

IBM Safer Payments  
Version 6.1

*Release Notes*



This edition applies to IBM Safer Payments release 6.1.x, Program Number 5725-Z82, and to all subsequent releases and modifications until otherwise indicated in new editions.

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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 6.1.x.

## 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 .

## Download links

- [6.1.0.00 Download instructions](#)
- [6.1.0.01 Download instructions](#)
- [6.1.0.02 Download instructions](#)
- [6.1.0.03 Download instructions](#)
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## Support community

To view and search for troubleshooting topics, alerts, workarounds, and more information, go to the [IBM Support Community](#).



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## Chapter 2. 6.1.x APAR fix list

The following APARs were fixed in 6.1.x.

IBM Safer Payments patches are cumulative, which means that a new patch contains all of its fixes and all fixes for prior patches of that major release. For example, 6.1.1.00 includes all fixes in 6.1.1.00 as well as those in previous 6.1 patches.

### 6.1.0.00 APAR fix list

[PO07689](#), [PO08561](#), [PO08509](#), [PO08481](#), [PO07931](#), [PO08361](#), [PO08460](#), [PO08447](#), [PO08467](#), [PO08483](#), [PO08427](#), [PO08462](#), [PO08299](#), [PO08494](#), [PO08282](#), [PO08243](#), [PO07873](#), [PO08257](#), [PO08417](#), [PO08329](#), [PO08285](#), [PO08378](#), [PO08401](#), [PO07874](#), [PO08338](#), [PO08159](#), [PO08344](#), [PO08326](#), [PO08328](#), [PO08276](#), [PO08358](#), [PO08297](#), [PO08281](#), [PO08335](#), [PO08315](#), [PO08286](#), [PO08014](#), [PO08145](#), [PO08184](#), [PO08235](#), [PO07838](#), [PO08240](#), [PO08230](#), [PO08173](#), [PO07401](#), [PO07968](#)

### 6.1.0.01 APAR fix list

[PO08530](#)

### 6.1.0.02 APAR fix list

[PO08534](#), [PO08654](#), [PO08687](#), [PO08673](#), [PO08479](#), [PO07963](#), [PO08426](#), [PO08625](#), [PO08547](#), [PO08645](#), [PO08041](#), [PO08532](#), [PO08647](#), [PO08508](#), [PO08453](#), [PO08626](#), [PO08528](#)

### 6.1.0.03 APAR fix list

[PO06805](#)

### 6.1.0.04 APAR fix list

[PO08717](#), [PO08511](#), [PO08017](#), [PO08732](#), [PO08725](#), [PO08562](#), [PO08682](#), [PO08533](#), [PO07904](#), [PO08709](#), [PO08236](#), [PO08672](#), [PO08680](#), [PO08668](#), [PO08731](#), [PO08275](#), [PO08444](#), [PO08619](#), [PO08389](#), [PO08649](#), [PO08243](#), [PO08705](#), [PO08126](#), [PO08631](#), [PO08750](#), [PO08652](#), [PO08481](#), [PO07671](#), [PO08512](#), [PO08768](#)

### 6.1.0.05 APAR fix list

[PO08810](#), [PO08789](#), [PO08757](#), [PO08797](#), [PO08526](#), [PO08719](#), [PO08738](#), [PO08777](#), [PO08435](#), [PO08827](#), [PO08541](#), [PO08642](#)

### 6.1.0.06 APAR fix list

[PO08778](#), [PO08557](#), [PO08821](#), [PO08966](#), [PO08834](#), [PO08782](#), [PO08850](#), [PO08907](#), [PO08935](#), [PO08793](#), [PO08751](#), [PO08925](#), [PO08873](#), [PO08913](#), [PO08871](#), [PO08911](#), [PO08914](#), [PO08837](#), [PO08815](#), [PO08558](#), [PO08623](#), [PO08734](#), [PO08826](#), [PO08824](#), [PO08844](#), [PO08847](#), [PO08885](#), [PO08829](#), [PO08875](#), [PO08805](#), [PO08817](#), [PO08772](#), [PO07896](#), [PO08857](#), [PO08851](#)

### 6.1.0.07 APAR fix list

[PO09200](#), [PO09130](#), [PO09185](#), [PO09161](#), [PO09041](#), [PO09146](#), [PO09088](#), [PO09124](#), [PO09136](#), [PO08859](#), [PO09024](#), [PO09131](#), [PO09066](#), [PO09003](#), [PO08878](#), [PO08795](#), [PO09139](#), [PO08887](#), [PO08961](#), [PO08991](#), [PO09065](#), [PO08400](#), [PO08922](#), [PO08984](#), [PO08968](#), [PO09092](#), [PO08944](#), [PO09011](#), [PO09120](#), [PO08909](#), [PO08890](#), [PO08938](#), [PO08987](#), [PO08908](#), [PO08899](#), [PO08769](#), [PO08840](#), [PO09180](#), [PO09184](#), [PO09238](#)

#### **6.1.0.08 APAR fix list**

[PO09209](#), [PO09290](#), [PO09313](#), [PO08923](#), [PO09243](#), [PO09325](#), [PO09245](#), [PO09158](#), [PO09275](#),  
[PO09117](#), [PO09276](#), [PO09306](#), [PO09054](#), [PO08865](#), [PO08606](#), [PO08390](#), [PO09252](#), [PO09173](#),  
[PO09188](#), [PO09192](#), [PO09254](#), [PO09241](#), [PO09063](#), [PO09194](#), [PO09327](#), [PO09148](#), [PO09149](#),  
[PO09175](#), [PO08947](#), [PO09155](#), [PO09137](#), [PO08816](#), [PO09075](#), [PO09145](#), [PO09037](#), [PO09056](#),  
[PO09242](#), [PO09262](#), [PO09373](#), [PO09418](#)

#### **6.1.0.09 APAR fix list**

[PO07255](#), [PO09027](#), [PO09134](#), [PO09138](#), [PO09166](#), [PO09187](#), [PO09196](#), [PO09277](#), [PO09285](#),  
[PO09295](#), [PO09297](#), [PO09320](#), [PO09335](#), [PO09346](#), [PO09362](#), [PO09393](#), [PO09401](#), [PO09456](#),  
[PO09469](#)

#### **6.1.0.10 APAR fix list**

[PO08515](#), [PO08657](#), [PO09132](#), [PO09240](#), [PO09284](#), [PO09298](#), [PO09319](#), [PO09326](#), [PO09379](#),  
[PO09386](#), [PO09397](#), [PO09400](#), [PO09405](#), [PO09410](#), [PO09428](#), [PO09435](#), [PO09440](#), [PO09441](#),  
[PO09444](#), [PO09446](#), [PO09449](#), [PO09450](#), [PO09452](#), [PO09454](#), [PO09461](#), [PO09470](#), [PO09477](#),  
[PO09480](#), [PO09483](#), [PO09488](#), [PO09495](#), [PO09504](#), [PO09540](#), [PO09545](#), [PO09547](#), [PO09584](#)

#### **6.1.0.11 APAR fix list**

[PO09104](#), [PO09215](#), [PO09300](#), [PO09331](#), [PO09340](#), [PO09383](#), [PO09443](#), [PO09465](#), [PO09508](#),  
[PO09552](#), [PO09607](#), [PO09610](#), [PO09611](#), [PO09613](#), [PO09620](#), [PO09621](#), [PO09639](#), [PO09640](#),  
[PO09661](#), [PO09673](#)

#### **6.1.1.00 APAR fix list**

[PO09025](#), [PO09399](#), [PO09413](#), [PO09481](#), [PO09525](#), [PO09601](#), [PO09643](#), [PO09646](#), [PO09664](#),  
[PO09686](#), [PO09690](#), [PO09701](#), [PO09721](#), [PO09724](#), [PO09738](#), [PO09742](#), [PO09751](#)

#### **6.1.1.01 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](#), [PO09834](#),  
[PO09839](#), [PO09854](#), [PO09867](#), [PO09870](#), [PO09871](#), [PO09872](#), [PO09878](#), [PO09896](#)

#### **6.1.1.02 APAR fix list**

[PO08111](#), [PO08209](#), [PO08644](#), [PO09191](#), [PO09445](#), [PO09548](#), [PO09557](#), [PO09632](#),  
[PO09784](#), [PO09790](#), [PO09794](#), [PO09796](#), [PO09818](#), [PO09824](#), [PO09831](#), [PO09847](#), [PO09850](#),  
[PO09852](#), [PO09857](#), [PO09873](#), [PO09882](#), [PO09885](#), [PO09891](#), [PO09894](#), [PO09900](#), [PO09910](#),  
[PO09913](#), [PO09920](#), [PO09935](#), [PO09942](#), [PO09952](#)

#### **6.1.1.03 APAR fix list**

[PO08429](#), [PO08747](#), [PO08864](#), [PO09422](#), [PO09756](#), [PO09859](#), [PO09895](#), [PO09917](#), [PO09918](#),  
[PO09925](#), [PO09927](#), [PO09938](#), [PO09950](#), [PO09951](#), [PO09955](#), [PO09958](#), [PO09959](#)



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## Chapter 3. 6.1.0.00 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.00.

This release changed the version number from 6.0.0.03 to 6.1.0.00 and contains high impact changes according to PA-DSS.

### What's new

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IBM Safer Payments 6.1.0.00 includes new features and enhancements.

#### Release highlights

- Simulations can now be run on instances other than the API instance allowing better utilization of the memory resources of the cluster. First, the instances must be enabled to run simulations using the cluster configuration page. To run a simulation on a specific instance, a button at the top of the simulation and the simulation report page can be used. Users are prompted with a table containing the available instances. Upon confirming the selection, all simulation-related tasks are performed on this instance. Changing the assigned instance disables the previously started simulation so one revision can perform one simulation only. The memory control page was extended to display simulations from all cluster instances. If an instance is not available when trying to access a revision or simulation running on it, the revision is automatically assigned to the current API instance.
- Safer Payments can now train random forest models using data from production or simulation. Previously, random forests could be ingested via PMML only. To train such models on data stored in Safer Payments, that data had to be exported first, transferred to another system, where it then was used to train the model, which then had to be transferred to and imported into Safer Payments. Now models can be trained inside of Safer Payments directly without exporting data or importing PMML. The feature can be found on the Model tab under Model factory. For more information, refer to the online help of these pages.
- Chunks of simulation data can now be exported directly from within the challenger revision in CSV (comma-separated values) format. This allows to perform external model training on new features. The new functionality is available as part of the simulation queries page and requires a dedicated role-based privilege to be granted.

#### Additional enhancements

- Capabilities to delete index entries and all associated values from the system by a single click on a button or a single API call have been introduced.
- Reporting queries allow a user to generate reports based on performance indicators, which are dynamically tuned result columns that are created by applying any set of conditions. Previously, Safer Payments Group by queries had only Genuine/Fraud/Total columns. Now, using a new Reporting queries page these hardcoded columns can be replaced using performance indicators. Reporting queries also support Timing analysis, Rule performance, and Account analysis.
- When deferred writing is enabled, Revisions, Cases, and Monitoring lists are now also written to disk deferred.
- A new feature makes it possible to define flexible targets for analytics and model generation. Unlike in the past, when modelling was performed solely against the "Fraud" flag, it is now possible to define target conditions. The value of meta attribute "Fraud" can be ignored by defining target conditions during the modelling process. All transaction records fulfilling the target conditions are considered as fraudulent, as if these transactions had "Fraud" flag being set. For more information, refer to the simulation page.

