAR PO09951).
- Changes that are made to certain fields of some revision elements are not shown in the compare revision and audit trail of the model revision.
- If element generation threads are configured to be greater than one, rule generation results are not accurate, and might be different between multiple runs.
- In rare situations, an element can be saved with a name that is already used, which invalidates the configuration (APAR PO09938).
- In rare situations, a crash can occur after a golive when a query is started during the golive.
- Rule actions in preprocessing rules can be defined but are never run (APAR PO08429).
- An instance can hang if you stop a simulation that was started as workflow with rule designer enabled. Shut down is prevented.
- A crash can occur if a case is opened whose masterdata uses a categorical attribute but the index node is invalid (APAR PO09931).
- A generate report job can fail if it computes a fraud mark report that processes a record that is marked as fraud by a deleted user (APAR PO09967).
- Potential security issues exist in some external statically linked server libraries. Updated Libcurl, librdkafka, libxml, opencv, lib, and zstd to the most current version.
- During merging, recomputation messages are computed differently than during normal computation.
- When a merging is recomputed, the MDC oldest URID on an attribute can be set to a value before the attribute is created. Queries then contain unexpected results. Also, the MDC oldest URI is then smaller than DDC oldest URID (APAR PO09756).
- Logs do not show who sent the signal (APAR PO09958).
- Multiple regolives that are run and queued at the same time might result in FLI errors and failed golives on remote instances (APAR PO09970).
- Logs for simulation show the user name.

- Realtime computation performance is slow if many outputs and mappings are processed (APAR PO09955, PO09959).
- During golive, bypass is activated after deferred writing and jobs are stopped. However, stopping them can take time during which latencies can occur (APAR PO09956).
- A crash can occur if a save request for a persistent connection outgoing channel configuration is sent without a `connectionPoolPriorities` field.
- Primary URID and Primary Instance ID are not printed when the Outgoing Configuration Channel message is sent by a case action, and the message is not archived when delivery fails (APAR PO09949).
- Updating a persistent outgoing configuration channel is slow.
- If an instance's bypass setting is changed, the change is not applied (APAR PO09957).
- An invalid HTTP response is returned if the simulation instance is different than the API instance and the response is larger than 3000 characters.
- SSL settings to reject TLS 1.0 and TLS 1.1 connections are not enabled by default for MCI, ECI, and API.
- During a logical golive, the instance status is set to waiting for interlock and stays this way until a structural golive is done. This also happens when interlock is disabled in system configuration (APAR PO09969, PO10007).
- MCI, FLI, BDI, MQI, and KMI can be enabled while a maintenance function is running that requires them to be disabled (APAR PO09788).
- If settings on **Administration** > **System** > **Configuration** are changed, some warning and error messages are not issued.
- MCI responses of type JSON contain unnecessary white space.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- In the Output Attributes table, the meta attribute **case class** displays inconsistent values.
- When a simulation is run without attributes that require simulation, the message `simulation initializing` is displayed. The simulation appears to be in progress when, in fact, it is finished.
- If a master key is changed, the case class configuration is not written to disk even though case classes can use encrypted attributes in condition forms.
- Improved the online help for Main Memory settings, MCI StatusResponse example, and Fraud marking reports. Added more content to several topics, for example, case types, internal model generation, outgoing channel configuration, and inbound endpoints. Improved user interface text about feedback. The language options in the user interface are now always listed in their own language (APAR PO09422).
- If the SCI communication to a remote instance fails and thus does not prevent updating a revision while a remote analysis is running, the analysis is not stopped upon the revision update (APAR PO09927).
- If space is limited in the user interface, multiselect dropdown fields sometimes do not display all options.

Download instructions

Download IBM Safer Payments 6.4.2.02 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.02 download link	27 Jan 2023	English	162.14 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_02.zip:

  ```
  c361884ca5114b30e91a7e7ed57b16d7183cc52215acba101366b776749af3b3
  ```

- MD5

  SaferPayments_6_4_2_02.zip:

  ```
  9816272c472007974b9c5527c2de5490
  ```

Chapter 8. 6.4.2.03 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.03.

This release changed the version number from 6.4.2.02 to 6.4.2.03. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.03 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.03 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.03 Update information

- PMML files that are larger than 500 MB can now be uploaded. Parsing PMML files can temporarily but significantly increase memory consumption on the server side. The increase is larger for larger files.

- Previously, if retention by time was used, empty DDC files were created for attributes that are not stored. The problem is now fixed but it is best to remove the DDC files from the file system. Use the file name to identify the DDC files for attributes. The files contain the attribute UID in their file name.

- If you encountered problems with attribute purging before the update (log message 520), force a full purge of all affected attributes after the update. First, create a challenger revision and deactivate purging for each affected attribute. Then, activate purging again and perform a golive. Then, activate purging again and perform a golive. A full purge is performed during the next end of day job. All the old transaction records are securely delete from memory and disk.

- During the upgrade, it is not possible to create a new mandator while different instances are on different versions. If you need to create a new mandator, wait until all instances are upgraded.

- To improve defense against a Slowloris DOS attack, set the following new fields:

  1. Click **Cluster** > **Settings** and click an instance.

  2. On the **Interfaces** > **Message command interface** tab, select **Enable incoming connection limit**. Enter a connection threshold in **Incoming connection limit**.

  3. Repeat on the **Interfaces** > **Application programming interfaces** tab.

  4. Repeat for other instances.

- Set the new **System** > **Configuration** > **Interfaces** > **Pretty print JSON response** option to control whether white spaces are included in JSON responses. In the 6.5.0.01, 6.4.2.02, and 6.3.1.03 releases, a change was introduced that omitted white spaces in the JSON responses over MCI. Now you can control it.

Change log

IBM Safer Payments 6.4.2.03 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defect was fixed:

- If you run a rule report with context while a remote simulation is active, a deadlock might occur on the remote instance (APAR PO09991).

- If a logical golive is run and an index node is deleted, index-dependent element values are changed when the new index node replaces the old one. The problem occurs whether the index node is deleted by a purge or normal deletion (APAR PO09972).

- When retention by time is used, the end-of-day job creates DDC files for attributes that are not stored. The files cause the instance to crash when the affected attributes are stored during golive.

- Improved defense mechanisms against a Slowloris DOS attack. Added **Enable incoming connection limit** and **Incoming connection limit** to the **Cluster** > **Settings** > **Interfaces** > **Message Command Interface** tab and **Application programming interface** tab. The fix is for CVE‑2023‑27556.

- A deadlock might occur during the end-of-day job or when cases are archived if users perform additional case investigation activities, for example, take over or transition a case.

Major defects and changes

The following major defects were fixed and major changes were made:

- Deferred writing is not interrupted when certain elements are saved, which causes processing to stop for a long time. Now, if bypass is enabled, it is activated when mandators, working queues, and messages are saved. The save takes a few extra seconds during which time the save button is disabled.
- A deadlock can occur if rule generation is running on a lower-level mandator when a mandator higher up in the subtree runs a golive.
- Updated Libcurl to version 8.0.1.
- Signal handlers are missing for SIGILL and SIGBUS.
- Go to **Administration** > **Messages**, select a message whose type is flat xml format, click Generate a report of this message. The **Transaction Message Report** page opens. **XML Message Sample** under **Model Response** is not readable if the text is too long.
- If a user triggers a shutdown while IBM MQ messages are being processed, IBM Safer Payments might exit with a backtrace. The transaction that caused the backtrace does not finish computing (APAR PO09933).
- A crash might occur when a file with an empty path for the period is opened while the index is being rebuilt.
- If many cases exist, case selection takes a long time (APAR PO10010).
- If you switch the API instance, external model mappings are not editable.
- On **Model** > **Modeling** > **Attribute Settings**, **Production data available (no simulation necessary)** is displayed even if the data is available only in DDC and therefore unusable for simulation computations. Now, **Production data available in MDC (no simulation necessary)** and **Production data not available in MDC (enable it for simulation to prime from DDC)** display correctly (APAR PO09974).
- On restart or key activation, a deadlock occurs and further logins are prevented if you enter an incorrect PIN but with the correct number of digits. The problem occurs if extended authentication is enabled with two-factor authentication that is based on one-time password (OTP) (APAR PO09988).
- In notifications that are sent to users, the timestamp is incorrect (APAR PO09965).
- If a simulation and a golive are started simultaneously, the golive cannot start until the simulation initialization finishes.
- The export data job collects attributes from only the first mandator (APAR PO09995).
- When the API is changed from disabled to enabled on an instance, maintenance functions that are running on it are interrupted.
- The description for external model components is difficult to find in the online help. Improved the description and added a help button to the **Model** > **Scoring Engine** > **Model components** > **Own Model components** > **External model component** page.
- On **Model** > **Profiling** > **Calendars**, the **Support standard deviation** checkbox is missing.
- The status of remote instances changes to Unreachable even if it is reachable (APAR PO09863).
- Larger random forest, decision tree, and boosted tree models cannot be uploaded due to a 500 MB limit on uploading pmml files.
- On **Model** > **Data model** > **Lists**, prepending or reordering entries in the **Output Values** section corrupts the values of other entries (APAR PO09954).
- Statistics, Rule analysis, Rule optimization, and Rule Scoring under **Model** > **Modeling** > **Analyses** display [Object object] in some columns rather than actual values (APAR PO09596).
- When a table is on a page that is read-only, the filters do not work (APAR PO09842).
- The server might crash if invalid xml is uploaded in a PMML model file (APAR PO09881).
- The simulation report lists all attributes, including attributes that do not take more memory for simulation and require no additional user operation.
- A deadlock might occur if a golive is started for the same mandator or head mandator of a revision where a simulation query (all types) is already running. A simulation query of type rule report is also started when a rule report is started (APAR PO09985).

- Added **Cases not closed** to **Cluster** > **System monitoring** > **System internals**. It displays the number of current non-closed cases.
- The timestamps in all tooltips for reports display in UTC instead of the user's time zone (APAR PO09984).
- On **Monitoring** > **Defined risk lists** > **Defined risk list entries**, an invalid JSON error is issued if the defined risk list's **Output attribute** was changed from a categorical to a noncategorical attribute with `Enable category selection` being selected.
- On **Model** > **Scoring engine** > **Model Components**, if you copy a non-ruleset model component, the type is **ruleset** on the new model component, and other fields are not copied (APAR PO09973).
- The **Model** > **Review overview** > **Revision Control** > **Revision Control** > **Audit Trail** and **Compare Revisions** tabs do not list entries for newly added condition groups on rules. Only changes to existing condition groups are listed.
- On **Investigation** > **Queries** > **CPP selection**, the save button is disabled if the user is defined at a submandator level (APAR PO09968).
- When an API request of `getIndexes` with null **revision** value is sent, a backtrace is created.
- When a golive report is initiated for a revision, a log message `Internal model generation stopped for revision ...` is displayed. It displays even if the revision is not running internal model generation.
- When outdated attribute values are purged, the purge fails for attributes that are not stored in MDC. Fatal error log message 520 is written for each attribute, which is correct. Log message 194 is also written, which is incorrect. It means that the values were successfully purged, which is untrue.
- If a golive is started on an unmodified revision of a new mandator, the remote instances might be invalidated (APAR PO09982).
- An instance might shut down during golive if not stored attributes are missing, and they are used in a condition for a submandator (APAR PO09977).
- On **Cluster** > **Interfaces** > **Inbound**, the **Suppress meta information in JSON** checkbox is now cleared by default when a new inbound endpoint is created for dynamic or JSON message types. If the checkbox is selected, complications might occur when JSON transactions are sent through the MCI because `messageID` is suppressed.
- If **Enable logical golives** is cleared, golives are processed as structural golives. However, the GoLive report displays it as logical.
- On **Administration** > **Case management** > **Case classes**, added the checkbox **Exit case investigation screen after transition**. If it is selected for a transition, after the transition is run, investigators are returned from the case investigation screen to where they opened the case from.
- Added a scroll bar to pages that display a list of suggested expressions in conditions, conclusions, and formulas.
- If you export a table that contains sensitive data and enter an invalid password, the error New `password is invalid because it is [description]` is displayed. The password is incorrect but the error does not match the description in the error message.
- Golive is blocked, and the instance goes into maintenance mode if its status is offline, startup, starting services, synchronizing, restore status (`RESTORING_DONOR, RESTORING_RECIPIENT, STATUS_LOCKDOWN`), or any status that is related to key activation (`WAITING_FOR_KEY, MASTER_KEY_CHANGE_ACTIVE, MASTER_KEY_CHANGE_PASSIVE,MASTER_KEY_CHANGE_FINALIZE`) (APAR PO09962).
- When an instance is restarted, user groups that are assigned to case transitions on case classes are lost (APAR PO09987).
- Users who can create a rule can also add it to a performance report, even if they lack the privilege, by sending a custom API request.
- The online help does not highlight searched keywords in its results.
- Merchant monitoring rule **6.2.2.1 MasterCard acquirer authorization monitoring requirements - Repeated authorization requests for the same cardholder account** is missing in the user interface.