- A new element that is called Modeling workflow makes it possible to execute modeling elements like rule generation or analysis automatically after simulation or even create loops with entire model workflows. The workflow must be selected and started on the simulation page.
- Execution of Python functions can now be canceled after a certain timeout. The timeout can be specified globally or for each Python module independently.
- The PMML parser interfaces have been improved. PMML neural nets now allow a set of data transformations, which were previously only supported in tree-based models. For more information about supported data transformations, refer to the model components section in the online help.
- The external training capabilities have been extended. Safer Payments now allows execution of specific variants of boosted tree models via PMML. For more information, refer to the model components section in the online help.
- All the pages of the old UI were ported to the new UI.
- NormContinuous transformations normalize the input values in specific range, thus transforming all input values on a common scale. The normalization is done using piecewise linear interpolation. Given two points (a1, b1) and (a2, b2) such that there is no other point (a3, b3) with  $a1 < a2 < a3$ , then the normalized value is:  $b1 + (x - a1) / (a2 - a1) * (b2 - b1)$  for  $a1 \leq x \leq a2$ . The input values falling outside the normalization interval are the outliers and handled by the Outlier Treatment Method in PMML. Available Outlier Treatment Methods are:
  1. asIs: Extrapolates the normalization from the nearest interval.
  2. asMissingValues: Maps to a missing value. If no value is given in this case, outliers are mapped to 0.0.
  3. asExtremeValues: Maps to the next value from the nearest interval so that the function is continuous.
- Calendar profiles now provide the option to perform a period rollover during the end of day job. This deterministically updates period 0 (the current period) in absence of incoming transactions, which can be important as calendar periods can only be referenced by number, not by date. These updates can be enabled for each calendar profile individually and is disabled by default to not change the default behavior.
- Transactions can now be checked against compliance and defined risk lists without creating a transaction record. The verification result can now be directly included in the message response. This can reduce memory requirements in certain usage scenarios.
- Four API requests were added for the new user interface: 'EnableMqi', 'DisableMqi', 'DisableApi' and 'DisableBdi'. These allow context actions for interfaces 'Mq Interface', 'Application Programming Interface', and 'BatchDataInterface'. In addition an instance is now reserved for a user when being edited in the cluster settings form in the new UI.
- It is now possible to customize the look and feel of the new Safer Payments UI with the help of an additional "theme builder" command line tool. You can customize the colors, icons, and other styling of the UI corresponding to your preferences. To gain access to the "theme builder" tool contact your IBM support representative.
- Conditions now support references to case variables on the right side of an expression using the same syntax as references to attributes. For example: '[InvestigatingUserId] EqualTo[ClosedbyUserId]'
- Cases now keep track when the last aggregation happened. This can, among other things, be used in automated case transitions. To move cases from 'Followup' to 'New' upon case aggregation, an automated transition with the condition 'lastAggregationOnTimestamp > stateChangeOnTimestamp' can be created. Other conditions can be applied as well. Caution has to be taken that the transition changes 'lastStateChangeOn' in this example, otherwise it would be re-executed endlessly.

## Update information

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IBM Safer Payments 6.1.0.00 includes changes that you need to know about if you are updating from an earlier version.

- After starting the configuration with the new binary, only the API instance will be enabled to run simulations and all model revisions are assigned to that instance. Note that if you change the API from one instance to another, the revisions are still assigned to the old instance and run simulations

there. The API request 'getStatistics' was changed. When used on the Statistics page under the Analysis section of the revision page, the revision uid now has to be sent in as 'revision'. Previously it was sent in as 'uid'. API request 'setSimulationDataSelection' was also changed. The field 'simulationMethod' is now part of the 'data' object inside of the request instead of lying outside of it.

- Starting an existing configuration with this version creates a modeling workflow element with settings similar to former behavior and add it to simulation.
- Due to the update to OpenSSL 1.1.1, some old nonsecure encryption methods like SSLv3 or Diffie-Hellman static keys with 512 bit are completely dropped and will now create an error during startup. Some new modern TLS 1.3 ciphers are available with this update. Before the upgrade, remove 512 static bit Diffie-Hellman keys from cluster configuration. Alternatively, replace the content of the dh512 files with the content of new generated static Diffie-Hellman keys with at least 2048 bit.
- Automatic escaping of placeholder values was added to Notifications, External queries, and Case actions for target HTTP. The escaping method is selected by the configured content type. Check, if the content-type of HTTP Outgoing connections is selected correctly and evaluate if the content would still work properly with escaped values before updating.
- The fields in the GetMessage API response changed: "mayCreateTransactionRecords" is replaced by "messageProcessingStyle". The Save API request can contain message definitions containing either "messageProcessingStyle" or for backwards compatibility "mayCreateTransactionRecords".
- Before updating to this version, you must clear any docx case actions that are currently selected in case close codes or transitions of case classes. Removing them will not change any behavior because even if they were selected no case actions were sent. After the update, docx case actions cannot be selected anymore in case close codes or transitions. If they are not removed beforehand, they are ignored during startup and an error message is printed.
- A log message 745 was added if a fraud flag couldn't be set automatically on a remote instance. The retry functionality for fraud flags is disabled by default and needs to be activated in System Configuration to apply a fix.
- If the configuration contains conclusions in pre-processing rules, rules, final rules, or mergings that set meta attributessystem, primary URID, or primary instance ID make sure to remove these conclusions before updating. These conclusions will not be displayed correctly anymore after the update.

## Change log

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IBM Safer Payments 6.1.0.00 includes critical, major, and minor bug fixes and APARs.

### Critical changes

- Creation of files was not logged properly by log message 435 (APAR PO08401).

### Major changes

- The IBM MQ interface was deactivated before a golive but not reactivated afterward if the setting "close during golive" in system configuration is enabled (APAR PO07689).
- Major FLI synchronization issues occurred when quotation marks were used in risk list or compliance list entries and deleted afterward (APAR PO08561).
- Users were able to save a memo or the cpp of a case without reserving the case beforehand if the case was not reserved by any user. Now, a user gets a "not reserved" error message when trying to perform these requests without reservation.
- Some cases were not visible in the case selection if the user didn't have the privilege to view the case class of the case, even if he had the privilege to view the case (APAR PO08509).
- PMML Random Forest files were reparsed into memory at every golive, which caused memory fragmentation. Now the models are only reparsed if a change to the model occurs. This reduces the amount of memory fragmentation that occurs in the system. Repeated uploads of models with small changes and repeated changing of random forest input and output attributes can still lead to

increased memory fragmentation and therefore process memory consumption when performing golives and simulations (APAR PO08481).

- Executing a case state transition after clicking a hyperlink in a query on the "work case" page was reporting an "ITEM\_NOT\_FOUND" error (APAR PO07931).
- There was a "JSON not compliant" error when trying to bulk close multiple investigation cases and if the case classes were displayed as drop-down. Additionally, case classes can be stored again if case close codes switch its display from drop-downs to checkboxes (APAR PO08361, PO08460).
- The search parameter for masterdata queries was still visible in the browser URL, even if it was transmitted via HTTP POST and not HTTP GET.
- There was a problem when using several threads in simulation, analysis, and rule generation. This could lead to inconsistent results between several runs such as small differences in the number of records included in simulation queries, rule optimization, and rule generation.
- The requests assignElementToInstance, checkCalendarComputations, commitRuleScore, getLoadBalancingInstances, isSamplingEnabled, reserveEventLogMessage, saveEventLogMessage, unreserveEventLogMessage, and getCppsToHighlight did not return the usual "NO\_PRIVILEGES" response status when executed by a user without the proper privileges. The requests were still protected, they just did not behave consistently with the rest of the API.
- MS SQL escaping for the RDI was mentioned in the online help but couldn't be selected. Additionally, mergings with recompute target previously didn't write the SQL "update" statements in the RDI. The "update" statement will be added for mergings with recompute target (APAR PO08447, PO08467).
- Embedded investigation case queries were previously synchronous and added time when opening the investigation case. This is now loaded asynchronous, similar as in query results to avoid UI performance issues.
- Users were able to unreserve a case of another user. An unreserve for a case of another user will not have any effect anymore.
- Creating a manual case from the "create case" form without inserting the "primary URID" resulted in high latency when creating and opening the case (APAR PO08483).
- Auto-fill was disabled for password and username fields by adding the HTML attribute "autocomplete=off" to avoid that usernames are filled in automatically in browsers.
- There was a fatal error when the simulation report was requested for a revision that had ruleset defined when there was no champion revision for the revision's mandator.
- Errors that occurred while writing in data export jobs were not handled correctly and could even result in an application crash (APAR PO08427).
- There was a risk of "E 227" errors and also a risk of crashes when masterdata was computed and deferred writing was enabled (APAR PO08462).
- Changing rules or rulesets while a simulation was running and a later manual stop of the simulation could result in a blocking simulation that doesn't finish. A blocking simulation would also block later golives and prevent a clean shutdown. In rare situations, the instance could even crash after changing rules or rulesets (APAR PO08299).
- There was no XML, JSON, and URL escaping of placeholder values in OCCs. This could result in errors when trying to use XML, JSON, or HTTP-FORM that contained characters, which needed to be escaped properly to not break the encoding. Additionally, formatting multiple loop constructs was fixed for case actions (APAR PO08494).
- When a case was requested via get request shortly after an attachment was added, the case attachment response stream could have a trailing comma. Also, there was a missing comma in the case files rules fired object. This did not cause any problems but was invalid JSON.
- When rebuilding an index for which purging is enabled, the index will be purged automatically after the rebuild. Also, when purging and starting up an instance, all free nodes of an index are added to the list of available nodes now to speed up finding available nodes during insertion. When rebuilding or resetting an index, the purged nodes were not cleared previously although they were not of use anymore. In addition, this could potentially lead to unusable index nodes after the rebuild and existing index nodes to be overwritten (APAR PO07873).

- Re-create index jobs didn't close the FLI. Therefore, the execution time could be different between instances and the jobs could overlap between instances. Additionally, there was a risk of fatal errors and crashes in very rare cases during re-create index job if deferred writing was enabled (APAR PO08257, PO08417).
- Precedents, Pattern, and Counter could have random values in mergings with recompute target enabled if the index of the element wasn't computed (APAR PO08378).
- There was a performance drop on the dashboard and a small performance drop in case investigation, queries, and model, as some requests that are used in the dashboard became slower. The requests could slow down for 1 - 2 seconds, which could sum up to multiple seconds on the dashboard page. Only configurations with a large number of investigation cases were affected by this issue (APAR PO08338).
- Values of numeric attributes that are not formatted as PAN with dashes, were printed with an incorrect last digit in query results when starting with a 9 and having more than 15 digits, or when having more than 16 digits (APAR PO08159).
- A rare deadlock could happen if there were working queue conditions that use reporting attributes, which are no longer selected in case classes (APAR PO08344).
- If the priority of a monitoring list was changed while incoming transactions are computing, the monitoring list could block all incoming transactions permanently until next restart (APAR PO08326).
- Queries, simulations, and data export jobs were significantly slower in 5.7.x for configurations that had a large set of mandators (APAR PO08328).
- To avoid possible crashes the string handling of case variables "GeneratedOn", "ChangedOn", "FollowUpOn", "LastActionOn", "StateChangedOn", and "CaseUid" has been changed.
- Investigation cases that are created by sanction list jobs contained random values if the attribute was not filled by masterdata (APAR PO08276).
- Rule conclusions with boolean attributes could compute wrong values in simulation.
- The end of day job could block during index purging if a profile was defined on the same index that also had "update during merging" enabled and transactions that updated profiles when merging during end of day job (APAR PO08358).
- The synchronization performance of uploaded defined risk lists was improved and bugs were fixed. Previously, remote instances had issues with entries that were not replaced correctly and with unreadable filter criteria conditions of risk list entries after uploading defined risk lists (APAR PO08297).
- When searching in compliance lists by "list id" in the user interface, some entries might not be displayed (APAR PO08335).
- Performing multiple cluster changes at the same time, for example from remote instance, could block the incoming FLI permanently (APAR PO08315).
- For configurations with deferred writing enabled, the "last written urid" was written as value with additional "safety margin". So the "last written urid" value was usually written too far in the past, which caused additional data loss after having a crash. Additionally, the setOffline / setOnline function now dumps the deferred writing "time gap" and the unnecessary complete dump of FLI buffer during restore for donors has been disabled.
- An instance crashed when running a "copy definition of" on a ruleset if it had a rule with "Set masterdata" as an action (APAR PO08286).
- Placeholders for reporting attributes, masterdata, text modules, and case variables are now replaced correctly in docx case actions. Additionally, docx case actions were removed from the selection of case actions in case close codes and transition definition in case classes. Also, the text module selection dialog is only shown now if enabled text modules exist (APAR PO08014).
- The flag "use only printable ASCII" was lost after saving the System Configuration page.
- A user privilege was checked when risk list entries were added on remote through FLI although this check was not necessary and might lead to FLI messages being discarded in rare cases (APAR PO08145).