- Some records are not written to DDC if the deferred writer is interrupted soon after startup (APAR PO10008).
- For cases that are created manually or by query, server-side validation does not occur for non-negative case scores.
- When a TCP connection is being established and a problematic message header is processed, the connection cannot be reestablished because of incorrect state variables. The problem is detected with bypass (APAR PO10014).
- Omitting white spaces in JSON responses on MCI, MQI, KMI, or BDI might break the communication from external systems to IBM Safer Payments. Added **System** > **Configuration** > **Interfaces** > **Pretty print JSON response**. Use the new option to control whether white spaces are included in JSON responses.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- In the online help, the **Batch Data Interface Overview** topic contains a broken link to a topic about jobs.
- A fatal log message might occur for the FLI buffer, followed by log message 0514 during a restore.
- On various report pages, error text is incorrect if you enter a `from` date that is after a `to` date.
- An error is issued when temporary cases are archived because a temporary audit file is missing (APAR PO09494).
- On **Model** > **(select a challenger revision)** > **Simulation**, click filter. On **Instance selection**, the **Refresh instances table** toolbar action displays the wrong icon.
- On **Administration** > **System** > **Configuration**, click **Download IBM Safer Payments Configuration**. The **Instance** field displays partial rather than full instance names because it is too short.
- The **Include ddc** checkbox is not displayed on **Monitoring** > **Merchant monitoring rules**. Now, it correctly displays for certain rule types if **Merchant monitoring rules may include ddc** in the system configuration is enabled.
- Increased CPU and speed for slow calculations when date ranges that are based on server time are used in data selections (APAR PO09253).
- Case consolidation performance degrades significantly with the number of open cases (APAR PO10011).
- Message logging for the index repair function contains text about `rebuild` rather than `repair`. It also does not produce a progress log message.
- On **Administration** > **Case management** > **Case classes**, if there is more than one definable transition and you change the target case class for one transition, the list of case state options for all the definable transitions changes.
- In conditions, if you focus on an expression field and press the space bar to see the context menu, it does not display near the expression field (APAR PO09492).

Download instructions

Download IBM Safer Payments 6.4.2.03 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.03 download link	21 Apr 2023	English	154.73 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_03.zip:

  ```
  016e06d75ec045f99e388bc948125f2f0255100df350dbbee743ff09d0945de9
  ```

- MD5

  SaferPayments_6_4_2_03.zip:

  ```
  f00b87b47453fa423af142679d141657
  ```

Chapter 9. 6.4.2.04 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.04.

This release changed the version number from 6.4.2.03 to 6.4.2.04. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.04 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.04 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.04 Update information

- Introduced a user-configurable search depth. It is used for tuning the system performance regarding the remote lookup index search. It defines the maximum number of records that are checked on the index sequence when it searches for the target record.

- Broken query files no longer prevent a startup. Additionally, erroneous files that cannot be loaded during startup are now renamed from `xxx.iris` to `xxx.error`. Log message 856 is written.

- If MCI bypass is enabled and active, the instance now responds with status `Ok/Bypass` instead of the actual instance status. This usually happens during golive or other maintenance mode activities. Also, the instance no longer mixes different headers. If an HTTP header is sent, IBM Safer Payments uses only this information for bypass forwarding.

- The fields **lockTimeoutSeconds** and **lockTimeoutCountdownThresholdSeconds** in the `saveSettings` request have been updated to be named **activityBasedSessionTimeoutSeconds** and **activityBasedSessionTimeoutCountdownThresholdSeconds**.

- Previously, there was a **mandator** parameter that needed to be sent in with the `confirmGolive` API request. This parameter is no longer used.

- Improved the function that converts a time string to a UTC timestamp. Its results were incorrect in certain time zones. The function is used by the jobs scheduler for monthly jobs, group by queries, reporting queries, and certain merchant monitoring reports (ones with intervals in the reports). If you use these features and are in a timezone with a 30-minute offset, for example, Portugal, your results after the upgrade will be slightly different. In particular, you might need to change the time of your monthly jobs.

Change log

IBM Safer Payments 6.4.2.04 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defect was fixed:

- In rare situations, backtraces are printed when sockets are being closed. The problem usually occurs when an instance is shutting down.

- Users who do not have the privilege to view the system configuration are not allowed to perform a golive (APAR PO10066).

Major defects and changes

The following major defects were fixed and major changes were made:

- Improved security regarding user passwords. On **Administration** > **System** > **Configuration**, added **Use common password blocklist**. If it is enabled, you can upload a file that contains a list of weak passphrases. When users change their password, it is checked against the list.

- Model components of PMML boosted trees always use `multipleModelMethod modelChain` even if the model file defines a different method (APAR PO09869).

- Parser errors in uploaded PMML files do not create error feedback in the user interface. Startup, the golive report, golive, and simulation do not check for parser errors in uploaded PMML models, which might result in missing PMML computations. Also, the PMML model outputs are sometimes not computed during message computation on the API instance. The problem occurs when the champion revision is compared to a challenger revision and certain changes are done to the PMML model in the challenger. In particular, the problem occurs if the PMML model file is reuploaded or the field mappings are changed between the revisions. The problem does not occur on non-API instances (APAR PO10162).

- During startup, defined risk list files cannot be loaded if they contain empty values (APAR PO09474).
- If a defined risk list entries file of an unsupported encoding type is uploaded, no further risk list files can be uploaded. The problem also occurs if the file contains empty lines that end in a Linux® line ending (APAR PO09439).
- Performance slows down if the remote lookup index search cannot find the target record (APAR PO09919).
- If deferred writing is enabled, the rollover of calendar periods might cause backtraces and fatal errors.
- If a docx case action is saved again after an attached template file is uploaded, an error is issued when the case action is sent.
- Some golive messages have unnecessary color indicator tags.
- There is no valid response for MCI status requests during golive or when no unique message ID is set in the status request.
- The **Fraud Flag** meta attribute column displays in the query result table even if the fraud column is not selected in the query definition. The problem occurs if **Administration** > **System** > **Configuration** > **Direct transaction marking in queries** is selected. Also, the column incorrectly contains URID column information. Hyperlink queries do not work if the URID and fraud columns are not selected as columns (APAR PO09989).
- PMML tree-based models output negative probabilities for specific PMML input files. The problem occurs for random forests where the record count is included only in the `ScoreDistribution` element, and not on the node.
- If a defined risk list entries file contains an entry with empty characters at the beginning of its line, the upload stops. The instance must be restarted to upload more entry files.
- If a user logs out during the upload of a defined risk list entries file, the upload fails. The instance must be restarted to upload more defined risk list entries.
- If a table contains an empty cell, it displays as `undefined` in a csv export. Also, if the sanitize csv setting is enabled and it contains an empty cell, it cannot be downloaded.
- Improved security when multiple user login attempts are made with the correct username but wrong password. Now, when a user enters a wrong password, the login button is disabled for five seconds. Backend security was also improved.
- Added **Use maximum session time (seconds)** to **Administration** > **System** > **Configuration** > **Interfaces** > **Application Program Interface** > . It controls how long a session remains open, regardless of user activity. It is optional.
- In rare situations, a crash might occur when a running simulation that uses the `in chunks` simulation method is disabled (APAR PO10012).
- When logical golives are enabled in the system settings and a logical golive is done on a mandator of the key performance indicator or status alarm indicator or parent mandator, after the EOD job the KPI or SAI returns 0 if it has any condition. The KPI or SAI works again when it is saved after the EOD (APAR PO09998).
- Crash backtraces are limited to 30 entries (APAR PO10031).
- Startup continues without champion revisions being read.
- The operating system delays the memory allocation, which worsens the situation when running out of memory (APAR PO10022).
- On **Investigation** > **CPP selection**, filter preferences are not saved correctly and are reset when you navigate away and then return to the page.

  On **Investigation** > **Case selection**, date range preferences are not updated correctly when you navigate away and return the first time. Return a second time, and they are updated.
- In case investigation, if you batch close multiple cases from multiple case classes, duplicate case close codes display in the Bulk Close selection window (APAR PO09983).

- Click **Model** > **[revision]** > **Profiling** > **Patterns**. When the pattern is displayed, **Stencils** > **Records** conditions are not correctly populated. The attribute names and operators are not displayed in the conditions. They become visible when you edit the pattern (APAR PO10025).

- In rare situations, a crash occurs during startup if unexpected mappings exist.

- The **Rule Generation Data Overview** and **Generated Rules** tables under **Model** > **Modeling** > **Model Factory** > **Rule** display [Object object] rather than actual values. The problem occurs only if **Verification** is selected.

- On **Administration** > **Case management** > **Case actions** > **HTTP Case Action**, **Content type addition** cannot be set if HTTP output channel configuration is used (APAR PO10015).

- If **Hide logout button** is selected on **Administration** > **System** > **Configuration** > **Authentication Settings**, the logout button still displays on all instances (APAR PO09324).

- Remote simulation does not work if OIDC authentication is used (APAR PO10027).

- Go to **Investigation** > **Queries** > **Queries** and click **Settings**. If you select **Uid**, the **Uid** column does not display in the table. Also, the mandator Uid table column is **Uid** but it should be **mandator UID** (APAR PO09926).

- A crash might occur when an API request is manually sent to confirm a golive. The problem occurs if the mandator doesn't match the revision of the request.

- On **Administration** > **System** > **Configuration** > **Misc**, the time in **Start End of Day (EoD) job** is specified in UTC instead of the user's time zone.

- On **Administration** > **Job Settings** > **Job** the **Daytime** field for a monthly scheduled job does not show the set time zone, which might lead to a wrong input for the job schedules. Furthermore, the set time might have an incorrect offset in certain time zones (APAR PO09948).

- Updated OpenSSL to 1.1.1u and libxml2 to 2.10.4 to address potential security issues.

- In **Investigation** > **Queries** > **Group by queries**, memory usage is abnormally high if **Account analysis** is enabled and the **Meta attribute** for Account is of type text. Memory is not released even after the group by query is deleted. A crash might occur due to low memory (APAR PO10053).

- The save button is not disabled when a save is performed. Duplicate saves might cause other problems.

- In rare situations, non-API instances might deadlock after working queques are updated. A crash might occur if you are working with working queues while simultaneously changing working queue configurations (APAR PO09861).

- On **Cluster** > **System monitoring** > **Event log messages**, the ID column is not displayed by default.

- The default file names for the Diffie Hellman file and CA certificate file are incorrect. They are not the same as the file names that are stated in the Implementation Guide. The files are used by the API and ECI when TLS is enabled.

- The default file names for the Diffie Hellman file and CA certificate file are incorrect. They are not the same as the file names that are stated in the Implementation Guide. The files are used by the API and ECI when TLS is enabled.

- Improved the performance of case consolidation. Previously, it sometimes loaded slowly, which caused a buildup of unconsolidated alarms and FLI buffering.

- A deadlock might occur if a defined risk list is opened and written to file simultaneously (APAR PO10049).

- Improved the performance of printing expressions to file and to the user interface. Golives might also be faster.

- Golive is sometimes slow because invalidated revisions are unnecessarily rewritten during the process.