- When changing the fraud flag of a record manually via API, it was possible that the change was not forwarded correctly to a remote instance. This occurred if some instance had major synchronization issues and did not receive the trx record yet, but was able to receive the manual fraud flag change. An optional retry functionality was added to avoid such situations (APAR PO08235).
- Outputs for events and profiles are recomputed for a merged record if the merging has the options "recompute target" and "update calendar profiles and events" activated and the profiles or events have the option "update during merging" activated. If the merging changes the record of the last event in a way, so that the record does not meet the event conditions anymore, the timestamp that is stored in the event will be decreased to the previous event (APAR PO07838).
- It was possible to set meta attributes system, primary URID, and primary instance ID in conclusions of pre-processing rules, rules, final rules, and mergings. This could lead to problems with data selections. Therefore, these attributes cannot be selected any longer in conclusions.
- OpenSSL was patched to version 1.0.2r as general maintenance task.
- A "NO\_PRIVILEGES" dialog prevented case investigators from investigating cases if they did not have the privilege to change CPPs of cases.
- In releases SP 5.4.0.10, 5.5.0.02, 5.6.0.00, and higher, attributes in expressions of conditions and conclusions are saved with their uid instead of their attribute name. If a configuration is started from an older release with these or higher releases, and if an attribute in an expression had a name that started with the uid of another attribute (for example: "5480 Account number") the other attribute was used in the expression instead of the correct one. If the data type of this attribute differed from the data type of the input attribute of the condition or conclusion, the instance would not start. The same was true for attributes that are used in model formulas when starting with version 5.7.0.00 or higher (APAR PO08240).
- This issue affected the general prioritization of different modules. Some elements waited much longer for other operations than they should. There was a delay on golives, queries, latency KPI, and also other modules. For example, latency KPIs stopped working for multiple minutes after changing case classes or case close codes (APAR PO08230).
- Masterdata isn't filled for external queries in investigation cases if the record isn't available anymore (APAR PO08173).
- When running analysis with rule optimization, a fatal error occurred and the analysis was aborted if no index on the meta attribute account was defined (APAR PO07401).
- The release version string was added to backtrace files.
- The audit trail entry regarding successful or failing delivery of case actions was missing in the case audit trail. There was only an entry stating that the case action was triggered (APAR PO07968).

## Minor changes

- Libraries libxml and bzip have been updated to libxml2-2.9.10 and bzip2-1.0.8. Additionally, some security general best practice compiler options have been enabled to improve security.
- The formatting in common point queries was partially broken and contained extra " and [ ] characters
- When adding case alarms manually via context menu to case actions, the replaced attribute values of type timestamp were shown as numeric timestamp instead of formatted date with time in loop constructs (APAR PO08282).
- When a golive failed on a remote instance, it was possible that the instance was detached. For example, when the golive did not find a fitting challenger as target revision. Now, the instance is only set to state corrupted and shut down with an error message. This leaves more possibilities to recover the instance. For example, by manual changes on file level as there is no data gap compared to a detached instance where the FLI buffer is dropped (APAR PO08243).
- When the analysis data selection range was not within the simulation data selection range, a crash could occur during simulation/analysis. The analysis data selection is now adjusted correctly to be within the simulation data selection when applying changes to the simulation data selection (APAR PO08329).

- It is now possible to parse conditions that use scientific notations in their expression and thus possible to parse PMML models that contain such values. Previously, loading such PMML models resulted in parser errors and skipping parts of the model (APAR PO08285).
- Highlighting CPPs in query results could slow down resizing of tables when using Firefox. Also, as soon as one embedded query in case investigation had CPP highlighting enabled, all query results in case investigation were highlighted (APAR PO07874).
- The "Last transition User" column in case selection is now reconstructed from audit trail for old cases, which are synchronized via FLI, and persistent on the file system.
- Empty numeric values were printed as "0" instead of empty value in query csv exports and export jobs. An option was added to decide whether the original nil value that is defined in Safer Payments should be used for data type numeric, text, and timestamp or an empty value (APAR PO08281).
- Due to encryption change or after receiving a wrong formatted masterdata update, case data might have characters that are not json-escaped correctly and cause parser error issues in browsers.
- For users without compliance list change privilege, a no privileges error was thrown when clicking a compliance list form (APAR PO08184).
- Rule scoring was split into two steps. The first step is running rule scoring to create a table that shows the rules as they would look like with the new score conclusions. The second step is to select rules to be committed so the conclusion changes are applied to the challenger revision. With this change, it is possible, to score more than one rule a time.
- The form online help for merchant monitoring rules and index-based evaluations contained a faulty link to the online help for jobs.
- A client-side validator was added and text was changed for latency report settings.

## Download instructions

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Notice about downloading IBM Safer Payments 6.1.0.00.

### Attention:

Related to flash notice 1128213 and APAR PO08530. Do not install Safer Payments 6.1.0.00 but directly upgrade to 6.1.0.01. If you have already installed version 6.1.0.00, follow the instructions here: <https://ibm.co/35eeJxB>





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## Chapter 4. 6.1.0.01 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.01.

This release changed the version number from 6.1.0.00 to 6.1.0.01 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.01 includes no new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.0.01 includes changes that you need to know about if you are updating from an earlier version.



**Attention:** Related to flash notice 1128213 and APAR PO08530. Do not install Safer Payments 6.1.0.00 but directly upgrade to 6.1.0.01. If you have already installed version 6.1.0.00, follow the instructions here: <https://ibm.co/35eeJxB>

### Change log

---

IBM Safer Payments 6.1.0.01 includes a critical APAR.

#### Critical changes

- Counters, precedents, and patterns did not evaluate the index sequence during re-computation after a merging. Therefore, their output values were incorrect in this case (APAR PO08530).

#### Major changes

- None

#### Minor changes

- None

### Download instructions

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Download IBM Safer Payments 6.1.0.01 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
<a href="#">Safer Payments 6.1.0.01 download link</a>	13 Dec 2019	English	162151069 B

For more 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\_1\_0\_01.zip:

9d41c2ba7641a1470666f02c3c61c2f2e350f52cf56abc4c5040c30fa39ee40d

- MD5

SaferPayments\_6\_1\_0\_01.zip:

2241898d00414cd5f4a8c6558bbb9ed5

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## Chapter 5. 6.1.0.02 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.02.

This release changed the version number from 6.1.0.01 to 6.1.0.02 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.02 includes new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- The system information page now has a section with memory allocation information.

### Update information

---

IBM Safer Payments 6.1.0.02 includes changes that you need to know about if you are updating from an earlier version.

- After the first start, the following nil values are printed differently in outgoing case actions/notifications:
  - Nil values from query result placeholders no longer print to "empty", but to "original".
  - Timestamp nil values from masterdata placeholders no longer print to "-549755813888", but to "empty".

These settings can be changed in the Outgoing Channel Configuration definition.

- In PMML models, computation of numeric predicates changed if the constant has more decimals than the Safer Payments attribute. This can lead to different results.
- After the update, it is recommended to check the value that is configured for the new setting "Clear reporting attribute caches after". It should be set to the amount of days a case is usually still viewed or appearing in case selection once it is not active anymore.

### Change log

---

IBM Safer Payments 6.1.0.02 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- None

#### Major changes

- With deferred writing enabled, a crash could occur in rare cases when an event or calendar was updated by a merging (APAR PO08534).
- PMML Random Forest Models now show an estimated memory consumption in the golive report. To do this, models are pre-parsed after upload, which therefore can take a longer time (APAR PO08654).
- Aggregation of compliance lists was causing to increase investigation cases files constantly on remote instances. This could result in FLI issues and constant crashes on remote instances (APAR PO08687).

- The system could potentially crash when running a simulation query with the setting 'use simulation data selection' enabled, if the data selection definition covers records that arrived in the system after the simulation was started. Simulation queries now show only the simulated records when setting 'use simulation data selection' is enabled (APAR PO08673).
- If numeric attribute values were sent via outgoing channel configuration messages, like notifications or case actions, while setting 'format values' was disabled, then the values were always sent with three decimals no matter how many decimals were set in the attribute definition. The same happened when setting 'format values' was enabled, but the attribute was formatted with 'decimals without digit groups' (APAR PO07963).
- A pop-up error happened when comparing retired revisions where one revision had PMML models defined. A pop-up error could occur when opening the Model components table with PMML models in retired revisions (APAR PO08426).
- In PMML, random forest or PMML decision tree files conditions can often contain constants with long decimals. When such a condition was created from PMML in Safer Payments, the constant decimals were rounded to the maximum number of decimals of all attributes in the condition. Therefore, a condition like `Amount -> less than -> 0.00112345` was computed as `Amount -> less than -> 0.00`, when Amount had two decimals. Now it is computed with the decimal precision that is defined in the constant. However, a maximum of eight decimals is supported, so any additional decimals in the constant are cut off. For PMML conditions, this change can have the potential side effect that large numeric attribute values cannot be guaranteed to be evaluated as expected, if the condition has more decimals than the attribute. For example, when the constant has eight decimals, this limits the range of correctly evaluable absolute attribute values to 92,233,720,368.xxx.
- PMML model files are now compressed when transmitted over FastLink interface (APAR PO08625).
- Update during merging of events and calendars did not work as expected when using a peer index. The target attribute was never used even if it was selected in the event/calendar. Also, it was potentially possible that the champion MDC of events, calendars, or device identifications could be modified during a simulation if the simulation was performed in a sub mandator and a head element was simulated. This could happen by modifying attributes in the sub mandator for a simulation, which are used in a counter condition in the head mandator. If events, calendars, or device identifications used outputs of the counter in their conditions, this could change the data of the head element. Now, these elements use a dedicated simulation MDC and never access the champion MDC.
- The URI of "export cases table" HTTP request could get too long and could cause an HTTP error 414 during cases export (APAR PO08645).
- When the instance IDs are not consecutive numbers starting with 1 or if risk lists were created on a cluster with fewer instances, risk lists and cases might not be loaded during startup (APAR PO08041).
- A maintenance function was added to discard specific FLI messages.
- After moving a dialog, an included select field was storing the wrong value. By this, it was possible to transmit unwillingly and unknowingly a wrong select value to the server (APAR PO08532).
- There was a fatal error log message during restore on the recipient instance, if deferred writing was enabled and the instance was detached before restore (APAR PO08647).
- If there are Key performance indicators (KPI) or Status alarm indicators (SAI) with conditions, a remote golive could fail and invalidate an instance, if the golive was received by the instance during status "Synchronizing" at startup (APAR PO08508).
- One or several instances of a cluster could crash when a champion was retired without promoting a new champion and transactions were processed in parallel through the FLI (APAR PO08453).
- Resizing the capacity of multi-value masterdata could result in an infinite loop in a golive, which required to kill the application. Also, restarting with empty multi-value masterdata could also result in crashes and infinite loops when loading multi-value masterdata (APAR PO08626).
- Jobs could create deadlocks in rare situations, if there were multiple jobs running simultaneously and performing golives or shutdowns, while having W 174 "Thread pool limit exhausted for batch data interface" warnings.

## Minor changes

- Additional improvements and bug fixes were made to the new UI.
- Information about the current instance ID was added to system internals.
- The online help of Outgoing Channel Configuration definitions now lists the "Mask Values" paragraph only once.
- Numeric, text, and timestamp nil values in outgoing case actions and notifications can now be configured separately in an Outgoing Channel Configuration definition. For numeric and text nil values, the available options are "empty", "original" and "configurable". For existing Outgoing Channel Configurations, the value defaults to "original". For timestamp nil values, the available options are "empty" and "configurable". For existing Outgoing Channel Configurations, the value defaults to "empty".
- Case creation showed case classes in select boxes that were disabled (APAR PO08479).
- There was a "SESSION\_EXPIRED" error when the user tried to export data, when using OIDC SSO as logging method. Additionally, issues with page display were resolved when clicking the "logout" button, when using OIDC SSO (APAR PO08547).
- The response headers CacheControl: no-store, no-cache, max-age=0, must-re validate Pragma: no-cache were added to all export requests.
- An option was added to system configuration to configure when the reporting attributes caches of cases are cleared. Previously, the cache was cleared every day during end of day job. This could lead to prolonged waiting times in case investigation after the end of day job and increasing memory usage due to the repeated rebuild of the caches (APAR PO08528).
- In addition to checking the privileges of the user, it is now also checked that investigators who are no supervisors can only work with cases that belong to their private working queue or a public working queue where they are assigned as user. Also, the request to retrieve the users for the filter in case selection was changed to check the supervisor privilege instead of the case investigation privilege since only supervisor can access case selection.

## Download instructions

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Download IBM Safer Payments 6.1.0.02 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
<a href="#">Safer Payments 6.1.0.02 download link</a>	12 Feb 2020	English	162329598 B

For more 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\_1\_0\_02.zip:  
5b026ed271e1a01b10aa428e1e0046965423b0962a7ec00c271e20cf6753dc9b
- MD5

SaferPayments\_6\_1\_0\_02.zip:  
dd87c5aab280bfc9ae22c0d03dd11d6f

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## Chapter 6. 6.1.0.03 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.03.