- A golive on a top mandator issues the following error 0321 Revision xxx configuration error: FATAL_ERROR and deleted the invalidated revision to prevent the error from occurring again. The problem occurs if an invalidated revision of a submandator uses an attribute from a top mandator, and the attribute is deleted on the top mandator (APAR PO09992).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- When you edit an expression that has a numeric value as it's base, the suggested drop-down list displays only numeric attributes. Also, timestamp type attributes do not display. The problem occurs throughout the user interface, for example, in **Model** > **Rules** > **Conclusions**, **Model** > **Formulas**, and **Investigation** > **Queries** > **Conditions** (APAR PO09356).
- Configuration and user files are not loaded sorted. If there are errors when files are loaded during startup, different startup configurations might exist on different systems.
- If the `ignore_encryption` debug parameter is enabled, some instances fail to start due to errors in expressions.
- Improved performance of queries and random forest computations.
- XML responses to transactions are malformed if **Administration** > **Mandators** > **Settings** > **Include profiling and component statistics in model responses** is enabled.
- On instances where the API is not enabled, users cannot update bypass settings and password files for some interfaces (APAR PO09466).
- When querying a data range that is only available in DDC for the meta attribute system time, the data selection textbox wrongly gives an error that the data from the selected date and time is not available even though the **Include DDC** setting is enabled. The impact is only on the user interface. The required data is retrieved after saving the page and running the query (APAR PO10009).
- Removed **MCI message format** on **Administration** > **System** > **Configuration** > **Interfaces** > **Message Command Interface**. The removal has no functional impact.
- When the simulation analysis runs on more than one thread, it occasionally returns an incorrect result.
- A misleading log message is printed if you delete a mandator that is referenced by a head mandator's simulation, simulation query, or analysis data selections (APAR PO08463).
- Improved help text and tooltip for **Purge outdated entries securely** on **Model** > **Data model** > **Inputs** > **General Settings**.

Download instructions

Download IBM Safer Payments 6.4.2.04 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.04 download link	21 July 2023	English	154.81 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_4_2_04.zip:

0c56cdd1cfa6d4d0b7997bf04edf194185d7c80a3a7afdac433be337cfa6a2f3

- MD5

SaferPayments_6_4_2_04.zip:

ec8b4937daf1173f293c30e088620c89

Chapter 10. 6.4.2.05 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.05.

This release changed the version number from 6.4.2.04 to 6.4.2.05. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.05 includes no new features or enhancements.

Release highlights

• None

Enhancements

• None

Update information

IBM Safer Payments 6.4.2.05 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

• 6.4.0.00 Update information
• 6.4.1.00 Update information
• 6.4.2.00 Update information
• 6.4.2.01 Update information

6.4.2.05 Update information

- Before performing the upgrade, disable FLI on existing instances. The existing version cannot handle the FLI message for deleting/enabling/disabling the defined risk list entry from the new version.

- The audit trail for defined risk lists is now written to its own file, which is named `definedRiskListAuditTrail_[uid].iris`. It is automatically updated. Back up the original file before the upgrade.

- When manually marking records as genuine or fraudulent from query results on **Investigation** > **Queries** > **Queries**, it is now possible to control which notifications are selectable. Enable notifications by setting the new **Available for manual fraud marking** checkbox on **Administration** > **External system integration** > **Notifications**. Grant users the privilege to trigger notifications by assigning the new **Trigger notifications on fraud marking** role privilege on **Administration** > **User management** > **Roles**. By default, no notification are selectable, and no users have the privilege to trigger notifications.

- On **Investigation** > **Investigation** > **Case search** and **case selection**, added an ▷ (execute) icon. Now, a search starts only when ▷ is clicked or the Enter key is pressed. The page is refreshed only when ▷ is clicked.

Change log

IBM Safer Payments 6.4.2.05 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- Simulation order for final rules and preprocessing rules is different from the order in real-time computation (APAR PO10114).

Major defects and changes

The following major defects were fixed and major changes were made:

- On numerous pages in the user interface, single select component dropdown values are cut off if they display at the bottom of the page. The same problem occurs for autocomplete dropdowns for condition forms and for color picker components (APAR PO09884, PO09853, PO09645).

- On **Investigation** > **Queries** > **Masterdata**, values are not correctly rendered if one attribute is used with categories in two masterdata with different insertion conditions (APAR PO10041).

- Status alarm indicators do not display a title if a tooltip is unavailable (APAR PO09575).

- External queries that update encrypted masterdata block FLI (APAR PO10058).

- A deadlock might occur if simultaneously a case that has reporting attributes and queries is opened and a golive is run.

- A crash might occur if, on **Cluster** > **Interfaces** > **Outgoing channel configuration**, an outgoing channel where **Target** is set to **Persistent connection** is deleted and an error occurs (APAR PO10044).

- When defined risk entries are deleted, synchronization is slow.

- A deadlock might occur if there is an automated transition to close the case (APAR PO10042).

- A crash might occur or backtrace be generated if case transitions are queued. Later, all are performed at the same time in parallel. The problem might also happen if a case transitions while the case actions of a case close code are being changed (APAR PO10050).

- There is no setting to prevent end-of-day jobs from running. Now, added an **End of day (Eod) job** checkbox on **Administration** > **System** > **Configuration**. If selected, end-of-day jobs are allowed to run. If cleared, they are prevented. The default is selected. Contact IBM Support before using.
- On **Model** > **Challenger** > **Rules**, when a rule report without context is run, the **All Rules** page is displayed. Instead, the actual rule report page should be displayed. Also, if you navigate away from the **Simulation Report** page by clicking another menu entry, the **All Rules** page is displayed (APAR PO10070).
- When golive is started, it might get blocked if simulation queries and rule reports that are already running cannot find records. While the golive is blocked, it does not start/run and it waits until the simulation query or rule reports finish (APAR PO10047).
- The digit and decimal group separators for numeric expressions are not correctly enforced. Also, the wildcard values are truncated on the user interface (APAR PO09999).
- DDC files are not removed during golive after an element is deleted if the element already existed during startup.
- Data synchronization is slow when it writes an audit trail for a large defined risk list.
- Some HTTP requests are not producing log messages. The lack of log messages makes problem resolution difficult for IBM Support.
- A crash might occur if multiple requests to copy a retired revision are made while a golive is running (APAR PO10077).
- A deadlock might occur when a simulation rule report query is started. Then, before that is finished, a rule is deleted that has a conclusion or masterdata rule action (APAR PO10075).
- On **Model** > **Scoring engine** > **All Rules** > **[select multiple rules]** > **Move rules**, it is possible to select rules to move but they are not moved (APAR PO10095).
- During computations like golive, other computations like queries and simulation might pause while the instance tries to enter maintenance mode, even if the instance is not ready to enter maintenance mode. Now, the queries and simulations are paused only when the instance enters maintenance mode (APAR PO10085).
- Simulation performance is slower than expected. Now, simulation performance is still slower than real-time performance in most situations, but it is improved, especially when using many elements.
- Golives and end of day jobs are blocked while reporting queries are computed (APAR PO10043).
- On **Administration** > **Jobs** > **Settings** > **Export data jobs**, if multiple mandators are selected on the **Data Selection** tab, duplicate attributes display on the **Data output** tab. The problem occurs if the selected mandators inherit attributes from the same parent mandator (APAR PO10048).
- Attributes selected for inclusion in the data output of a data export job may be excluded from the export file (APAR PO10087).
- Golives cannot proceed if other revisions are running rule generation (APAR PO10073).
- On **Admininstration** > **System** > **Configuration**, an access error is issued even if the user has the privilege to view the system configuration (APAR PO10036).
- When manually marking records as genuine or fraudulent from query results on **Investigation** > **Queries** > **Queries**, there is no control over which notifications are selectable. Now, notifications can be configured to be selectable by setting the new **Available for manual fraud marking** checkbox on **Administration** > **External system integration** > **Notifications**. The **Trigger notifications on fraud marking** role privilege on **Administration** > **User management** > **Roles** is also new. It controls the ability to trigger notifications.
- Binary `StatusRequests` values in MCI that are non-zero are interpreted as `StatusRequests`. Now, only values of 1 are interpreted as `StatusRequests`.
- A crash might occur if working queues are saved while they are computed (APAR PO10059).
- When records are marked as fraud on **Investigation** > **Queries** > **Queries**, negative fraud values cannot be selected in **Fraud value** (APAR PO10083).
- After startup, encrypted indexes are repaired even if the index is not damaged (APAR PO10103).

- On **Investigation** > **Investigation** > **Case search** and **case selection**, a search is triggered with every keystroke that is entered in **Search term**. It causes numerous unnecessary server requests. Now, a search starts only when the newly added ▷ (execute) icon is clicked or the Enter key is pressed. Auto refresh was added to the case search page. Whether auto refresh works depends on the **System configuration** > **System** > **Page auto refresh** > **Investigation** setting. Auto refresh on case search and case selection is done only when ▷ is clicked. If a filter on one of the pages is changed, auto refresh stops until ▷ is clicked again (APAR PO10100).
- On **Investigation** > **Investigation** > **Case search**, the search does not respect the **Maximum cases shown on selection table** setting. It also takes longer than expected.
- Broken data of encrypted masterdata after startup if encryption of the index attribute is getting enabled and no entry was added yet on the mastedata index. Additionally, there is broken data of attributes after startup, if the encryption of the attribute changed and if no record was loaded yet on the instance.
- Unnecessary files are included in the installer.
- Added information about the **Maximum session timeout** field to the online help. It was missing. The field is located on **Administration** > **System Configuration** > **Interfaces** > **Application Programming Interface**.
- On **Model** > **[mandator revision]** > **Model components** > **PMML model component** > **PMML Model Import**, the tooltip for the download icon is not formatted correctly.
- In the online help topic for **Cluster Golive**, there is a broken link to **MCI bypass**.
- On **Model** > **Modeling** > **Analyses** > **Statistics**, after visible columns are configured, the header of the **Name** column is empty.
- On **Investigation** > **Queries** > **Queries**, for queries with empty results, **False alarms per hit** is incorrectly formatted (APAR PO09255).
- Timestamps in the latency report files are stored in system timezone, but they should be stored in UTC+0 timezone. When the system timezone setting is not UTC +0, the latency timestamp in system internals is different from the system time of the same record in query output (APAR PO09334).
- On **Cluster** > **System monitoring** > **Settings** > **[instance]** > **Interfaces**, users with read-only access cannot switch between the tabs in the **Interfaces** section (APAR PO10093).
- In numerous places in the user interface, when a date is chosen in a calendar, the text is not localized with the user's language (APAR PO10104).
- On **Model** > **[model]** > **Profiling** > **Calendars**, if **Calendar Period** is changed, for example from daily to weekly, calendar dates are then incorrectly calculated. After the instance is restarted, the calendar values are calculated correctly from that point forward.
- Improved the documentation to more clearly communicate that there is a risk of a malicious attack when file attachments on cases are uploaded. It is a best practice to implement a third-party virus scanning tool. The online help for case attachments and the configuration setting that enables case attachments were improved. The IBM Safer Payments Implementation Guide was also improved.
- Case action inputs are not read into the system after the instance is restarted twice (APAR PO09994).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- The MTID (message type ID) of tracked messages does not display in the latency report.
- On **Administration** > **Roles** > **[user]**, in the tree structure for privileges, **Memory control** is incorrectly located under **Administration**. Now, it is located under **Cluster** in the tree structure (APAR PO10061).
- On **Report** > **Report** > **Investigator** > **[report]**, some fields are missing text translations (APAR PO09615).
- Updated Libcurl to version 8.2.1.

- The rule performance report file is not removed from the DDC even after disabling the rule performance report and restarting the application (APAR PO10033).
- In numerous places where lists are defined in the user interface, after an output value is deleted, the condition values in other outputs in the list are corrupted (APAR PO10067).
- A small latency spike occurs during the deferred writing cycle because of the time that is consumed for the deletion of the calendar period file for the rollover (APAR PO10082).
- On **Administration** > **System** > **Configuration** > **Interfaces** > **FastLink Interface**, an error message for **Receive timeout (seconds)** is incorrectly issued.
- Improved the tooltip text for the **All connections** checkbox and **Connections from** text box. They are located on **Cluster** > **System monitoring** > **Settings** > > **[instance]** > **Interfaces** > **Message Command Interface** and **Cluster** > **System monitoring** > **Settings** > > **[instance]** > **Interfaces** > **Application Programming Interface**.
- Now, on **Administration** > **System** > **Configuration** > **Interfaces** > **Application Programming Interface**, the **Session timeout** and **Maximum session timeout** fields must be greater 60 seconds. Also, a warning is issued if they are set to a value between 60 and 300 seconds.
- On **Monitoring** > **Defined risk lists**, the table contains two **Mandator** columns. It should contain a **Mandator** column and a **Mandator UID** column. The same defects also occur on **Monitoring** > **Merchant Monitoring Rules** and **Monitoring** > **Index Based Evaluations**.
- On **Model** > **[mandator]** > **Scoring engine** > **All Rules**, the column headers are all **UID**. Now, they are **Ruleset UID**, **Revision UID**, and so on.
- On **Model** > **[mandator challenger]** > **Modeling** > **Simulation** > **Queries**, the header contains the placeholder text, `Simulation Queries {0}`. The text was removed.
- On **Model** > **[mandator challenger]** > **Modeling** > **Rule Scoring** > **Rule Scoring Results**, the plus icon in the toolbar is disabled.
- On **Model** > **Modeling** > **Model factory** > **Rule**, in the CSV export of the table Generated Rules, `[Object object]` appears in the **Condition** column rather than actual values.
- Added information about FCD response formats to the online help, it was missing.
- Added **Log latencies also for FLI** checkbox on **Administration** > **System** > **Configuration** > **Misc** > **Log latency violation details**. It controls whether latencies are logged for messages that are computed from FLI.
- When a role is assigned to a user on **Administration** > **User management** > **Accounts** > **[user account]** > **Mandator Privileges**, log message 370 is not written. It should be.
- HTML formatting tags are sometimes included in golive messages.
- On **Cluster** > **System monitoring** > **Settings**, added a **Heartbeat Debugging Status** column to the list of instances.
- On **Model** > **[mandator]** > **Data Model** > **Mappings**, for mapping messages of type **Fcd**, the tooltip for **Start length pairs** contains typos.
- On **Model** > **[mandator]** > **Profiling** > **Formulas**, a vague error message (`_FORMULA_DIVISION_BY_CONSTANT_ZERO_`) displays if an expression is defined that divides by zero. Now, the error message is `Division by constant of zero is not allowed`.

Download instructions

Download IBM Safer Payments 6.4.2.05 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.05 download link	15 November 2023	English	154.81 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_05.zip:

  ebb406ed5b46009072b7890df788086ba047a7b5b4911e7d5f3e53931300b7d1

- MD5

  SaferPayments_6_4_2_05.zip:

  ff0f2467938665cbf47f7ec57744b851

Chapter 11. 6.4.2.06 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.06.

This release changed the version number from 6.4.2.05 to 6.4.2.06. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.06 includes no new features or enhancements.

Release highlights

• None

Enhancements

• None

Update information

IBM Safer Payments 6.4.2.06 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

• 6.4.0.00 Update information
• 6.4.1.00 Update information
• 6.4.2.00 Update information
• 6.4.2.01 Update information

6.4.2.06 Update information

- By default tables now show a maximum of 40 columns to improve table loading performance on tables with many columns. More columns can still be enabled in the table settings. In case a user already has preferences for the table then this setting will only apply once the user resets user preferences in the user settings page. Alternatively the number of columns can also be decreased manually on the table preferences of the table that has many columns.

- If you use MQ Interface, the mechanism for setting the MQGET timeout has changed. Now, the maximum MQGET timeout is 3000 ms. The new field, **Repeat empty MQGET**, on **Cluster** > **Configuration** > **Instance** > **MQ Interface** defines how many times the timeout is repeated and avoids reconnections to MQ. For example, if MQGET is set to 3000 ms and **Repeat empty MQGET** is set to 20, the timeout is 600,000 ms. Review your current MQGET timeout value and set **Repeat empty MQGET** as needed.

- Data exports from BDI can now be downloaded by users that have at least `execute job` privileges for jobs.

Change log

IBM Safer Payments 6.4.2.06 includes critical, major, and minor defect fixes, APARs, and changes.

Critical defects

The following critical defects were fixed:

- If both deferred writing and **Reduce DDC access for mergings** are enabled, the write cycle can take a long time. The problem occurs when a large volume of mergings happen that are in the MDC range but they are already written to disk. Also, debug log message 4 now displays the correct number of records that were modified by mergings (APAR PO10121).

- A crash might occur when case actions are sent that include query values that display as `n/a` or `Data accessible only in DDC` (APAR PO10133).

Major defects and changes

The following major defects were fixed and major changes were made:

- The user interface might freeze if a table shows many columns, for example, in mappings. Now, columns are, by default, limited to 40. If needed, increase the limit in the table settings. Tables now load faster (APAR PO10029).

- If the MQGET timeout is set to a high value, a long timeout occurs when interfaces are deactivated. Now, the maximum MQGET timeout is 3000 ms. A new field, **Repeat empty MQGET**, has been added to **Cluster** > **Configuration** > **Instance** > **MQ Interface**. It defines how many times the timeout is repeated and avoids reconnections to MQ. For example, if MQGET is set to 3000 ms and **Repeat empty MQGET** is set to 20, the timeout is 600,000 ms (APAR PO10111).

- When the Ctrl+S shortcut is used in the user interface, changes to condition and conclusion expressions are not saved correctly if the expression field is still in focus. The value from the previous field is saved in the expression rather than the changed expression. The same problem occurs when an empty expression in a list expression is saved (APAR PO09650).

- A crash might occur during golive. Error message E 0063 is written in the log files. The problem occurs when an index is created and an orphan sequence is included due to an incorrect condition (APAR PO10109).

- Simulation allocates memory for inherited noninput attributes. The allocation is unnecessary.

- In simulation query, noninput attributes are empty if the data is not available in MDC (APAR PO10017).

- A crash might occur if a query count is running and the API is interrupted (APAR PO10112).

- On **Administration** > **System** > **User** > **Enable system account** , a value that you enter in **Allow system users from IP** appears to be saved but it is not.

- After the reset index, rebuild index, and re-create index jobs are run, filled indexes cannot be populated (APAR PO10040).

- On **Monitoring** > **Defined risk list entries** > **Defined risk list entries**, the save icon is disabled after saving an entry with an invalid operator in the condition. For 6.6.0.00, the save icon is hidden.

- On **Model** > **[challenger revision]** > **Transaction enrichment** > **Mergings**, an undefined error is issued if a merging with collusions is created and `always` is selected in **Store source**.

- On **Model** > **[mandator]** > **Revision overview** > **Revision Control** > **Compare Revisions**, the name of the changed rule is displayed as `undefined`. Also, the name of the unchanged rule is not displayed correctly. The problem happens when a revision is compared to an older revision (APAR PO10013).

- After a logical golive on a submandator is run and then end of day jobs are run, key performance indicators and status alarm indicators cause unrecoverable errors and do not compute. The problem occurs if the indicators are defined on a top mandator that uses an attribute from the submandator in a condition (APAR PO10123).

- On **Model** > **[mandator revision]** > **Modeling** > **Analyses** > **Attributes**, attribute intervals are not displayed correctly (APAR PO10124).

- On **Cluster** > **System monitoring** > **Settings** > **Cluster settings**, improved the error message that is displayed when you try to create an instance with an ID that is outside the allowed range of 1 to 7.

- When a page in the user interface is read only, icons that should be clickable, for example, the help icon, are not clickable. Other icons, for example, section toggle checkboxes, are not clickable as expected but are not disabled (APAR PO09864, PO10137).

- On **Administration** > **Jobs** > **Settings** > **[report generation job]**, results cannot be downloaded if the API is disabled on a BDI (batch data interface) instance. Also, multiple types of jobs cannot be opened in view mode if the API is disabled (APAR PO08707).

- A crash might occur when nested XML is loaded on the BDI with multiple threads. Also, backtraces might occur if XML that has no closing tags, for example, an XML header, is used together with a nested XML parser in BDI job files (APAR PO10101, PO10102).

- Queries and simulations include transaction records that they should not. The problem is due to how absolute and relative server times are resolved during data selection (APAR PO10161).

- When a case is written to FLI, all case alarms are also written. Therefore, the usage of FLI buffer is unnecessarily increased. Now, only the case alarm with the highest score is written to FLI.

- A crash might occur when a counter is deleted, and at the same time a data export job is updated.

- A crash might occur when references are deleted or created for the same element at the same time (APAR PO10157).

- An error occurs during simulation or when a transaction is computed because internal random forest fails due to an empty categorical attribute (APAR PO10129).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- When you click or tab out of a date field, timestamps shift forward or backward by a value that is equivalent to the user's time zone offset. The problem occurs only if European or US date formats are used. Now, dates are handled correctly and consistently for all date formats (APAR PO09719).

- Made numerous corrections and improvements to the online help.

- On **Model** > **[challenger revision]** > **Modeling** > **Simulation**, icons in the **Status** column of the instance assignment table are cut off.

- On **Investigation** > **Investigation** > **Case selection**, the online help text is incorrectly formatted and out-of-date.
- On **Cluster** > **Maintenance** > **cleanout revisions**, the text description in the tooltip does not explain the actual behavior. The same problem exists in the online help.
- On **Administration** > **Jobs settings** > **export data job**, there is no log message if the job is canceled.
- When an instance starts, release information and the instance ID are not written to any configuration file. Now, the information is written to the `iris.iris` file. The information is useful when debugging problems.
- On **Model** > **[mandator revision]** > **Scoring engine** > **Model Component**, the online help contains grammatical mistakes.
- On **Model** > **[mandator revision]** > **Scoring engine** > **Model Component** > **[PMML component]** > **PMML Model Import**, the tooltip does not match behavior. The same problem occurs in the online help.
- On **Model** > **[mandator revision]** > **Postprocessing** > **Final ruleset**, the text for the tooltip for the **Add new** icon is incorrectly formatted.
- On **Cluster** > **System monitoring** > **System internals** > **General information**, the timestamp for deferred writing has no time zone information.
- On **Administration** > **System** > **Configuration** > **Misc** > **Event log messages**, **Maximum records shown (records)** and **Default view period (seconds)** accept negative values. The same problem occurs for other configuration fields.
- On **Cluster** > **System monitoring** > **Event log messages** > **[Event log message]**, the online help contains unrelated sections.
- On **Investigation** > **Queries** > **Common point queries**, the **Save** icon works correctly. However, the **Save and execute** icon can be clicked even if the query is incomplete.
- On **Administration** > **System** > **Configuration** > **System** > **Deferred writing**, a misleading error message is displayed if deferred writing is enabled. The problem occurs if there is not enough memory to enable deferred writing.
- On **Model** > **[challenger mandator]** > **Golive**, the golive report sometimes does not display the correct operational message. The problem occurs, for example, when the DDC for attributes with `System time` meta attribute is too small.
- On **Cluster** > **System monitoring** > **Settings**, table icons are misaligned. The same problem occurs for other tables.
- The audit log that is generated during golive contains a misspelling.
- On **Cluster** > **Maintenance** > **[set MDC/DDC sizes]**, an error message incorrectly displays. The problem occurs if the selected revision is not a challenger.
- On **Model** > **[mandator revision]** > **Transaction enrichment** > **Masterdata**, the online help for **Forward to external system** is missing.
- On **Model** > **[challenger revision]** > **Modeling** > **Rule scoring**, the `Commit changes to all rules` confirmation message contains incorrectly formatted text.
- If the `setOffline` request is performed twice, the second run might take many hours to finish (APAR PO10117).
- On **Cluster** > **[instance]** > **Interfaces** > **Application Program Interface**, online help is missing for **Incoming connection limit**. The online help is also missing for the same setting on the Message Command Interface tab.
- On **Model** > **[mandator revision]** > **Modeling** > **Test Sandbox**, the online help is out of date. It describes elements in the old user interface.
- On **Investigation** > **Case selection** > **[case]**, the **Masterdata** tab does not show if only one multivalue masterdata is enabled for the card.
- Updated OpenSSL to 1.1.1w. Updated Libcurl to 8.4.0 on the server.
- On **Administration** > **Case management** > **Case classes** > **[case]** > **Layout settings**, the edit menu in tab sections is not available if the tab name is longer than about 20 characters. For the problem to

occur, the **Use custom layout** option must be enabled for the case class. Now, a tab correctly expands to show the full name and its edit menu.