This release changed the version number from 6.1.0.02 to 6.1.0.03 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.03 includes no new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.0.03 includes no changes that you need to know about if you are updating from an earlier version.

- None

### Change log

---

IBM Safer Payments 6.1.0.03 includes major bug fixes and APARs.

#### Critical changes

- None

#### Major changes

- When enabling client certificate validation for the MCI or API the server falsely complained about a missing password file for the client certificate even though there is no certificate password needed for these interfaces. This error only occurs when not using a password file for the server certificate or when the used password file is not named "private.pwd" (**APAR PO06805**).
- It was possible to run into a `double free or corruption` error with backtrace when sending in invalid data streams through the API.

#### Minor changes

- None

## Download instructions

---

Download IBM Safer Payments 6.1.0.03 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
<a href="#">Safer Payments 6.1.0.03 download link</a>	15 May 2020	English	154.82 MB

For more 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\_1\_0\_03.zip:

9615cbb3dba18f2951afe71275ba64d890b5ac6b2a3fc91e0368bb7def92b4fb

- MD5

SaferPayments\_6\_1\_0\_03.zip:

8584007b444cb4b0ceefe8289db0ce56



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## Chapter 7. 6.1.0.04 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.04.

This release changed the version number from 6.1.0.03 to 6.1.0.04 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.04 includes enhancements.

#### Release highlights

- None

#### Additional enhancements

- The URLs used for accessing the Safer Payments new UI was changed to add a /sp path before all routes. The user will be automatically redirected to the new URL if they attempt to access the old URL.

### Update information

---

IBM Safer Payments 6.1.0.04 includes changes that you need to know about if you are updating from an earlier version.

- The new functionality "close during end of day job" is optional and needs to be enabled in system configuration, if MCI or MQ should close during end of day job. This option will not exist anymore in Safer Payments 6.2, as this will be included by the "close during golive" option.
- Attributes that are used in computation conditions of indexes need to be stored in case they are not set by pre-processing rules/lists but are mapped. Otherwise, counters, patterns and precedents may not be computed during the re-computation of merging targets.
- No action required. Additional log messages 187 and 192 were added. Also, log message 575 changed to log message 574 in some situations, where it was incorrect before.
- PMML Predicates on numeric fields are now always calculated as IEEE 754 double precision values. Due to rounding errors, some results may be different compared to previous versions of Safer Payments.
- Two options have been added to "System Configuration" - "Case Investigation" which can increase the performance for case search and case selection (see changelog). It is recommended to turn off at least "include DDC to resolve uncached reporting attributes". If not needed, unchecking "Resolve uncached reporting attributes" brings additional performance.

### Change log

---

IBM Safer Payments 6.1.0.04 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- Fix crash in Simulation that evaluates a PMML tree model with nested MiningModel structures.
- Boolean attribute values that were set by applying masterdata or conclusions, were empty in notifications using attribute references. The same applied to hex and IP attributes that were set by applying masterdata.

## Major changes

- The simulation of collusion with firstparties containing text values could crash. Additionally, numeric firstparties were not displayed correctly in the result table.
- When running random forest generation an instance could have crashed due to an out of memory error. This was more likely when many categoric or custom categoric attributes were activated for model generation and when many records were selected for training or verification.
- While performing multiple case transitions simultaneously on cases that may share the same aggregation history, a fatal error could get triggered in rare cases. In very rare cases, there might even be a crash in such a situation (APAR PO08717).
- The EU sanction list format changed and couldn't be parsed anymore (APAR PO08511).
- The simulation of index sequences wasn't cancelling as fast as possible when priming from DDC. Therefore, stopping simulations that primed index sequences from DDC wasn't possible and it required to wait until the sequence finished priming from DDC (APAR PO08017).
- With overlapping mandator conditions of sibling mandators, it was possible to create cases via rule action that created permanent FLI synchronization issues on the remote instance.
- When clicking on the jobs table column 'Next start' the table won't get sorted. If the jobs page is revisited afterwards, without having clicked on other column headers, a 'Loading' sign will appear and from then on no columns can be sorted in the table (APAR PO08732).
- The MCI usually blocks during end-of-day job. An option was added to close the MCI during end-of-day job to make it easier and faster to switch to a fallback instance.
- The system could crash when evaluating compliance lists for names that contain an ampersand or Cyrillic characters that increase the length of the name when being romanized (APAR PO08725).
- The MQ interface does not pull messages anymore when the FLI buffer threshold for "Close MCI/MQ at" is reached (APAR PO08562).
- The application could crash after shutdown, while random forest model generation was still running. Additionally, a small memory leak was fixed that didn't cleanup revisions after deletion.
- There was the possibility of confusing golive report messages and crashes when a rule with rule performance tracking enabled did not use any MDC storage.
- When an alarm is aggregated onto a case which is simultaneously archived by the end of day job, the archived case will not be recreated on remote instances anymore (APAR PO08682).
- PMML Random Forest and Boosted Tree models did not update their output attributes after a golive with no changes to the model.
- Counters, precedents and patterns were not computed during recomputation of targets after a merging when using an index that had computation condition attributes that were not stored and set by preprocessing rules or lists. Also, counters, precedents and patterns were not computed when using peer indexes and selecting the target attribute.
- With standard glibc-malloc there is no way to release memory back to the operating system. This is possible if safer payments is started with tcmalloc. To call the release free memory function, an API call has been implemented.
- Since SP 5.7.0.04, SP 6.0.0.01 and SP 6.1.0.00 the usage of `recompute target` in a merging in combination with the usage of a calendar profile, in which the setting `include current` was disabled, could produce wrong calendar profile output values due to the recomputation of the profile during merging (APAR PO08533).
- In charts KPI data was interpolated when zooming out using a maximum of 5000 data points so peaks were not always visible in the chart. For all types except "external" and "investigation cases" the maximum data points in the range will be used now instead of interpolating the data (APAR PO07904).
- When pressing "Stop simulation", PMML models which have been parsed for simulation were not freed from memory.

- A crash was possible during rule generation in case an attribute was included in rule generation that had attribute usage intervals and either the same From and To value or a step that exceeded the interval (APAR PO08709).
- Log messages for the start and finish of data export jobs, index based evaluation jobs, report generation jobs and sanction list jobs were added. Also, log message 575 was changed to 574 at locations where it was incorrect before.
- During case creation from query results, a fatal error occurred when a case was created for a record that belonged to mandator without a champion revision. The fatal error had no further impact except from the case not being created (APAR PO08236).
- The search for not cached reporting attributes in case selection and case search can take a lot of time if case classes with different sets of reporting attributes or new reporting attributes have been selected. This was fixed by attaching optional conditions to the search mechanism, which can be found in "System Configuration" - "Case Investigation" under "Resolve uncached reporting attributes" and "include DDC to resolve uncached reporting attributes" (APAR PO08672).
- The application may crash, if a simulation report of a sub mandator is started while another simulation of a sub mandator is running that includes rules of a head mandator (APAR PO08680).
- Deleting working queues could lead to instances entering a hanging state that could affect the API, FLI and case dispatching as well as shutdowns. In some cases the instance had to be killed and restored (APAR PO08668).
- The users, managers and conditions of working queues were not locked against case investigation related activities. Thus there was a chance that changing working queues while cases were dispatched or investigators working, could lead to inconsistencies or crashes in very rare situations.
- The online help for the "lockdown" status is wrong. Instead of restoring the lockdown instance, it is required to restore all other instances from lockdown instance (APAR PO08731).
- Changing a working queue priority while the instance was receiving data could block the whole instance and even prevent a shutdown.
- On errors, Safer Payments tried to run gdb if it was installed. This could cause unnecessary timeouts on production systems, in case gdb was actually installed. Therefore, the gdb call was removed while using another internal stacktrace function.
- During shutdown if the ECI is disabled, the file "cfg/auto\_generated\_key.iris" may be written in a wrong way. This may cause the FLI to not forward users passwords updates and display the SCI as unreachable (APAR PO08275).
- Files in the "rep" folder have not been transferred during restore operations. By this, some message statistics might have been a bit lower than expected for an instance that just has been restored.
- An instance could get stuck permanently during go-live, if there was a lot of case investigation during the time of the go-live.
- There was a rare possibility for the simulation to crash, when multiple threads and method "chunked" was used. The likelihood of the crash increased when profiles were simulated that performed rollovers.
- A rare race condition could result in backtraces and crashes when changing queries and requesting them from server at the same time.
- The memory control page in the old user interface was not working correctly after preferences were reset or if the user never had used that page before.
- Retiring a champion will fail and may create major synchronization issues, if there are still active or invalidated challengers for the same mandator and if one of the challengers has rulesets defined. Additionally, the log message number for retiring a champion was fixed (APAR PO08444).
- It was possible to have some messages computed during shutdown in rare cases, which then were not stored to disk and not forwarded FLI (APAR PO08619).
- Waiting for responses from ODBC Outgoing Channel Configuration message could block the instance from shutdown, if the ODBC driver was not configured to have any timeout (APAR PO08389).
- The python folder was missing when exporting the cfg as zip in system internals or system configuration.

- When receiving HTTP requests via MCI, the 6th HTTP header that was relevant for SP was always ignored (APAR PO08649).
- There was a low risk of a crash when case investigation and golives were performed in parallel.
- When revisions are copied and golives are performed on the API instance in a short time span (on original revision and copy) it was possible that the remote instances receive the copy revision before the golive of the original revision is completed. So when the golive for the copy arrived, it tried to be performed on an invalidated revision. This was detaching remote instances (APAR PO08243).
- Message statistics not transferred during restore (APAR PO08768).

## Minor changes

- System information which is deprecated in Linux has been removed from System internals page.
- When manually fraud marking transactions, an RDI update statement is created for the fraud mark timestamp attribute (APAR PO08705).
- It was not possible to create case classes if the champion revision of the head mandator did not define an output with meta attribute "Case Class". The form would always show a validation error for the "id" field. In this version, the meta attribute "Case Class" is not mandatory anymore and case classes can be created without it. Additionally regolives did not check the value ranges of the meta attributes for notifications, reminders and case classes against already existing elements. It was possible to invalidate existing elements with a regolive if the new champion reduced the value ranges of these meta attributes. In this version we added a check to prevent such invalid regolives (APAR PO08126).
- The server name that is sent within the header of HTTP responses can now be configured. If it is empty, no server name will be sent within the response. The default server name is still 'IRIS'.
- The "latest latency violations" section in system internals has been enhanced with two new toolbar buttons: "Expand all" and "Collapse all". These allow to show or hide all "time per computation" and "time per element" tables of all URIDs at once. In order to prevent severe load times and to have a clear arrangement, URIDs are now grouped into tabs of 8 URIDs per tab. This new feature is only available in the new user interface.
- Calendar computation could create latencies even though no index node was computed for the index used by the calendar (APAR PO08631).
- There was no validation on the API instance for invalid DDC/MDC changes caused by the maintenance function set MDC/DDC sizes. This caused the remote instances to stop synchronization after calling the maintenance function, as the remote instances performed a validation (APAR PO08750).
- Decrease memory consumption of tree based PMML models (Decision Tree, Random Forest, Boosted Trees) (APAR PO08652).
- The canAccessAnyMasterdata API request had no practical effect and was removed.
- PMML Boosted Trees files were reparsed into memory at every golive, which caused memory fragmentation. Now the models are only reparsed if a change to the model occurs. This reduces the amount of memory fragmentation that occurs in the system. Repeated uploads of models with small changes and repeated changing of boosted trees input and output attributes can still lead to increased memory fragmentation and therefore process memory consumption when performing golives and simulations (APAR PO08481).
- Category values will now be truncated to their UTF-8 corresponding value, in case that the attribute length is too small for the category length (APAR PO07671).
- There was the possibility of missing attribute or rule performance data in MDC after a golive performed a resize of the MDC where some data was filled up from DDC. This bug was fixed, MDC is now filled correctly after resize (APAR PO08512).

## Download instructions

---

Download IBM Safer Payments 6.1.0.04 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
<a href="#">Safer Payments 6.1.0.04 download link</a>	15 May 2020	English	154.90 MB

For more 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\_1\_0\_04.zip:

723a5026b9dbda134bb013ec52c111d9551c8cb8d59b85a540f4604cf4c8e1fc

- MD5

SaferPayments\_6\_1\_0\_04.zip:

4f975427a0c377171828d5105d0cd875



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## Chapter 8. 6.1.0.05 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.05.