- On **Administration** > **User management** > **Accounts** > **[user]** > **Global Privileges**, if **System configuration** is set to `View`, the user can edit the system configuration pages. The user should be able to only view the pages.

Download instructions

Download IBM Safer Payments 6.4.2.06 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.06 download link	13 February 2024	English	154.84 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

    SaferPayments_6_4_2_06.zip:

    ```
    7eb169070169076775105d09e685dd915b00fb15a65796f4ca4bb0e1c05a24c8
    ```

- MD5

    SaferPayments_6_4_2_06.zip:

    ```
    616b8fd2faa3508439e25ceabcc1d2ef
    ```

Chapter 12. 6.4.2.07 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.07.

This release changed the version number from 6.4.2.06 to 6.4.2.07. It contains No Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.07 includes no new features or enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.07 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.07 Update information

- On **Investigation** > **Queries** > **Group by queries Fraud Ratio** is now calculated as basis points. The new formula is: `10000 * ((fraud amount) / (total amount))`. Before the update, **Fraud Ratio** was calculated as `(fraud amount) / (genuine amount)`. If the CSV file is used in external systems or values are used for other calculations, change your system to accommodate the new calculation results.
- It is now possible to send `statusRequests` to MCI for nonxml messages. Also, it is possible to set a `messageTypeId` for MCI `statusRequests`. If no `messageTypeId` is set for a status request, it responds with the type of the message that is used by the Inbound Endpoint.

Change log

IBM Safer Payments 6.4.2.07 includes major and minor defect fixes, Known Issues, APARs, and changes.

Critical defects

The following critical defects were fixed:

- None

Major defects and changes

The following major defects were fixed and major changes were made:

- Throughout the user interface, tables with many columns load slowly. Now, tables load faster. The default limit of displaying only 40 columns was removed. White space and default column width relative to the content was optimized. If you double-click the "change column width" handle, the column width adjusts to fit the content of the cells. If the Google Chrome browser is used, you can now select a range of table rows by pressing shift and then clicking the first and last rows in the range.
- A crash might occur when a `setOffline` or `setOnline` request is performed while an IBE (Index Based Evaluation) job is running.
- Python modules cannot be deleted even if they are not referenced (APAR PO10122).
- On **Investigation** > **Queries** > **Group by queries**, the name of the query is not displayed in the title of the results page (APAR PO10149).
- When a revision with many masterdata definitions is changed and then synchronized on remote instances by using the FastLink Interface, the synchronization takes a long time (Known Issue DT269755).
- On **Investigation** > **Investigation**, use any menu item to open an existing case. The title contains the case ID, which is formatted with an unnecessary space after the hyphen. If you copy the case ID and try to search for it, the search fails due to the space (APAR PO09851).
- Throughout the user interface, a table with many columns does not fit on the screen. Now, the minimum column width is smaller.
- A crash might occur if a `getCppsToHighlight` API request with a nonexistent query UID is sent (APAR PO10155).
- On **Monitoring** > **Defined risk list entries**, the toolbar icon to display defined risk list audit trails is missing (APAR PO10154).
- On **Administration** > **Mandators** > **Settings**, the value in **Name** can be changed to one that is already used in another mandator. Then, a crash or failure occurs when the system is restarted.

- When the **Open rules table** icon is clicked, the rules that are listed are not correctly filtered. The access points to the icon are **Model** > **[revision]** > **Data model** > **Preprocessing rulesets**, **Model** > **[revision]** > **Scoring engine** > **Model components**, and **Model** > **[revision]** > **Post processing** > **Final rulesets**. When you click the checkmark next to a ruleset, the **Open rules table** icon displays.

- Several problems occur with reporting progress in ad hoc queries, index queries, hyperlink queries, and common point queries. If a query finds fewer than 20 matching transaction records, progress displays as 0% for the entire runtime. If a query finds more than 20 matching transaction records, only matching records are included in the progress percentage. If matches occur rarely compared to the overall record range, progress is rarely updated and never reaches 100%.

- On **Investigation** > **Queries** > **Group by queries**, **Fraud ratio** is not calculated correctly. It is calculated as `(fraud amount) / (genuine amount)` instead of `(fraud amount) / (total amount)`. It is often a small number (less than 0.01), which is difficult to represent accurately. Now, **Fraud ratio** is calculated as basis points. The new formula is: `10000 * ((fraud amount) / (total amount))`. Also, the table header, CSV header, and graph label now display the text **Fraud Ratio (BP)**, where *BP* is for basis points (APAR PO10054).

- On **Administration** > **User management** > **Accounts**, when a new user is created, check boxes selections that are made under **Global privileges** are not saved.

- On **Investigation** > **Queries** > **Queries** > **Query Data Selection**, data selection ranges display as icons. Also, there is too much white space. The problems occur anywhere that has that data selection layout, for example, **Simulation**, **Group by queries**, **Reporting queries**, and **Common point queries**.

- The end-of-day job can run in parallel with `setOffline` (APAR PO10118).

- When BDI (batch data interface) is used to import an encrypted file, a `PREMATURE_END_OF_LINE` error is issued. The problem occurs only if **Use AES CTR encryption** is enabled in **Administration** > **Jobs** > **Settings** > **[Job]** > **Load file settings** > **Enable encrypted delivery**.

- When a new query is created on **Model** > **[revision]** > **Modeling** > **Simulation** > **Queries**, the save icon is disabled. The problem occurs if the **Investigation** > **Query** > **Change privilege** is not enabled on the user's role (APAR PO10039).

- When a user is created with the copy function, that user is not forced to change their password the first time that they log in.

- The `rebuild index` maintenance function ignores mandator conditions, index computation conditions, index insertion conditions, and records that have an invalid timestamp. Also, masterdata is changed from nil to zero after the index is rebuilt (APAR PO09778).

- On **Model** > **[challenger revision]** > > **Modeling** > **Simulation** > **Queries** > **Index query**, the query uses production data rather than simulated data. The same problem occurs for hyperlink queries. The results are wrong if the index that is used by the query was changed in the simulation. Hyperlinks in other simulation query results work correctly.

- On **Model** > **[revision]** > **Modeling** > **Analysis** > **[analysis]** > **Analysis Data Selection**, if you add a condition attribute that is encrypted, it is not readable the next time you open the analysis (APAR PO09569).

- During a master key change, an instance that is in passive mode cannot receive messages through AMI (Alert Message Interface).

- When a `fraudMarkingReport` request is saved by using a script, an error is printed to logs if the mandator in the request is not the UID of an existing mandator.

- The `StatusRequests` API always responds in XML, even when a JSON `messageTypeId` is sent. Also, `StatusRequests` do not have a valid date in the HTTP response header (APAR PO10175).

- A crash might occur when message definitions are added or removed and MCI bypass errors occur at the same time.

- On **Model** > **[revision]** > **Data model** > **Inputs** > **Own input attributes** > **[counter attribute]**, attributes of type hexadecimal are not listed under **Reference attribute**. The same problem happens on **Model** > **[revision]** > **Data model** > **Outputs** > **Own output attributes** > **[counter attribute]**.

- On **Model** > **[revision]** > **Modeling** > **Model factory** > **Rule** , a crash occurs if the **Generated Rules** list contains conditions that use the `is true` or `is false` Boolean operators.

- On **Administration** > **Jobs** > **Settings**, if an end-of-day job starts while an export job is already running, the export job pauses until the end-of-day job finishes. That process is correct. However, after the end-of-day job finishes, the export job does not continue from the point it stopped. Therefore, duplicate records are present in the export file (Known Issue DT261334).

- On **Cluster** > **System monitoring** > **Settings** > **[setting]** > **Interfaces** > **Encrypted Communications Interface (ECI)** tab, the checkboxes to enable and disable the **Validate server certificate** and **Validate client certificate** sections are missing. The same problem occurs on the **Application Programming Interface (MCI)** tab.

- On **Monitoring** > **Defined risk list entries**, if an entry that has escaped JSON characters is deleted, an error is logged on remote instances (Known Issue DT378209).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- For versions 6.3.x, 6.4.x, and 6.5.x, on **Investigation** > **Queries** > **CPP selection**, the **New CPP** icon is enabled for users who have the read-only CPP selection privilege. For versions 6.6.x, the same problem happens with the **New CPP** and **Delete CPP** icons.

- On **Investigation** > **Case creation**, information about the **CPP** field is missing from the online help. CPP stands for *common point of purchase*.

- When an item in the user interface is deleted, the confirmation message refers to the **Confirm** icon. However, there is no **Confirm** icon. The problem occurs on numerous pages.

- On **Administration** > **System** > **Configuration** > **Authentication Settings**, the **Automatically Re-login** checkbox has no functionality. It appears only if **LDAP** or **Local then LDAP** is selected in **Authentication method**. The checkbox has been removed.

- On **Model** > **[revision]** > **Modeling** > **Analyses** > **Attributes**, text for the progress circle is missing.

- On **Investigation** > **Queries** > **Reporting queries**, improved the online text for reporting query conditions and performance indicators.

- On **Administration** > **System** > **Configuration** > **User**, the online help for **Use common password blocklist** is missing.

- On **Model** > **[challenger revision]** > **Modeling** > **Simulation** > , the logs do not mention forwarded HTTP requests. Responses for forwarded HTTP requests are also not logged.

- On **Administration** > **Case management** > **Case actions** > **[case action setting]**, online help is missing for **Available for manual fraud marking**.

- On **Investigations** > **Queries** > **CPP selection**, the online help does not adequately describe the feature.

- On **Model** > **[revision]** > **Transaction enrichment** > **Mergings**, the **Mandator UID** column header is missing. On **Model** > **[revision]** > **Data model** > **Mappings**, the **Attribute UID** column header displays incorrectly.

- On **Model** > **[challenger revision]** > **Modeling** > **Rule analysis**, tooltip text for **Saved amount per false alarm** is missing.

- On **Model** > **[revision]** > **[conditions]**, if the condition order is changed and one of the expressions has an error, the error is copied to other conditions. The problem occurs in all model components that have conditions, for example, patterns.

- When a page is saved and then reloaded, a problem occurs if it has conditions that are based on intercept code, case queue, or notification meta attributes. The page might show that expressions are in error even though they are valid.

- On **Administration** > **System configuration** > **Misc** > **Miscellaneous**, the logs omit that end-of-day jobs are disabled. On **Cluster** > **System monitoring** > **System internals**, the last execution time for end-of-day jobs is omitted.

- On **Administration** > **System** > **Configuration**, the **Download IBM Safer Payments configuration** icon is displayed to users who lack the privilege to use it.

- The online help for maintenance functions is missing information. It does not clearly state that when a maintenance function encounters an error, the instance is put in an error state.
- On **Report** > **Report** > **Missed cases**, a value that is selected in **Time unit (before)** changes to `hours` after IBM Safer Payments is restarted. For example, if **Time unit (before)** is set to `days`, it changes to `hours`.
- Throughout the user interface, too much white space displays in table cells (APAR PO09366).
- On **Model** > **[challenger revision]** > **Modeling** > **Attribute setting** > **[attribute]**, the words `undefined text` are displayed.
- When records are marked as fraud or genuine on **Investigation** > **Queries** > **Queries**, the **Fraud value** can be omitted. The result is that an invalid default value is sent to the server (Known Issue DT261601).
- Now, HTTP notifications can be sent as HTTP/1.1 in their HTTP header. The HTTP/1.1 header contains an additional PORT in the `Host` entry, and an additional `Connection: close` entry. To send notifications with HTTP/1.1 header, select the new setting **Use HTTP 1.1 header**. It is located on **Cluster** > **Interfaces** > **Outgoing channel configuration** > **[configuration]** > **Type settings**. HTTP/1.0 does not send a PORT in the `Host` header.

Download instructions

Download IBM Safer Payments 6.4.2.07 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.07 download link	16 May 2024	English	154.90 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  `SaferPayments_6_4_2_07.zip:`

  ```
  151907b321432d9ba54d2da2f65070dbbd7cfa6d84d461e33add56c266e2963f
  ```

- MD5

  `SaferPayments_6_4_2_07.zip:`

  ```
  f0e66eee0772d10bf7295c2b1b83676a
  ```

Chapter 13. 6.4.2.08 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.08.

This release changed the version number from 6.4.2.07 to 6.4.2.08. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.08 includes neither new features nor enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.08 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

- [6.4.2.02 Update information](#)
- [6.4.2.03 Update information](#)
- [6.4.2.04 Update information](#)
- [6.4.2.05 Update information](#)
- [6.4.2.06 Update information](#)
- [6.4.2.07 Update information](#)

6.4.2.08 Update information

- The system must no longer be restarted if you change **Fastlink Interface (threads)** on **Administration** > **System** > **Configuration** > **System** > **Number of Parallel Threads**. Now, Fastlink interface connections are automatically dropped and re-created if **Fastlink Interface (threads)** is changed.
- Debug log message 889 and error log message 888 were added to log details of ITEM_NOT_FOUND issues. If you run into an issue with an ITEM_NOT_FOUND error, then you can enable the debug message 889 to print more information about the error in the logs.
- If an encrypted numeric reporting attribute exists and **Mask encrypted values** is selected on **Administration** > **Mandators** > **Settings** > **[mandator]** > **Relational Database Interface**, the value is now inserted into the VALUE_TEXT column. Previously, it was inserted into the VALUE_NUMERIC column.
- Now, Db2 SQL statements that are output through the relational data interface (RDI) wrap table and column names in double quotation marks rather than single quotation marks. As of Db2 version 11, single quotation marks are no longer supported. Therefore, Db2 version 10 is no longer supported.

Change log

IBM Safer Payments 6.4.2.08 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- Buffer overflow and uncontrolled memory allocation errors occur in MCI when remote systems send arbitrary large requests.

Major defects and changes

The following major defects were fixed and major changes were made:

- A crash might occur when a challenger revision is deleted while a random forest model generation is running (APAR PO09971).
- If you change **Fastlink Interface (threads)** on **Administration** > **System** > **Configuration** > **System** > **Number of Parallel Threads**, the system must be restarted. Then, synchronization issues occur between instances.
- An error message is printed when messages are computed and then the computation stops. The problem occurs after a counter is copied, and the original counter uses a peer index with `target` sequence and the new counter uses an index to another nonpeer index. The problem can also occur when events, mergings, patterns, precedents, and profiles are copied in the same way. Also, index queries might return incorrect results after they are copied from a query that uses a peer index with `target` sequence (APAR PO10136).
- In rare situations, a crash might occur when a table that shows rules or conclusions is opened (Known Issue DT391564).
- When MCI bypass is deactivated, a long wait time occurs until the instance can process new MCI messages again.

- When a golive is running and you add new elements or users before it finishes, the remote instances might be invalidated when they run the golive. Also, external mappings are added automatically without a message in the golive report. Now, the golive report includes a message for added external mappings (APAR PO10141).
- When extended authentication is enabled and a new user logs in, the login page is displayed rather than the one-time password (OTP) page (Known Issue DT277055).
- On **Administration** > **Jobs** > **Settings**, when you run a BDI Load file job with **Re-create interval index** enabled, the indexes on remote instances are not populated after the job finishes (APAR PO10063).
- A crash might occur due to a thread leak in the Kafka Message Interface.
- On **Model** > **[revision]** > **Model factory** > **Model training** > **Rule Designer**, select an item and click **Explore all indicators**. Data selection conditions and rule generation conditions are not correctly applied. Therefore, data for other items is included in the selected item (Known Issue DT380010).
- Improved performance for rule reports and rule queries. The improvement is especially evident when a ruleset contains many rules whose conditions are not met (Known Issue DT379143).
- Added the new **Cluster** > **Maintenance** > **Cancel or continue recreate index** maintenance function. If an error occurs while a re-create index job is running, you can now exit the job or continue. Use the **Cancel or continue recreate index** maintenance function only under the advice of IBM Support.
- After rule generation is started, the error `Only challenger revisions can be simulated` might be issued. The error continues to display even after you leave the page and also after the process stops or is disabled. The same problem might also occur when the retention settings report is started.
- When you create a condition in the user interface, for example, in a query, the message `There is no corresponding category defined for the selected attribute` might display. The problem occurs if the selected attribute has categories and the expression uses single wildcard characters, for example, `*` or `?` (APAR PO09835).
- MS SQL statements print with incorrect enclosing characters for table and column names (Known Issue DT381678).
- A crash might occur during the end-of-day job after the `systemtime` metaattribute is resized. The problem occurs when logical golives are enabled and rules with performance report are defined (APAR PO10065).
- On case investigations, for example, **Investigation** > **Investigation** > **Case search** > **[case]**, only masterdata cards that are linked to one index display content. Masterdata cards that are linked to multiple indexes do not display content (Known Issue DT386110).
- When golive is run, the oldest URID in the index is set to a wrong value if the index was rebuilt (Known Issue DT389262).
- SQL statements for reporting attributes attempt to insert masked numeric attributes into the VALUE_NUMERIC column.
- SQL DELETE statements that are created for cases through the relational data interface (RDI) use invalid syntax.
- Db2 SQL statements that are output through the relational data interface (RDI) wrap table and column names in single quotation marks. As of Db2 version 11, single quotation marks are no longer supported. Now, table and column names are wrapped in double quotation marks.
- A crash might occur when XML files that contain the string P0ST are loaded by using a BDI load file job. The same problem occurs with JSON files that start with the string P0ST (Known Issue DT378504).
- Updated OpenSSL to 1.1.1y. Known potential security issues exist in 1.1.1x.
- After a golive finishes, memory usage increases more than expected if **Model** > **[revision]** > **Data model** > **Indexes** > **[index]** > **Purge outdated** is enabled (Known Issue DT387182).
- On case investigations, for example, **Investigation** > **Investigation** > **Case search** > **[case]**, if you filter or sort an index query, the wrong rows are highlighted in the query results (Known Issue DT389546).
- When you apply a filter in a table and then click a column title to sort the table by that column's values, the sort does not work (Known Issue DT389548).

- A crash might occur if you delete a ruleset or move rules out of a ruleset while a simulation rule query is running.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- On **Model** > **[revision]** > **Modeling** > **Analyses** > **Rule optimization**, variables in the tooltips for several fields display as {0}, {1}, and {2} rather than correct values.

- On **Investigation** > **Investigation** > **Queries** > **Common point queries**, hexadecimal query parameters display incorrectly on the results page. For example, a value like 1111123412341234 might display as ???4?4?4. Also, sometimes the results page is not displayed.

- On **Monitoring** > **Defined risk lists** > **Defined risk lists entries**, when you click **Import entries from a file**, the **Add condition** icon under **Filter Criteria** > **Add condition group** is sometimes missing (APAR PO10172).

- On **Model** > **[challenger revision]** > **Scoring engine** > **Model components** > **[PMML model]** > **Import PMML model** > **Data Field Mapping**, error text for the option **no encoded category selected** is missing.

- On **Administration** > **System** > **Configuration** > **System** > **Page auto refresh**, **Session countdown (seconds)** does not allow a zero value. Also, if **Notice (seconds)** is set to zero, the user interface stops responding (APAR PO10147).

- On **Model** > **[revision]** > **Modeling**, tabs for reminders display on some simulation analysis result pages, for example, rule overlap. Now, the tabs were removed.

- On **Administration** > **System** > **Configuration**, click **Download IBM Safer Payments configuration** but then do not select an instance. An error is displayed rather than a statement that the instance is missing. Now, the current instance is used as the default if no instance is selected.

- On **Administration** > **Mandators settings** > **Relational Database Interface**, the **REVISION_NUMBER** field is missing from the **RULESFIRED** table in the online help.

- On **Investigation** > **Investigation**, open a case that was originally created by using manual case creation. Log message 744 is printed in the logs. It is printed every time that the case is opened (APAR PO10177).

- On **Administration** > **System** > **Configuration** > **Interfaces** > **FastLink Interface**, an error occurs if a noninteger value is entered in **Buffer size (GB)**.

- On **Administration** > **System** > **Configuration** > **Investigation & queries** > **Compliance monitoring**, decimal values cannot be entered in **Reload wait factor (times)**. The field accepts only integer values. The same problem occurs with **Remote golive wait factor (times)**, which is located on **Administration** > **System** > **Configuration** > **Modeling** > **Decision Models**.

- ITEM_NOT_FOUND error messages do not provide sufficient information for debugging. For example, the item that is missing is not provided. Now, many ITEM_NOT_FOUND error messages were improved.

- If the Google Chrome browser is used and you view tables, the table height is too large by half a row. The problem occurs if you click **Fit to screen** and then later reduce the value in **Settings** > **Number of rows**.

- In tables where a **more** icon might display, the icon is hidden if the cell is too narrow for the content. The **more** icon might appear in the **Comment** column on **Investigation** > **Investigation** > **Case search** > **[case]** > **Common point queries** > **Audit trail**. It might also appear in the **Model** > **[revision]** > **Modeling** > **Model factory** > **Rule** > **Model training** > **Generated Rules** table if **Generated conditions as popup** is enabled (Known Issue DT389549).

Download instructions

Download IBM Safer Payments 6.4.2.08 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.08 download link	6 August 2024	English	154.46 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_08.zip:

  ```
  7527a1c7874e015da8cc6ada066496d9dc966b3d01d7916884757b5d05b79b58
  ```

- MD5

  SaferPayments_6_4_2_08.zip:

  ```
  5efecbadf16c1322bb400939baff94a2
  ```

Chapter 14. 6.4.2.09 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.09.

This release changed the version number from 6.4.2.08 to 6.4.2.09. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.09 includes neither new features nor enhancements.

Release highlights

• None

Enhancements

• IBM Safer Payments can now communicate with targets with multiple domains on the same IP address. Each domain can have its own SSL certificate. To use the feature, on **Cluster** > **Interfaces** > **Outgoing channel configuration** > **General settings**, **Target** must be HTTP `message`, `message`, or `persistent connection`. Set the new **Use Service Name Indicator (SNI)** checkbox. It is located on **Cluster** > **Interfaces** > **Outgoing channel configuration** > **Use SSL**.

Update information

IBM Safer Payments 6.4.2.09 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

• 6.4.0.00 Update information

6.4.2.09 Update information

- IBM Safer Payments 6.4.2.09 was recalled and is not available for download. The 6.4.2.09 changes are included in 6.4.2.10. When you upgrade to 6.4.2.10, read the 6.4.2.09 Release Notes as well.
- Before the update, backtraces were written to `logs/backtraces_starting_at_[date].iris` file. After the update, backtraces are written to `logs/backtraces_current.iris` while the instance is running. After startup, the previous `backtraces_current.iris` file is moved to `backtraces_from_[date].iris` if it is not empty.