This release changed the version number from 6.1.0.04 to 6.1.0.05 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.05 includes enhancements.

#### Release highlights

- None

#### Additional enhancements

- The Selected first parties tables will be opened in separate Internal window/popup when you click the button or icon for the same in Incriminating first parties tab and first parties at risk tab in Investigation Case.

### Update information

---

IBM Safer Payments 6.1.0.05 includes changes that you need to know about if you are updating from an earlier version.

- Checked all the filesystem reserved characters and replaced with under score.
- For SQL statements written by RDI for alerted cases a column INSTANCE\_ID was added to the insert statement of the HITTINGURID table. Also, the column HITTINGURID was renamed to URID. So for existing HITTINGURID SQL tables add a column INSTANCE\_ID and rename column HITTINGURID to URID.
- Additionally to audit and system logs, the log folder will now contain latency report files, in case latency reporting is enabled and latency violations happened in previous days. If external scripts or jobs are in use that delete log files after certain time, those scripts should be checked or adjusted in order to also delete outdated latency report files. The filename structure is 'latency\_log\_[instance\_id]\_[yyyy-mm-dd].iris'. From versions SP 6.0.0.07, 6.1.0.05 and 6.2.0.01 the setting `Clear latency entries during eod` was removed. The option is now redundant, because the reports are archived to files. The latencies will always be cleared from system internals during end of day job.
- The API request "getAllRulesTable" was changed. A "type" field is now mandatory to control which types of rules to retrieve. Valid values are "rule", "preprocessing" and "final". The request now also supports two filter options. The first filter named "filterRulesActive" can be used to either retrieve rules that are enabled or rules that are disabled or both. The second filter named "filterRulesInherited" can be used to either retrieve rules owned by the current challenger itself or rules inherited from higher mandators or both.

### Change log

---

IBM Safer Payments 6.1.0.05 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- User interface checks the correct privileges while marking transactions.
- Ruleset conditions are now shown below the rules form.

- My Working Queues page can be accessed again.
- User interface wouldn't allow to save changes to the profiling items because of a validation error.

## Major changes

- When alarms were aggregated, the remote instance would not update the case class, if the aggregated alarm was for another case class. (APAR PO08797)
- An unneeded request 'benchmarkDiskSubsystem' was removed.
- Changing stencil name no longer causes the stencil form to rerender.
- Special characters are now correctly displayed when uploading categories through CSV.
- Improved performance of dashboard charts.
- My account tab now gets correctly highlighted when navigating to the page.
- When parsing nested XML messages, XML attributes of the first element were not parsed. Only attributes of the following elements were parsed.
- "Show complete audit trail for element" does not falsely redirect to general model page.
- Case investigation list table and Query results table now display the table of rows.
- New risk list entries can be created without an expiry date.
- Clicking swapped conditions/conclusions no longer causes their values to revert.
- Analysis are now shown while rule optimization is running.
- Reservation and un reserve of elements while navigating through the user interface works correctly.
- Case class and investigation report results were not showing the correct symbols. "Σ" should be used for sum rows and "Ø" be used for avgs.
- Updated the formatting for several columns on the query statistics table.
- Multiple query executions were performed in special scenarios degrading performance.
- The average fraudulent amount column would display as NaN.
- Fixed a bug in the new user interface where only one value of an external query result is displayed. Also improved the styling of how external query result values are displayed.
- During creation of condition with operator 'number of single character' potentially invalid memory could have been read.
- When rebuilding an index or its sequence, the updated sequence attribute was not written to DDC when deferred writing was enabled. Thus, the values in the sequence were not persistently altered by the rebuild.
- SQL files generated by the RDI did not reflect attribute name changes after a golive. (APAR PO08789)
- No files were generated by the RDI in case the mandator name contained filesystem reserved characters such as / . (APAR PO08757)
- Encryption keys form's actions are enabled / disabled correctly.
- Index queries with peer indexes now display the sequence and aspect attribute fields.
- Defined risk list can now be defined with numeric output attributes that have categories.
- The 'Copy to' functionality now works as expected for model components.
- For alerted cases the SQL insert statement written by RDI did not include the instance id in the HITTINGURID table.
- The consumption of pmml models was not mentioned in simulation report. Additionally simulation could be started although pmml models were still parsing.
- Dashboard charts height is now independent from the status alarm indicators.
- Focused form headers now are not highlighted.
- In conditions, the close to operator now works correctly for timestamp attributes.
- Rules priority validation limit has been corrected (10000).



- IBM text in the user interface header has been removed.
- Fixed parsing of PMML decision trees due to not being able to find the output fields.
- Conditions expressions can now use decimals with the operation "Contains" when the selected attribute it refers to, has decimals.
- It was not possible to read from DDC of hexadecimal, ipv4, text and time interval attributes in simulation queries when production data was available for the attribute. (APAR PO08526)
- When transactions were loaded via job, values containing multiple spaces forced the program to crash in case the attribute had a length of 1 byte. (APAR PO08719)
- Values in query result could show up under wrong columns when the query included an encrypted numeric attribute and the user did not have the right to view unmasked data.
- Python functions used in conclusions are now recognized when creating a new rule.
- Attribute categories can be individually deleted.
- When recomputing a target transaction after a merging, URIDs that were already written to DDC in a previous deferred writing cycle were not written to disk again. This could result in data loss for attributes that were set during recomputation. (APAR PO08777)
- Merchant monitoring rules can now be saved.
- Index based evaluation form works correctly when modifying a calendar computation, as the name field no longer corrupts other calendar computations.
- Conclusions that use Python functions with multiple parameters can now be correctly defined.
- Latency violation reports are now archived to files in the log folder. This happens during end of day job in case latency reporting is activated and violations occurred. To view these files, export the logs folder on 'System Internals' page in section 'General Information'.
- Data selection conditions are now validated.
- Data selection input fields behave more user-friendly and performant.
- Simulation queries would show an error when refreshing a simulation query.
- User interface data wouldn't refresh if an operation required a restart.
- Data selection for analysis was working incorrectly.
- First time in any simulation statistic there was no data displayed.
- Alarms were not aggregated into cases when the score of the alarm was lower than the score of the case. (APAR PO08435)
- Copying a profiling item, which created new attributes could crash the system. (APAR PO08827)
- In the new ui, all case investigation functionality is now available immediately after reopening a case. This resolves a bug where the case investigation screen stayed in reopen mode.
- Users are now able to insert stencil names without relicking the input field after every keystroke. This resolves a bug where the focus of the stencil name input field was lost whenever a character was typed.
- Pattern "to" values of records time range, filler number and filler time range were not saved properly. This was fixed.
- Golives could start with a delay on the API instance when queries were running in parallel. Also, updating of elements such as case close codes, case classes, SAIs, case states, charts, user groups, working queues, case work flows, external queries, reminders, notifications, KPIs, messages and mandators could be delayed by queries. The purging of index nodes during eod could potentially also delay golives and updates of elements.
- The structure of the rules table in the new user interface was changed to always show all rulesets and not allow a direct filtering on a specific ruleset. Filtering for enabled or disabled rules and inherited or own rules is still possible. The button to add a new rule is now always enabled as long as there are rulesets defined in the challenger. The ruleset for the new rule can be selected in a new form field instead of depending on a top-level filter.

- Index based evaluations that evaluate multiple value masterdata could access invalid memory and calculate wrong results if the multiple value masterdata contained values that did not correspond to an index node on the associated index.
- Numeric or timestamp conclusions wrote the value 0 instead of an empty value into the output when reading an empty value from a numeric attribute, e.g in a conclusion `Numeric Output -> is -> {Numeric Input}`. (APAR PO08642)

## Minor changes

- The RDI Update statement generated when updating a case memo or the CPP of a case was missing. (APAR PO08810)
- Storage type field is now read only when there's no privileges to edit it.
- Read-only tags (ex. condition value) are styled similarly to other read-only fields.
- Disabled sorting for rule optimization statistics tables.
- Read-only multiselect fields appear as tags (with an optional popup that shows all items).
- Fixed issue where toolbar buttons for non-editable tables weren't clickable in Firefox (ex. help button, execute report button).
- While performing a copy of an element, clicking the same element that was copied now works as expected.
- During the copy of an element, if the user wants to copy a second element, the information is now correctly reflected.
- During upload of a case attachment the user is now seeing a loading indicator.
- Fixed a problem in the UI while switching between attributes, the old storage type would persist.
- It is now possible to view multiple case attachments at once in the new user interface. The opened view dialogs now scale in a much more user-friendly way.
- The case search page shows an empty table with a "no results" message when the search returns no results. The case search page doesn't show the result table unless both parameter and term are set.
- The CPP highlights didn't show in query results.
- Encryption keys form is now displayed to show the comments when the key is already active.
- Encryption keys tables now refresh according to the system configuration refresh setting.
- If there's an error deleting items from a table, then the table is refreshed.
- Internal windows experience has been improved in lower resolution screens, with boundaries checks and auto resizing in case of being too large.
- The model revision table refreshes automatically, based on the refresh interval setting. When a go-live is updating the status of model revisions, their status is displayed as "Revision changes".
- Mandators that can't be edited are shown as disabled in the mandator tree.
- Sequences section in the index configuration page now has a help section.
- The mandator tree on the admin tab shows conditions beside each mandator.
- Revision overview page now correctly disables the save button if there's no privilege to edit the revision.
- When a transaction was marked as fraud manually the timestamp attribute was not adjusted, when that attribute was defined in a sub mandator. (APAR PO08738)
- Added help for the calendar computation section in Index based evaluation.
- The job messages dropdown in the new UI also shows the message MTID.
- Conditions suggestions while using Python functions correctly displays parameters.
- Validation message while using Python functions in conclusions is now correct.
- Dashboard charts on the new UI show a help button when configured to do so. Dashboard charts on the new UI no longer show an empty tooltip if no tooltip is configured.
- Single rule analysis takes you to the simulation report page.

- Status Alarm Indicators show tooltips properly.
- The result tables for reports (case classes, investigation, missed cases, and investigator) show help.
- Formatting for category values was broken in tables of new user interface.
- After starting an analysis, the mandator selection in data selection is emptied and you have to reopen the page.
- User interface would not allow to delete multiple analyses at the same time.
- In the form of a pattern definition, the occurrences-related fields were not hidden when the occurrences value was decreased from a larger value to the value "1".
- The additional text to inform the user when there are more audit trail entries that can be loaded from disk was moved to a more central and obvious place.
- Added label and tooltip text for rewrite risk list in User Account -- > general settings. (APAR PO08541)
- OpenSSL was updated to version 1.1.1g.

## Download instructions

---

Download IBM Safer Payments 6.1.0.05 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
<a href="#">Safer Payments 6.1.0.05 download link</a>	31 Jul 2020	English	155.48 MB

For more 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\_1\_0\_05.zip:

cbea4af3a8d7b6afd0da027be02b9165f76b52faf68a5f958e68560475b1a2c4

- MD5

SaferPayments\_6\_1\_0\_05.zip:

3ee27f02d966e59b00ecf85e376e548a



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## Chapter 9. 6.1.0.06 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.06.

This release changed the version number from 6.1.0.05 to 6.1.0.06 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.06 includes enhancements.

#### Release highlights

- None

#### Additional enhancements

- Event log message 0284 is now activated by default in system log. It helps to spot when a message's computation was stopped due to duplicate sequence values.

### Update information

---

IBM Safer Payments 6.1.0.06 includes changes that you need to know about if you are updating from an earlier version.

- The base path to the Safer Payments new UI has been changed. It was previously available at ``/sp/`` but now is available at the root path, ``/``. The new "base path" parameter can be used to allow the path to be set to a custom value, in combination with a reverse proxy. If you are currently using a reverse proxy, then you may need to update the configuration when updating to this Safer Payments version, as the API requests for the new UI will now be based off this base path.
- PMML Predicates on numeric fields are now always calculated as IEEE 754 double precision values. Due to rounding errors, some results may be different compared to previous versions of Safer Payments.
- When a merging finds and recomputes a target record, the source record will never be stored. In previous releases the source was stored when a merging with the store source setting did not find a target, but a subsequent merging found and recomputed the target.