Change log

IBM Safer Payments 6.4.2.09 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- None

Major defects and changes

The following major defects were fixed and major changes were made:

- When a ruleset from a challenger model revision is deleted while simulation is using that ruleset, backtraces and error log messages are generated. Also, a ruleset can be deleted after rules are moved from one ruleset to another. Now, deleting rulesets and moving rules are not allowed while simulation is running.
- When you manually mark transactions as fraudulent or genuine, for example, on **Investigation** > **Queries** > **Queries** > **[query]** > **Query results**, the notification's file content might be wrong. Depending on the selected test data, the problem might also occur when you click **Save and create test notification** on **Administration** > **External system integration** > **Notifications** > **[Notification]**. Only notifications of type `file` are affected. The problem occurs when text attributes are used in the message template. On version 6.7.0.00, the output file contains the message text only up to the first text value. In versions before 6.7.0.00, the complete file is output. However, it contains one or more null characters after each value of a text attribute.
- Updated packages elliptic, path-to-regexp, and dompurify to fix known security vulnerabilities.
- On **Cluster** > **System monitoring** > **Settings** > **Interfaces** > **Application Programming (API)**, added **Fallback URL**. Use it to specify, for example, a reauthorization page. If a request is answered with a 401 authorization error, you are redirected to the fallback URL after five seconds. A 401 authorization error might occur, for example, when IBM Safer Payments is used with a reverse proxy.
- On **Model** > **[revision]** > **Data model** > **Inputs** > **[attribute]** > **Categories**, an error occurs if you double-click a cell in the **Encoding** or **Fraud** column. The same problem occurs on **Investigation** > **Queries** > **Queries** in the **Fraud** column if direct fraud marking is used (Known Issue DT393963).

- When you run a re-goliveor a retired revision, the PMML model is empty and does not compute (APAR PO09886).
- If SSL is enabled on MCI, a brief MCI connection might remain indefinitely open. A brief connection occurs if it is opened and immediately closed. A massive number of brief connections causes MCI to deactivate and print an error message in the logs (Known Issue DT394259).
- On **Investigation** > **Queries** > **Queries**, calendar profile values might be zero after a golive is run or the system is restarted. The problem also occurs for cases and message responses that are processed by IBM MQ, MCI (message command interface), or BDI (batch data interface). It occurs if historical data is loaded or a timestamp in the future exists (Known Issue DT387020).
- In rare situations, incorrect values are stored for events and device identifications. The result is then wrong output attribute values. The problem occurs if deferred writing is used. The values display on **Investigation** > **Queries** > **Queries** and other menu items (Known Issue DT392933).
- On **Investigation** > **Queries** > **Queries**, a crash might occur if you repeatedly click the **Save and execute** icon. Now, the icon is disabled after the first click. The same problem occurs for **Investigation** > **Queries** > **Group by queries**, **Reporting Queries**, and **Common point queries** (Known Issue DT389924).
- Now, you can define individual start times for the end-of-day job on an instance level. On **Administration** > **System** > **Configuration** > **Misc** > **Miscellaneous**, added **Define EoD time per instance**.
- When many masterdata definitions are applied to transactions, performance slows down.
- On **Investigation** > **Investigation** > **Case search**, the case table is not refreshed when the page opens. The same problem occurs on **Investigation** > **Investigation** > **Case selection** (Known Issue DT389975).
- When you apply a filter in a table, if the filter includes text and spaces, the spaces are ignored.
- An instance fails to start if invalidated model revisions contain conditions on encrypted attributes that use constants on the right side of the condition. The problem occurs only if the attribute was encrypted after the revision was already invalidated.
- On **Cluster** > **System monitoring** > **Settings** > **Interfaces** > **Message Command Interface (MCI)**, an error log message is printed if an error in the TCP connection occurs. The error message text does not clearly describe the problem.
- On **Cluster** > **System monitoring** > **Settings**, the **Fastlink Status** table displays only after the refresh interval but not when the page is opened (Known Issue DT395359).
- In rare situations, the user interface might crash when tables are displayed (Known Issue DT392078).
- The application might stop responding if you click **Dashboard** while the end-of-day (EOD) job is running (Known Issue DT390790).
- During a restore, the instance might shutdown when the recipient instance finishes deleting files. The restore process then stops. Contact IBM support immediately (APAR PO10167).
- Backtrace files are hard to find and sometimes incomplete. Also, they are missing from the configuration export in **Cluster** > **System monitoring** > **System internals** > **General information** > **Download IBM Safer Payments configuration**.
- An instance might stop if a modeling workflow starts the step of initializing the rule designer while a golive is running (APAR PO10078).
- On **Model** > **[revision]** > **Modeling** > **Model factory** > **Model training** > **Generated Rules**, the table does not show verification data when the **Show generated conditions as popup** option is enabled.
- The rebuild index maintenance function does not fully wipe DDC data. Some values might then remain unchanged in the DDC file. If the system is restarted before all the values are overwritten, the wrong data might be loaded from DDC (Known Issue DT417292).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- When a duplicate mapping is found, the log message omits the revision information. The revision information states whether it is a champion, challenger, or retired. Without it, debugging is more difficult.

- On **Administration** > **Dashboard settings** > **Status alarm indicators** > **[indicator]** > **Email**, the application might stop responding when you enter email details. The problem might also occur on **Administration** > **External system integration** > **Notifications**. It might also occur on **Administration** > **Case management** > **Case actions**.

- On **Investigation** > **Queries** > **Reporting queries**, a JSON validation error might occur for numbers that result in negative or positive infinite values (Known Issue DT390202).

- On **Monitoring** > **Compliance** > **Ad hoc check**, strict matching is used when you search for values that contain hyphens and spaces. For example, if `Hassan Al-Zumur` is on the list and you search for `Hassan Al Zumur`, no match is returned. Now, you can influence the matching algorithm with the new **Handle dashes as whitespace** checkbox. It is located on **Administration** > **System** > **Configuration** > **Investigation & queries** > **Monitoring** > **Compliance monitoring**

- On **Monitoring** > **Defined risk lists** > **Defined risk lists entries**, click **Import Risk List** to upload a CSV file. Then click **Download the detailed import report as CSV file**. The downloaded CSV report contains records from previous import operations.

- Defined risk lists are not written to file in valid JSON format.

- The online help is missing a statement that not all HTTP/1.1 features are supported. Specifically, chunked encoding is not supported.

- When the `getMasterdataDeepInformation` API endpoint is used manually, requests for a missing index fail with generic log messages 99 and 459. Now, the error message clearly states that the index is not found.

Download instructions

Download IBM Safer Payments 6.4.2.09 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
recalled	17 October 2024	English	

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256
- MD5

Chapter 15. 6.4.2.10 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.10.

This release changed the version number from 6.4.2.09 to 6.4.2.10. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.10 includes neither new features nor enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.10 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.10 Update information

- When you upgrade one instance to the new version and other instances are still on the old version, do not delete any IBM Safer Payments elements. Wait until all instances are on the same version.

- On **Administration** > **System** > **Configuration** > **Misc** > **Application Settings**, be aware that **Server time zone** will be deprecated in the future. A migration path will be offered at that time. If you use it, no action is needed now. If you are setting up a new installation, do not use it. To raise awareness, an informational warning was added to **Server time zone**.

Change log

IBM Safer Payments 6.4.2.10 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- None

Major defects and changes

The following major defects were fixed and major changes were made:

- The user interface might crash if you delete a condition or master data condition. The problem occurs on **Investigation** > **Investigation** > **Case selection** > **Case Selection Condition** and **Case Selection Masterdata Conditions** (APAR PO09883).
- On **Model** > **[challenger revision]** > **Modeling** > **Simulation**, you cannot disable a simulation while simulation queries are running on the same revision (APAR PO10105).
- On **Monitoring** > **Defined risk lists** > **Defined risk lists**, in rare situations, duplicate entries might exist. If you delete all the risk list entries on one instance, entries might still exist on another instance. Then, when you delete the risk list on the remote instance, the deletion fails. The instances might then be inconsistent. For example, different revisions might be running on different instances (APAR PO10074).
- When an instance is shut down while a golive is running, the golive does not run on remote instances. Now, it is done on remote instances after the API instance is restarted.
- On **Investigation** > **Queries** > **Group by queries**, when you run a query, a log message is not printed when it is finished.
- When an instance fails to golive, a time gap occurs after maintenance mode is exited and before the shutdown starts. During the time gap, the instance is still counted as active. Other instances in the cluster might proceed with the golive and fail. The minimum active instances setting is ignored (Known Issue DT391830).
- In rare situations, an instance whose status is unreachable might block golives on other instances (APAR PO10173).
- On **Administration** > **Dashboard settings** > **Charts**, a fatal error might occur if you delete a chart while it is computing. The same problem occurs on **Administration** > **Dashboard settings** > **Key performance indicator**. Now, when you delete these items, the system enters maintenance mode.

- In certain scenarios, temporary cases are not promoted (Known Issue DT397122).
- On **Cluster** > **System monitoring** > **Settings** > **Cluster Settings** > **[instance]**, after you click **Force startup after crash**, the instance displays as `invalided` until startup finishes.
- Updated OpenSSL to 1.1.1za. Updated the elliptic and DOMPurify packages to fix known security vulnerabilities.
- On case investigations, for example, **Investigation** > **Investigation** > **Case search** > **[case]** > **Case actions**, attribute placeholders that contain large numbers might display wrong values. The problem occurs on numeric reporting attributes that are defined without decimals.
- Case classes might be inconsistent on the primary instance versus the remote instances. The problem occurs after an alarm with a lower score is aggregated into a case. The case's case class is then wrong on remote instances.
- Throughout the user interface, when you use the checkbox to select multiple rows in a table, your items might later be deselected. The problem occurs if you select multiple items, apply a filter, and then select more items. The previously selected rows that do not match the filter are deselected (Known Issue DT398225).
- On **Administration** > **Jobs** > **Settings**, a fatal error might occur if you run multiple fraud marking report jobs that compute the same fraud marking report.
- A crash might occur if a user tries to log in multiple times at the same time (Known Issue DT417690).
- The masterdata value might be empty when it is applied to computing real-time transactions. The problem occurs if the masterdata is based on an index from a higher-level mandator. On **Investigation** > **Queries** > **Masterdata query**, attributes are then empty (Known Issue DT418128).
- On **Model** > **[revision]** > **Scoring engine** > **All Rules**, a rule cannot be saved a second time. The problem occurs if the rule uses `Timestamp` or `Numeric` output types in **Conclusions** with the `Reset value` operation (Known Issue DT387158).
- When a challenger is promoted during golive, PMML might generate incorrect scores. The problem occurs if PMML boosted tree models are used in a champion and a challenger is created from it (Known Issue DT421950).
- On **Administration** > **System** > **Configuration** > **Misc** > **Miscellaneous**, when **Define EoD time per instance** is enabled, the end-of-day job might run one more time at the old time before it switches to the new time.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- Throughout the user interface, the sort icon in a table column might disappear after you minimize the column's width (Known Issue DT398477).
- On **Model** > **[revision]** > **Data model** > **Mappings** > **Input**, for mapping messages of type AVRO, some labels display incorrectly.
- On **Administration** > **Key management** > **Encryption keys** > **Encryption keys**, for inactive keys, the text in the Status column is incomplete. The timestamp is omitted.
- On **Model** > **[revision]** > **Data model** > **Inputs** > **[attribute]** > **Show references**, the **Reporting query** label displays as code rather than text.
- You cannot cancel a simulation for a challenger revision that is invalidated. The problem occurs if the revision is invalidated while the simulation page is open. For example, say that User1 is checking the simulation report on RevisionA. At the same time, User2 starts a golive on RevisionB on the same mandator. If RevisionB is newer than RevisionA, RevisionA is invalidated (APAR PO09929).
- When alarms are promoted or consolidated, log messages are not generated.
- When you create a new indicator on **Administration** > **Dashboard settings** > **Status alarm indicators**, items in the **Alarm type** list are not in alphabetical order.

- On **Administration** > **System** > **Configuration** > **Misc** > **Application Settings**, **Server time zone** is not intuitive and is sometimes used incorrectly. Now, an informational warning states that it will be deprecated in the future.
- On the golive report, the symbols for `realtime interception missing error` and `realtime interception missing warning` are swapped. The error is assigned an orange symbol. The warning is assigned a red symbol.
- When an incoming connection in MCI is rejected due to a connection limit, the following log message is printed: `W 0229 Ignored incoming MCI connection from '[IP address]' because IP address is blocked`. The log message is misleading because a blocked IP address is not the issue. The log message has been improved.
- Throughout the user interface, long option names in multi-select fields are truncated and indistinguishable.