### Change log

---

IBM Safer Payments 6.1.0.06 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- The application could crash when using hard timeouts for python callouts.
- A caching system for the user interface (UI) static files has been added and the static UI files are now delivered in a bundled version. This can significantly improve the loading time when Safer Payments is deployed on a network with high latency, some configurations can see up to 10x improvement in loading times (APAR PO08557).
- Transactions containing future timestamp could cause issues in profilings that use a reference timestamp such as calendars and events. A possibility to discard or alter these future timestamps was added.

## Major changes

- When alarms were aggregated, the remote instance would not update the case class, if the case score was lower as the currently highest score.
- In the new UI, python scripts are not shown as suggestions in conclusions.
- A crash could occur when unreserving a revision while a simulation was running for this revision on a remote instance. (APAR PO08778).
- It was not possible to use the Safer Payments new UI when it was placed behind a reverse proxy. This is now possible by setting the 'basepath' property in the instance API settings. All API instances should be set to the same basepath (APAR PO08821).
- When saving a load file job while it was running on a remote instance, the remote instance potentially crashed (APAR PO08966).
- On the new UI, the MDC/DDC could not have a value higher than 2,147,483,647 in some forms.
- Batch job files may be loaded from NFSv4 shares now. Note: NFSv3 shares were always working in RedHat version until 7.3 and since RedHat version from 7.4 kernel-3.10.0-693.18.1.el7.
- A crash could occur when executing maintenance function `resetOutgoingFli` in fast succession.
- A deadlock could occur when a revision was erased or unreserved while a simulation is running for this revision (APAR PO08834).
- When deferred writing was enabled, the creation of RDI files was bound to the general deferred writing cycle instead of the cycle selected in Mandator settings. By creating a separate deferred writing thread for RDI files, this has been changed (APAR PO08782).
- When a pmml model file that had transformations was loaded in a Safer Payment below 6.1.x, after upgrading to 6.1.x or higher the system potentially crashed during computation of the model in realtime path or simulation (APAR PO08850).
- The application could crash when simulation was stopped shortly before finishing computing (APAR PO08907).
- On the new UI, when viewing a data export job that exports encrypted data with a user that is not allowed to change jobs, the "salt" field showed garbage values instead of a proper hint to the user that he does not have the privileges to view the salt.
- In some cases times entered in data selections of the old UI, could show different times in the new UI.
- On the new UI, the user was not able to edit the time in the Defined risk lists entry expires field.
- On the new UI, when defining a substring preprocessing in mappings, users could not start on the first character of a string.
- In reporting queries result, the performance indicator column for amount is shown with the same number of decimals as the meta attribute amount. Also, Average amount is shown with two decimals and ratio would be shown with four decimal precision.
- A crash could occur while marking transactions as fraud or genuine in case investigation page if there are more than one queries available for the case class.
- After having saved a memo or cpp within case investigation the context menu in alerted transactions table didn't show up anymore (APAR PO08935).
- When a revision got copied on the API Instance, using a source revision that was assigned to a remote instance simulation wise lead to an error when opening the new challenger. The copied revision gets automatically assigned to the API Instance now (APAR PO08793).
- The system could have crashed when 'delete index entry' was executed from masterdata query result on an index that originally had a sequence, but the sequence was later removed (APAR PO08751).
- A performance decrease in queries and purging of index nodes was fixed which was introduced in versions 5.7.0.10, 6.0.0.07, 6.1.0.05 and 6.2.0.00 as part of a change to make sure that queries do not block golives and configuration updates (APAR PO08925).
- Values were potentially shown in wrong columns in reporting query.
- Copying a ruleset to another revision resulted in malformed masterdata rule actions (APAR PO08913).

- Using case search with encrypted attributes would yield no search results and disable further access to case search page (APAR PO08871).
- On the new UI, it was not possible to have values less than zero as ratio in sampling.
- Under rare circumstances an instance could crash when two users ran the same report (investigation, investigator, case queue or missed cases report) at the same time (APAR PO08911).
- When a FLI message was written exactly 17 bytes before the end of the buffer file, which means the message header exactly fit at the end of the buffer, the FLI buffer was corrupted. Additionally a misleading log error was printed after attempting to write 0 bytes to a file (APAR PO08914).
- On the new UI, in the user account form the copy icon was disabled even with the correct privileges.
- The real-time computation of internally generated random forest model components was predicting the output twice instead of once increasing the latency to compute a transaction.
- It was not possible to download files from the Safer Payments old UI when Safer Payments was used behind a reverse proxy (APAR PO08837).
- When rules which contain Python functions returning a string within a conclusion were triggered, instances on Linux would crash. This is the case for Python versions greater than 3 (APAR PO08815).
- The online help of calendar profiles did not mention that update calendar profiles and events should be enabled in all mergings that have conclusions, which use the profile's amount attribute or the profile's conditions attributes to avoid unexpected values in profile output attributes (APAR PO08558).
- The system crashed when the ``getRulesStatistics`` contained a ruleset that does not exist.
- On the new UI, in dashboard charts the last week, last day and last hour filters would take current time as "to" reference.
- On the new UI, key entry permission dropdown, key management dropdown and view unmasked data checkbox are shown in system configuration page only when the SP instance is encrypted. Log field has been removed from the Page refresh section in system configuration page.
- When a user did not have the privilege for a top mandator, then inside a sub mandator revision that user was not able to view some revision elements (like counters, calendars etc.) that belonged to the top mandator (APAR PO08623).
- When performing a head mandator golive in between simulations of a sub mandator including attributes of the head mandator, the application could crash or incorrect simulation results for attributes could be produced (APAR PO08734).
- During Startup, the Job Table tries to load when the job is clicked. Since the job is not yet created, it crashes the instance (APAR PO08826).
- On the new UI, Count Records function popup has "Cancel" and "Confirm" buttons with same effect.
- Changing tabs in any revision element page would remove previously displayed form below the table.
- Decimal precision in value expression of a condition is changed while changing the operator.
- The performance of uploading defined risk entries on secondary instances was too slow. Adding/editing/deleting/uploading defined risk list entries during upload is prevented to speed up the upload on remote instances and shows a dialog describing the reason (APAR PO08824).
- When an invalidated revision is deleted during golive, a crash could've happened (APAR PO08844).
- The system enters a deadlock situation when a message is being processed and a defined risk list or a compliance list is deleted (APAR PO08847).
- Correctly sets start date and expiry date for a defined risk list entry as per the start date, expiry date and default lifetime setting of the corresponding defined risk list.
- It was possible on some machines with specific versions of the krb5-libs library installed for Safer Payments to crash when doing an SSO login (APAR PO08885).
- Safer Payments could crash when performing a golive which increases MDC size of an attribute or a rule. This crash happened only when deferred writing was enabled and the golive was executed before there was any data written to the attribute or rule DDC. This crash is no longer possible.
- Uploading a docx template file for a DOCX Outgoing Channel Configuration failed with an error in the UI. This has been fixed.

- Improves the UI performance of Audit trail and compare revision tabs under revision control of a revision by reducing the initial load time of audit entries.
- Running a missed cases report while a golive was occurring could occasionally lead to instances entering a hanging state that could hang a golive as well as prevent shutdowns. In some cases the instance had to be killed and restored.
- The change will allow the sp to save the Amount value with 2 decimal places correctly.
- The system could crash when no rule generation result existed but request 'getRuleGenerationExplore' or 'setRuleGenerationIndicator' was sent. This could for example happen when on one browser tab rule generation was stopped but on another tab the old result was still visible and user performed request 'Explore all indicators' (APAR PO08829).
- Values encoding in Outgoing channel configuration now works correctly for UTF-8 values.
- Revision pages would not work on a recently updated Safer Payments instance if during the update the API was enabled on a different instance that still has not been updated yet. This was due to the fact, that during updates, all revisions are automatically assigned to run simulations on the API instance. After the update of the first instance, opening the revisions on that instance will cause it to try and get the revision information from the previous API instance which is still outdated and cannot handle these requests returning invalid responses leading to UI errors. The changed behavior will automatically assign the opened revisions to the current API instance in such cases.
- When saving simulation queries, the data selection was not adjusted to be within the simulation data selection when the simulation query data selection was below the simulation data selection. This was only an issue when sending the save request manually without sending checkDataSelection first. When using the UI, the data selection was adjusted correctly (APAR PO08875).
- UI Preferences are now cached to avoid unnecessary requests to the server when entering the page again.
- Tables will now show previously fetched content while fetching the updated version, diminishing the loading skeleton's impact on the product.
- The system could crash when there is no space while the export jobs was scheduled (APAR PO08805).
- The system could crash when a condition was computed that used 'ignore cases' and multiple text attributes in the expression (APAR PO08817).
- Golive did not interrupt data export job and had to wait for it to finish. Additionally resuming an interrupted data export job could take longer than necessary, since the last computed urid was not stored (APAR PO08772).
- The online help for calendar projection did not reflect correctly how projection is currently calculated (APAR PO08857).
- It was possible that "Expand all" and "Collapse all" were both enabled in sidebar menu to be clicked at the same time.
- It was not possible to collapse all unless you first expand all in the audit trail.
- 

## Minor changes

- Now "Not Synchronized" FLI state is correctly displayed in the FastLink status table in cluster settings page.
- When a hyperlink query is opened and transaction is marked as fraud, the select field in the opening popup had incorrect labels.
- Handled incorrect user preference while loading safer payments investigation tab for first time.
- Categories were not displayed in case selection and tables of alerted transactions in case view.
- The Golive report message shows correct sizes of the MDC and DDC consumption, when there is a memory decrease (APAR PO08873).
- Simulation keeps loading on the screen when the rule generation is under process.



- The configurable nil value timestamp in outgoing channel configuration was changed to allow 19 characters, in order to support standard timestamp definitions.
- Fixes UI error while loading the dashboard page immediately after adding a new KPI.
- Case search and selection is debounced.
- Added a div tag as parent of dropdown with the css of width and position (relative).
- After changing decimals of a numeric attribute in a challenger, simulation and Model/Test potentially produced wrong computations, because it calculated with the old number of decimals.
- When a merging recomputed a target, but a previous merging or masterdata had already marked the merging source record for being stored, following issues happened: On the primary instance the primary urid of the merging source record was empty. The merging source was recomputed instead of the target. Potentially wrong values were written to output attributes of the source record. In case a merging recomputes a target, the merging source will never be stored now (APAR PO07896).
- Validation prohibited saving a condition or a formula with the seconds denominator 's', e.g. ({Timestamp}+2s) (APAR PO08851).
- In the user interface, the dropdown options in popup should no longer be masked by the modal.
- Added revision status bar to model component pages.
- Changed the new UI "copy rules" behaviour to be similar to the old ui - copy to another revision instead of other ruleset.
- On the new UI, when there are too many data points on a bar charts x-axis, the bar chart component takes a while to load. (Causing page to be irresponsive in the mean time.)

## Download instructions

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Download IBM Safer Payments 6.1.0.06 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
<a href="#">Safer Payments 6.1.0.06 download link</a>	12 Nov 2020	English	149.34 MB

For more 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\_1\_0\_06.zip:

471d05770923cfb75ff897e9762ac6085ef06ff8482eab2ee4af7eef2a3d5013

- MD5

SaferPayments\_6\_1\_0\_06.zip:

d535cec4834e838840d96f09459d3642



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## Chapter 10. 6.1.0.07 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.07.

This release changed the version number from 6.1.0.06 to 6.1.0.07 and contains no impact changes according to PA-DSS.

### What's new

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IBM Safer Payments 6.1.0.07 includes enhancements.

#### Release highlights

- None

#### Additional enhancements

- When a query was changed while another user requested the queries table through the UI or a script it was possible that invalid memory was accessed and a segmentation fault occurred (APAR PO08795).
- The system could crash when no rule generation result existed but request 'setRuleGenerationFollowingIndicators' or 'setRuleGenerationPrecedingIndicators' was sent. This could for example happen when on one browser tab rule generation was stopped but on another tab the old result was still visible and user performed request 'select this and all following intervals'.
- Case score of value larger than 6 digits showed an incorrect value due to rounding to the nearest 10th divisible in alarm score table and case data table (APAR PO08899).

### Update information

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IBM Safer Payments 6.1.0.07 includes changes that you need to know about if you are updating from an earlier version.