Download instructions

Download IBM Safer Payments 6.4.2.10 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.10 download link	14 February 2025	English	154.38 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  `SaferPayments_6_4_2_10.zip`:

  ```
  f9b35dad65204b2b1a644e6af3aede756b16a4e2ad9ed07946d2288532db53b0
  ```

- MD5

  `SaferPayments_6_4_2_10.zip`:

  ```
  297314b406da74013bbecb019ecb94ba
  ```

Chapter 16. 6.4.2.11 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.11.

This release changed the version number from 6.4.2.10 to 6.4.2.11. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.11 includes neither new features nor enhancements.

Release highlights

• None

Enhancements

• None

Update information

IBM Safer Payments 6.4.2.11 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

• 6.4.0.00 Update information
• 6.4.1.00 Update information
• 6.4.2.00 Update information
• 6.4.2.01 Update information

6.4.2.11 Update information

- The `arc` folder that is inside the `inv` folder is no longer restored during the `Restore` process. On the recipient and donor instances, the `arc` folder is neither deleted nor modified.
- You can change the external model conditions only after the FLI is fully synchronized after the upgrade. If you upgrade from versions prior to 6.3.1.02, 6.4.2.01, 6.5.0.00, the warning `796: External system proxy ... did not receive outputs from primary instance for record ...` might be issued. You can disregard the warning (Known Issue DT419551).
- For the `ExportCasesTable`, `IsCasesTableEncrypted`, `GetCasesTable`, and `SetUserExportPassword` APIs, it is now mandatory to add the `caseFilter` API request parameter.

Change log

IBM Safer Payments 6.4.2.11 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- Instances might hang when the domain name is resolved. To avoid the problem, enable **Administration** > **System** > **Configuration** > **Misc** > **Miscellaneous** > **Parse IP addresses directly**.
- A crash might occur when a malformed HTTP header is parsed in MCI messages (Known Issue DT424773).
- On **Administration** > **Key management** > **Key management**, data in the DDC might become unusable. The result is that the data is lost. The problem occurs when an old triplet key is deleted before the data is reencrypted (Known Issue DT435179).

Major defects and changes

The following major defects were fixed and major changes were made:

- If you reduce the overall number of calendar periods or delete a calendar, DDC files for calendar periods are not deleted. During golive, calendar period data is not cleared if the calendar's index size is reduced below its fill level. Then, the calendar computation does not start from the beginning.
- On **My Account** > **User preferences**, the **Show unchanged model elements** toggle is not working. It should affect the results on audit reports and when you compare revisions. But it does not.
- On query results, for example, on **Investigation** > **Queries** > **Queries**, if you click in a cell that contains a hyperlink query, a query is triggered. You cannot copy the link without triggering a query. Now, you can select a row by holding the left mouse button and dragging. Ensure that the query is not triggered until you release the left mouse button. Then, right-click on the selection and choose **Copy** from the context menu. The link is copied to the clipboard.
- If an FLI message is sent from one instance to another, the sending side might abort the connection and open a new socket to resend it. The problem occurs if sending the message takes longer than the

FLI receive timeout that is configured in the system settings. It occurs even when the receiving side continues to send keep-alives.

- When an instance is restored, archived directories of investigation cases are also restored. They should not be. The problem occurs when you use **Cluster** > **System monitoring** > **Settings** > **[instance]** > **Restore**. The data that is archived for investigation cases is deleted from the recipient instance and then transferred from the donor. The data is stored in the `inv/arc*` directories.

- A crash might occur if interfaces are updated numerous times within a short time period.

- On **Model** > **[revision]** > **Scoring engine** > **Model components** > **[external model component]**, overwritable input and output attributes are not selectable for conditions (Known Issue DT419551).

- On **Model** > **[revision]** > **Profiling** > **Counters** > **[counter]** > **Evaluation Conditions**, `There is an error parsing the expression` might display even though the condition is correctly defined. The problem occurs if the counter contains a condition with a text, numeric, or timestamp attribute that is referenced in the expression. The same problem happens on precedents, events, and patterns (Known Issue DT419652).

- Investigators can sometimes transition cases unexpectedly because the case investigation privileges are handled in a nonintuitive way.

- On condition groups, for example, on **Model** > **[revision]** > **Scoring engine** > **Model Component**, an input field is missing. The problem occurs if you select a text attribute and then choose PREFIX EQUAL TO or PREFIX [NOT] EQUAL TO as the operator. The field where you define the number of characters for comparison is missing (APAR PO10143).

- On case investigations, for example, **Investigation** > **Investigation** > **Case search** > **[case]**, tables might overlap the sections for sending case actions and transitioning the case. The problem occurs if a custom layout is used where tables are placed inside a tab section (Known Issue DT419238).

- On case investigations, for example, **Investigation** > **Investigation** > **Case search**, filters might not work correctly. The problem occurs if multiple tabs for case investigations are open.

- During golive, an instance might crash. The problem occurs if incoming MCI connections are already closed when bypass is deactivated (Known Issue DT423270).

- On **Investigation** > **Queries** > **[any query]**, the page might load slowly or become unresponsive. The problem occurs if the query contains a condition that has many expressions (Known Issue DT423897).

- On **Administration** > **System** > **Configuration** > **Misc**, **Minimum active instances** is optional if **Enable interlock** is selected. However, it might be mistaken as mandatory given the layout of the fields. Now, **Minimum active instances** is available only if **Ensure cluster availability** is selected. **Ensure cluster availability** is displayed only if **Enable interlock** is selected.

- When you try to access **Administration** > **System** > **Configuration**, a privilege error might occur. The problem occurs even if the user account has the global privilege to view the system configuration but certain other privileges are not assigned.

- On **Investigation** > **Investigation** > **Case selection**, the page might freeze and the Execute button is disabled. The problem occurs if you run a search with invalid conditions. To continue, you must reset your user preferences and refresh the browser tab.

- A golive might fail, which causes an instance to shut down and become invalid. The problem occurs if a PMML model with a `TransformationDictionary` is used in one of the submandator champion revisions.

- On **Model** > **[revision]** > **Scoring engine** > **Model component**, a model might be corrupted when you save it. The problem occurs for internal random forest models (Known Issue DT435020).

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- On **Model** > **[revision]**, changes are not immediately displayed. Instead, they are displayed the next time that the page is refreshed (Known Issue DT418104).

- Table cells are too small to show the full cell content. You must resize the column to see the content. Now, the full text displays in a tooltip when you hover over the cell. The feature is controlled by the new setting, **My Account** > **General Settings** > **Enable table hover**. The default is enabled.
- Throughout the user interface, when you apply a filter to a table, the number of matching entries is not displayed.
- Updated OpenSSL to 1.1.1zb. Updated cURL to 8.12.0. Updated the jsPDF, DOMPurify, and canvg packages to fix known security vulnerabilities.
- When messages are sent through the AMI, if they fail to be sent from the primary instance, they can be relayed to a secondary instance in an attempt to send them from there instead. If the secondary (relay) instance is restarted while it is receiving notifications through the FLI, duplicate notifications might be sent (Known Issue DT406968).
- By using the API, nonprivileged users can be added to the working queue without verifying their privileges.
- The color of the pen icon is inconsistent relative to the add, remove, and update actions. The problem occurs on **Model** > **[revision]** > **Revision overview** > **Revision control** > **Compare Revisions**. It also occurs on the **Case Audit Trail**, **Defined Risk List Audit Trail**, and **Retention Audit Trail**.
- On **Model** > **[revision]** > **Revision overview** > **Revision control** > **Compare Revisions**, incorrect revisions might display in the dropdown list of revisions (APAR PO09787).
- On **Investigation** > **Investigation**, use any menu item to open an existing case. If you select a case in **Case history** and then click **Close** or **Follow up**, the dialog box is hidden behind other elements on the page (APAR PO10128).
- On condition groups, for example, on **Model** > **[revision]** > **Scoring engine** > **Model Component**, tooltips display too long. The tooltips overlay fields. They prevent you from working with the condition group. Now, tooltips on condition groups are disabled. There are three exceptions. Firstly, what appears after choosing `equal`, `not equal`, `close to`, and `not close to` for numeric attributes. Also, what appears after choosing `close to`, `not close to`, and the number of a single-character for text attributes. Lastly, what appears after choosing `close to` and `not close to` for timestamp attributes (Known Issue DT421941).
- When cases are assigned to working queues, the processing time is longer than expected.

Download instructions

Download IBM Safer Payments 6.4.2.11 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.11 download link	15 May 2025	English	154.48 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

SaferPayments_6_4_2_11.zip:

c5d471bef20ae46567b09c1d4231708552cd73674a9c14368fc7c32b9189201f

- MD5

SaferPayments_6_4_2_11.zip:

3fd9c50ad8bfe82daed1fb2d1b2da9c9

Chapter 17. 6.4.2.12 Release Notes

The Release Notes contain information about defect fixes, changes, and updating to IBM Safer Payments 6.4.2.12.

This release changed the version number from 6.4.2.11 to 6.4.2.12. It contains Low Impact changes according to PA-DSS.

What's new

IBM Safer Payments 6.4.2.12 includes neither new features nor enhancements.

Release highlights

- None

Enhancements

- None

Update information

IBM Safer Payments 6.4.2.12 includes changes that might require you to take action.

Read relevant update information

Compare the current operational version to the version that you want to install. Read update information topics that are relevant to your situation.

If you install a...	Read update information topics for ...	For example, if the version changes from ...	Read update information topics for...
Fix pack	All fix packs between the two versions	6.4.2.02 to 6.4.2.12	6.4.2.03 up to 6.4.2.12
Major release	The target version up to the fix pack that you are installing	6.3.x to 6.4.2.12	6.4.0.00 and 6.4.x up to 6.4.2.12
Major release and skip one major release	The major release for the skipped version and all topics in the target version up to the fix pack that you are installing	6.2.x to 6.4.2.12	6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12
Major release and skip multiple major releases	The major release for the skipped versions and all topics in the target version up to the fix pack that you are installing	6.1.x to 6.4.2.12	6.2.0.00, 6.3.0.00, 6.4.0.00, and 6.4.x up to 6.4.2.12

If needed, see:

- 6.4.0.00 Update information
- 6.4.1.00 Update information
- 6.4.2.00 Update information
- 6.4.2.01 Update information

6.4.2.12 Update information

- None

Change log

IBM Safer Payments 6.4.2.12 includes defect fixes, changes, Known Issues, and APARs.

Critical defects

The following critical defects were fixed:

- None

Major defects and changes

The following major defects were fixed and major changes were made:

- The content security policy is missing secure elements, for example, `object-src`. The HTTP header is missing `Referrer-Policy`. Now, the content security policy is stricter for `object-src` and `form-action`. Also, the referrer policy is now explicitly set (Known Issue DT382146).
- If a user is created with password change enforced, the change can be bypassed if requests are sent without using the user interface.
- Values might be decrypted in scenarios where it is unintended.

Minor defects and changes

The following minor defects were fixed and minor changes were made:

- Updated `Libxml2` to 2.14.4. Updated `@babel/runtime` and `pbkdf2` packages to fix known security vulnerabilities.

Download instructions

Download IBM Safer Payments 6.4.2.12 from IBM Fix Central.

Follow the installation instructions

For installation instructions, see the IBM Safer Payments Implementation Guide.

Download the installation image

Use the following link to download the installation image from Fix Central:

Download link	Release Date	Language	Size
IBM Safer Payments 6.4.2.12 download link	27 August 2025	English	154.45 MB

For information about using Fix Central, see Fix Central help.

Compare the checksum

Use the following hashes to verify the integrity of the download file:

- SHA-256

  SaferPayments_6_4_2_12.zip:

  ```
  cfc8faf755efa6826b27ad83e9914b9394894f4e4a4db3c968eb625e98b3db11
  ```

- MD5

  SaferPayments_6_4_2_12.zip:

  ```
  04ea84b5f68bdd84b46ba2dad4891574
  ```

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