### Change log

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IBM Safer Payments 6.1.0.07 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- Random Forest Generation can cause intermittent crash during data selection, or getting status of RF generation, or saving Random Forest model after the general. Also, switching API after Random Forest model generation may also cause instance to crash (APAR PO09238).
- In revision files attribute references of internal random forests were duplicated exponentially with each golve, causing large revision files and long times to copy revisions or startup an instance. Already existing duplicate entries will be removed on startup with this Safer Payments version (APAR PO08987).
- We have resolved a potential crash that occurred when executing an investigator report before and after a new case state was added to the configuration (APAR PO08984).
- 

#### Major changes

- Several additions to logging were made:
  - Added log messages with number 822 whenever starting a report (case queue report, investigation report, missed cases report, user report) and 823 whenever a report finishes.

- Added further details to condition and conclusion log messages.
- When saving the settings form, if the save button was hit more than once (e.g. accidentally double clicked) then it was possible for some of the values to be saved incorrectly (APAR PO09200).
- A detection mechanism for sequence loops in simulation of precedents and counters is introduced. This prevents simulation being stuck because of sequence loops (APAR PO09130).
- When attempting to upload a PMML model with many Data Field Mappings then the new UI can crash (APAR PO09185).
- When the length of an attribute and the categories were saved at the same time, then the simulation was not invalidated, if a simulation query was run on the invalidated simulation data, then it was possible for the instance to crash (APAR PO09161).
- We have guarded Safer Payments against a crash that was possible when a MCI ssl socket was shut down due to inactivity (APAR PO09041).
- FLI rate dropped for the duration of FLI retry connection at random times causing higher buffering rate than sending rate (APAR PO09146).
- Context actions on the cluster table (e.g. "Enable API" / "Disable MCI", etc.) do not write changes to file, if any of the instances in the cluster rejected the change (e.g. during a feature upgrade scenario) (APAR PO09088).
- An instance could crash when deferred writing overlapped in a bad way with a rule action overwriting a defined risk list entry (APAR PO09124).
- When using OIDC, if a user logged in to 2 browsers at once and then logged out in one of the browser tabs, it was possible for the UI to hang and display a white screen (APAR PO09136).
- In Safer payments' new user interface, in the mappings page, the table's performance becomes very slow while resizing the column and there are large number of messages. It could also cause the browser to crash. Out of the three tabs namely, Input attributes, Output attributes and All attributes, now only the active tab's content will be rendered (APAR PO09180).
- Added a "Hide Logout" setting to the Authentication Settings, which appears when OIDC, LDAP with SSO, or LDAP & Local with SSO are selected. Enabling this setting hides the logout button (APAR PO08859).
- There were some files which were not being cached. We introduced the ETag header to allow for caching of these files.
- The logout call from the New UI was changed from POST back to GET.
- When using case aggregation history, the highlighting of the most important alarm did not work as documented. Instead of highlighting only the most important alarm, i.e. the most recent alarm with the highest score, the old user interface highlights all alarms with the highest score while the new user interface only highlights the most recent alarm even if it did not have the highest score.
- The system configuration setting "mask values in notifications and case actions" was basically meaningless as the "mask values" setting in each individual outgoing channel configuration overwrote it. We therefore removed the system configuration setting along with the "getDefaultMaskEncryptedValues" API request that retrieved it. The PCI DSS report will now check the "mask values" setting of each outgoing channel configuration individually and contain a warning for each channel that does not mask outgoing values.
- Golives that increased the system time attribute could result in an application crash if a sub-mandator owns rules that were enabled for performance reports (APAR PO09024).
- The start up of the application will be prevented in case python callouts cannot be resolved that are referenced in the model. For debug purposes a start up parameter was introduced. When starting up with ignore\_python\_errors, it is still possible start with missing python functions. This start up parameter should not be used in production as missing python modules can lead to crashes during golive.
- MCI connection overflow may cause the processing thread to hang (APAR PO09131).
- There was a possibility of a wrong outcome when evaluating case masterdata conditions of data type text.

- In Safer Payments' new user interface, in any of the profiling page like counters, calendars, etc, when user quickly selects a profiling one after another before the previous selected profiling has loaded completely, then the attribute of the previous profiling item would be displayed for the current one. Upon saving the current profiling, the previous profiling's attribute would be saved for the current profiling. This led to same attribute being referred in two profiling (APAR PO09066).
- The column width preference was lost upon sorting a table.
- Safer payments can now calculate detailed latencies that previously were only combined under 'Misc Wait Times'. To enable this turn on 'Log misc wait time details' in system configuration.
- The end of day job was trying to access case attachments that have been wiped previous been wiped causing an exception.
- It was not possible to define masterdata on a time interval attribute when using a peer index (APAR PO09003).
- The system internals page did not show any information about the availability of the WebSphere MQ functionality on a given Safer Payments instance.
- The "LastActionOn" from Case was not updated in case, when a case action is triggered.
- Masterdata values with decimals did not show up in the hit condition values table of cases created by an index based evaluation.
- Deletion of attributes in calendar form in the new ui was not possible as the delete button was always disabled.
- When a simulation query with conditions on data selection is run and the user has enabled the checkbox to use the simulation data, a hard crash can happen.
- If multiple masterdata elements for an index linked to the same output attribute, the values of these masterdatas were not shown correctly in the masterdata query result.
- The case attachments table preference was stored for each case individually which resulted in a huge number of preferences to be stored in the user's file. Since these files are transferred over the FLI often, their increased size slowed down the overall synchronization speed of the cluster. We changed the behavior of the software to now only store a single user preference for this table. If you've suffered from the aforementioned problem it's recommended to reset the user preferences of each account that opened a lot of cases in the past. Preferences can be reset for each user individually on that user's "My account" page. A global reset for all users can be done using the maintenance function "reset user preferences" (APAR PO08878).
- A deadlock was possible when starting the rule generator right after the instance had been started and when the rule generator then ran into an error or was manually stopped at a bad time.
- Crash (read access violation) could happen when starting and stopping a simulation around the same time.
- Golives that changed the system time attribute from not being stored to being stored resulted in an application crash if rules existed that were enabled for performance reports.
- The expression under condition or conclusion in merging was not showing attributes at multiple instances(example when the page reloads after creation of new merging (APAR PO09139).
- Crash (segmentation fault) could happen when sending the "logout" API request more than once in parallel (APAR PO08887).
- After a masterkey change, encrypted values in revision audit trail files were not reencrypted with the new key and created "parser errors" when viewing them (APAR PO08961).
- It was not possible to set a value for the fields "encrypted" and "overwritable" when saving attributes in the old UI (APAR PO09065).
- A condition with preceding zeroes in the numeric expression and operators 'endsWith', 'startsWith' or 'contains' could have computed incorrectly because the zeroes were not taken into account. For example condition 'NumericAttribute->endsWith->06' returned true instead of false for attribute value '456' (APAR PO08400).

- In the model revision page of safer payment's user interface, sharing the revision from the general tab does not hide the modelling option from the left side navigation. This fix refreshes the left side navigation menu after sharing the revision.
- Due to a defect in API calls, revision comparison showed "undefined" values (APAR PO08922).
- In conclusions section in rules on selection of the a numeric attribute the user is not able to pass a string parameters in a python function.
- It was not possible to use python functions in rule conclusions on the new UI.
- After a master key change, group by query conditions that include encrypted attributes were not reencrypted correctly and thus not usable anymore (APAR PO08968).
- Exported Event log messages incorrectly printed the external log enabled value in the place of the audit log enabled (APAR PO09092).
- In mergings conclusion, attributes which were not stored in MDC or DDC are not able to be selected.
- In conditions form, saving an interval expression does not remove letters t, n and r when they are provided as fist letter in the interval value. e.g. "tue~thu"(APAR PO08944).
- We resolved rare race conditions that could lead to crashes when operating rule generation or random forest generation while disabling simulation at the same time. The crashes could happen when starting rule generation while disabling simulation or when committing a condition while disabling simulation or when disabling simulation while random forest generation is running.
- There was a possibility that a FLI connection is simultaneously sending two messages. This could result in a FastLink acknowledge error and to duplicate transactions on the remote instance. The probability of this bug was increased when using a large amount of FLI threads (APAR PO09011).
- Various changes to the help section fixing links and images.
- After Investigation - Cases- "Send case action" was disabled from Admin - roles, the case investigation was not accessible because of the error popup informing about no privileges.
- A csv download functionality is made available for all tables. The download contains the data shown to the user, incorporating filter settings and the appropriate formatting. Exceptions for that are tables with encrypted data. They still provide the encrypted zip download only (APAR PO09120).
- The computation of a compliance list could crash in rare cases during real time computation when using the starts with option or when searching entries manually (APAR PO08909).
- Status alarm indicator's email form now allows multiple email addresses in the "To" field (APAR PO08890).
- Remote instance execution of rule changes was too slow causing a severe slow down in FLI synchronization (APAR PO08938).
- Fixed a bug where Safer Payments was able to crash when a MCI socket is shut down for two different reasons at the same time. This was only possible when MCI was operating through SSL (APAR PO08908).
- When aggregating audit trails for a case the result might have been incomplete if the aggregated cases still contained unloaded audit trails entries on disk. These were not loaded from disk during aggregation and therefore not included in the result.
- It was not possible to modify the copy of the default case workflow.
- It was not possible to select attributes in Transaction Message Conditions when creating a status alarm indicator of type transaction message rate.
- Numeric attributes in tables are now aligning to the right.

## Minor changes

- Warning messages during CPP query execution were treated as errors and it was therefore not possible to display CPP query result.
- When opening data selection for rule generation when no 'timestamp' or 'account' meta attributes existed an error popup was shown that did not mention the error root cause (APAR PO08991).

- In the user interface, when the user is online and user's password has expired, then the user could continue to work until any page refresh is performed. But when the page refresh is done, then UI would only display the menu bar. This fix would logout the user in such a scenario so that the user could login again and change the password.
- The MCI endpoints UI could have duplicate endpoints forms.
- Client side Validation for MCI Endpoints was missing.
- In the Safer Payments' new user interface while creating a Key Performance Indicator of type "number of cases" , the dropdown to select the "case close code" was not displayed and hence it was not possible to create a KPI with a particular case close code.
- In the user interface, in the model components table under the model revision page, changing the status of model components using "enable/disable" buttons in table toolbar would change the status of those model components on the server but their status in the table was not refreshed. Hence the status of model components in the table in UI was not the same as that on the server.
- The functionality to stop pending messages when disabling an outgoing channel configuration was missing in the new user interface.
- The outgoing channel field inside the generate report job was getting validated even when it was disabled while creating a generate report job.
- It was possible for an external query to not function properly until it was saved a second time.
- The system configuration setting "Clear latency entries during eod" was removed in an earlier version but the new user interface was not updated and still showed a checkbox without proper label and functionality.
- When retrieving the cases table while also changing preferences of the same user in parallel it was possible to access invalid memory causing retrieving the preference to fail.
- In a status alarm indicator definition, threshold fields would accept any numeric value.
- Conclusion showed dropdowns that were only applicable to conditions.
- The time range validation for patterns displayed wrong error messages.
- The last changed user and timestamp were not updated on remote instances when risk list entries were updated (APAR PO08769).
- Index attributes are not listed for creating a masterdata insertion or deletion condition (APAR PO08840).
- The Sorting of the Amount column in the case Investigation and the Query Results were not working as it should be. Also the dimension or the currency symbol was missing in these tables (APAR PO09184).

## Download instructions

Download IBM Safer Payments 6.1.0.07 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
<a href="#">Safer Payments 6.1.0.07 download link</a>	01 Mar 2021	English	156.65 MB

For more 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\_1\_0\_07.zip:

292abfc2bbcc184ae5820504bb8a4f8d03a8331621c1b5b4461630f4c993fd4d

- MD5

SaferPayments\_6\_1\_0\_07.zip:

ed23d5e114ab5e449f54d96c9835e143



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## Chapter 11. 6.1.0.08 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.08.

This release changed the version number from 6.1.0.07 to 6.1.0.08 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.08 includes no new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.0.08 includes changes that you need to know about if you are updating from an earlier version.

- All existing modeling workflows in all existing revisions will be properly modified by irreversible removing all rule generation entries and saved back to the disk during first initial SP startup. This action will be logged with log message number 749.
- Due to the necessary changes to signal handling, writing backtraces in case of a crash works differently. Files for backtraces are not longer written into one file pay day called "backtrace\_log\_[InstanceID]\_[YYYY-MM-DD].iris", but to two different places:
  - 1) Backtraces are written into a file opened at startup of Safer Payments called "backtraces\_starting\_at\_[InstanceID]\_[YYYY-MM-DD].iris". Once Safer Payments is started, this file is created and will contain all backtraces which have been created since startup. A new file with a new date is created once Safer Payments is restarted. This file is created no matter if there is a backtrace or not. If you find empty files like this after updating, everything is okay. If you have automated file management processes around the SP config, especially log folders, please make sure that those files are not moved or deleted while Safer Payments is running.
  - 2) Backtraces are also written to standard error (stderr) of the process. Please make sure that you store the stderr of the Safer Payments process. If you use systemd services to manage saferpayments, it will be written to syslog which usually ends up in /var/log/messages or journald using "journalctl -u [servicename]".
- Defined risk list files in the configuration folder will be corrected if a file contains invalid JSON encoding in the audit trail. No further action required.
- Due to an improvement of incoming FLI performance, after the update a remote instance an existing FLI buffer might get synchronized substantially faster than before. If deferred writing is enabled, this in turn can mean that the minimum MDC size of deferred writing settings needs to be adjusted so that they take the improved FLI speed into account. Contact Safer Payments support if you have questions.

## Change log

---

IBM Safer Payments 6.1.0.08 includes critical, major, and minor bug fixes and APARs.

### Critical changes

- Rule generation is temporarily removed and is no longer supported as a modeling workflow entry type.

### Major changes

- There could be a system freeze when running the same query simultaneously at the same fraction of a second by multiple users (APAR PO09418).
- It was not possible to set masterdata from a masterdata query.
- Latency reporting was enhanced:
  - Writing latency reports could have negatively impacted the overall latency of a record and the CPU usage. To avoid this it is now done asynchronously.
  - It is now possible to write latencies to a log file as they happen. Previously only the last latencies available in memory could be written to log during end of day job, older latencies were lost.
  - The amount of text written for a latency report to memory and to log file was reduced. This does not negatively impact the data system internals shows in latency report.
  - It is possible to limit the number of processing elements (e.g. counters, rules etc.) in the latency report to the most time consuming elements.

The new functionality can be setup in system configuration (APAR PO09290).

- In the new User Interface, if there are no rows in the report while making a revision "golive" and if there were any previously displayed rows in the "Golive report table", then those rows are not removed from the table. This issue has been fixed in this version so that the "Golive report table" content would be correctly refreshed to display current report status of the revision.
- A crash could occur when stopping rule generation while a simulation was running for this revision (APAR PO09188).
- During upgrades the "Last Action On" of the cases being worked upon is set to an invalid timestamp, which causes these cases that were worked on during the upgrade to be archived on the next EOD.
- The new user interface now correctly handles conclusions with timestamp attributes where the expression would contain constant values including "w", "d", "m", "h". Eg. "4w" (APAR PO09313).
- Because of rare occasions of missing backtraces in case of a crash, the signal handling code of Safer Payments has been refactored (APAR PO08923).
- In the new UI, a user without the privilege to edit indexes was not allowed to edit counters (APAR PO09243).
- Switch to OpenSSL 1.1.1k on all SP versions that use OpenSSL 1.1.1
- Memory associated with a rule is not freed when the rule is deleted or performance report for that rule is unchecked after a golive has been done in the parent mandator (APAR PO09245).
- The investigator report showed incorrect results as actions were counted multiple times. The audit trail entries in the investigator report should be counted based on the final state of cases (APAR PO09158).
- Import Risk List Download report displays stats gathered from mandators other than the Primary one currently in use or head mandators (APAR PO09275).
- When executing a missed cases report, there was an unnecessary long period that could lead to blocking, for example, for golives or updates of elements that happened at the same time (APAR PO09117).
- Introduced checkboxes in the settings, to make the checks on IP address and on the HTTP header X-Forwarded-for optional during session binding.
- When using conditions in the new User Interface, the "is empty" and "is not empty" operators for text input attributes were always evaluated to "false" if "ignore case" was selected. There was no issue

when evaluating the input attribute with "case sensitive". In the old User Interface, the comparison was always set to "case sensitive". This is fixed in the new User Interface. On selection of the "is empty" and "is not empty" operator, the drop down of case sensitive is removed in the conditions section of the form in Rules (APAR PO09276).

- New analysis could be saved without selecting a proper data range type leading to crashes when executing these analysis (APAR PO09306).
- The check whether an output attribute is empty was incorrect in simulation. This impacted conditions and pmml computation (APAR PO09262).
- Added a condition to prevent check for the sampling condition when samplingStrategy is "No".
- Added a condition to prevent unnecessary API calls.
- In the new UI, a newly created user could see "No privileges to perform this action" after saving the my account form due to a redundant server call which was not required while saving it (APAR PO09054).
- This fix will modify the defined risk list files in config if it includes invalid JSON encoding in the audit trail. We fix it with an escape character, and write it back to the file (APAR PO08865).
- Hyperlink queries were not able to refresh in the main window.
- Log messages 131, 408 and 535 were used incorrectly.
- Attribute values were printed without formatting within table constructs inside a docx case action (APAR PO08606).
- In the new UI, the validation of the "reset value" conclusion operator falsely required a right hand side expression to be entered (APAR PO09252).
- The application could crash when viewing the case table with masterdata conditions after a golive (APAR PO09173).
- Console messages for Text not found were coming in production (APAR PO09192).
- Need to add revision attribute as it was expected by the API for the streamType - "queryResultExport" and the export of simulation query (APAR PO09254).
- Stopping simulation at the same time as the analysis is started could cause a 'Segmentation Fault' instance shutdown (APAR PO09241).
- The Case Management tab is visible and enabled even if case investigation is disabled for a user.
- There was no feedback after saving changes to the revision general page in the new UI. Also, the keyboard shortcut for saving (CTRL + S) was not working.
- The case creation page flickered when changing the mandator or case class selection. This was due to the page needlessly switching to a loading state.
- When creating a new load file job with a message that had the "monitor latency" option disabled, then enabling the option and running the job, the latencies were not monitored (APAR PO09194).
- There was a bug in the internal error handling code, which meant that some null pointer exceptions could result in crashes. These were fixed so that they will print an error and a backtrace but not cause a crash (APAR PO09327).
- The API request "isOffline" reported the wrong status when the instance in question used deferred writing. Even after a successful execution of the "setOffline" API request on such an instance, "isOffline" would return the status "INSTANCE\_IS\_FINISHING\_DEFERRED\_WRITING" although deferred writing was already done by that time (APAR PO09148).
- The API requests "setOffline" and "setOnline" behaved differently depending on which instance they were sent to. When being sent to the API port of the instance in question, deferred writing of that instance would be stopped properly. When the request is sent to a different instance e.g. the API instance, the deferred writer would just be paused, causing some data to still be in flight and missing on disk (APAR PO09149).
- FLI performance was significantly improved for incoming connections (APAR PO09242).
- After upgrade from 5.7.0.09, the 'PMML random Forest' component can hit parser error during the startup if the operator isMissing/isNotMissing is used inside PMML file (APAR PO09056).
- The system could have crashed when running rule generation on remote instance (APAR PO08947).

- It was possible to delete compliance lists that were referenced by a sanction list job which could lead to an invalidation of a golive. The find reference functionality was introduced for compliance lists (APAR PO09155).
- When transaction is sent which changes masterdata for an index, and it does not contain the XML tags for a boolean masterdata (e.g. because it's not changing that value), the masterdata will be reset to False (APAR PO09137).
- It was not possible to create a job of type "export data" because the "salt" field was not initialized with valid random data.
- Records imported via load file jobs showed incorrect (too high) misc wait time and overall latency in latency report. This could have lead to each record causing a latency, which results in higher CPU usage and in turn higher actual latencies (APAR PO08816).
- Long body in model component is managed by adding a scroll (APAR PO09373).
- NaN is shown in FLI status.
- The decimal digits for hours are displayed with decimal digits now for execution time for Job Schedule under Administration.
- Golives that increased the size of the sequence attribute could result in an application crash if the index conditions only allow a subset of all messages being sent to the application to be inserted in the index (APAR PO09075).
- In the new UI, using a loop construct for regular cases in a case action template does not render the correct values depending on what transactions are added to the case action. For example, while adding transactions from the Alerted transaction, the preview renders the Amount field as "[object Object]" and while adding transactions from an embedded index query, the preview displays the amount value from the highlighted alerted transaction for each selected transaction instead of the original transaction. These two issues have been fixed now
- The startup parameter limit\_index is now applied to multi value masterdata. Using this start parameter, the size of the masterdata will be the capacity of the multi value masterdata multiplied with the limited index size.
- OCC templates can be modified by several threads, e.g. being updated while being read in a case action, which may lead to a crash in rare cases (APAR PO09037).
- When using the "execute" button to perform a "save and execute" on a new query, the UI reported "Requested item not found" instead of showing the result of the new query.
- In the new UI, when there are many KPIs displayed in charts in the dashboard page, for example, with combined number data points more then 30000 data points, then the page would become very slow and it would take 1 to 2 min to initially load it. This fix addresses the issue and improved the performance of the dashboard page to load within 30 seconds with 30000 data points.
- Only the last child was parsed in a nested xml structure with multiple layers.
- Dropdown text is not fully visible in confirmation message box during shut down of a cluster instance.
- Defined Risk List Entries Table showed expiresAt data even when the expires at is unchecked in Defined Risk List.

## Minor changes

- Added online Help about LDAP SSL settings (APAR PO09209).
- A more detailed explanation of the functionality was added to the help page of missed cases report.
- Defined risk list's export functionality now exports all the entries, instead of being limited by the setting "Maximum number of displayed entries" in system configuration (APAR PO09325).
- Golive report does not show memory freed messages while deleting the rule with performance report enabled.
- Working queues did not offer an option to include closed cases.
- The user assigned to a working queue who is not a queue manager cannot see this queue nor stored cases on the investigation tab.

- Reporting attributes placeholders were not replaced during HTML template processing while sending SMTP case action (APAR PO08390).
- In most cases users enable "Performance report" Rule setting by default, which has considerable impact on application performance since this setting requires additional memory in MDC or DDC.
- When revisions were retired while a remote instance was not reachable, it was possible that log message 480 was printed once those instances come back up. The log message was caused by invalid FLI messages for the retired revision that were created when viewing the retired revision while the remote instances were unreachable. This also affected other non-editable revisions such as invalidated challengers (APAR PO09063).
- When using OIDC authentication, the Safer Payments user interface sometimes showed incorrect error popups or unexpected errors caused by wrongly handled server responses. These responses are now handled correctly and only in rare cases the user is prompted with a valid error message including instructions on how to resolve the issue (APAR PO09175).
- Some log messages showed a fatal error with event log ID as 99, when it should only show standard error level. Those messages stated that a service could not be interrupted as it was not running.
- The conditions forms in the new UI did not properly react to changes to fields outside of the conditions even if those fields would change the available select options within the conditions.
- The "Check LDAP Settings" button on the System Configuration page of the New UI didn't work correctly (APAR PO09145).
- In the new UI, the help icon in rules designer and generated rules table is disabled when the rule generation is in progress. It has been fixed.

## Download instructions

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Download IBM Safer Payments 6.1.0.08 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
<a href="#">Safer Payments 6.1.0.08 download link</a>	15 Jun 2021	English	151.07 MB

For more 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\_1\_0\_08.zip:  
135f11c5e37b0cf147aa9f04c015eaa9716136efdb952980be7acd19ea7cb56d
- MD5  
SaferPayments\_6\_1\_0\_08.zip:  
4a19c5c4a58796bdcc3c64f23de56466



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## Chapter 12. 6.1.0.09 Release Notes

The Release Notes contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.09.

This release changed the version number from 6.1.0.08 to 6.1.0.09 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.09 includes no new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.0.09 includes changes that you need to know about if you are updating from an earlier version.

- Safer Payments is now able to detect problems about deferred writing configuration that were previously undetected. This is done by printing more log messages of E 0005. This event log message E 0005 now also includes additional information, to which one should pay special attention after the update.

### Change log

---

IBM Safer Payments 6.1.0.09 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- When using the MQ interface with a response queue, Safer Payments may crash while sending the response (APAR PO09469).
- An instance could crash when starting rule generation manually in the same time rule generation was running in modeling workflow. Additionally a deadlock could happen when stopping modeling workflow when rule generation was running. Rule generation is now permanently removed from modelling workflows. Rule designer is re-integrated after it had been removed in the previous fixpack (APAR PO09297, PO09295).

#### Major changes

- The Change master key feature did not work when cases existed. There was a deadlock preventing the master key change to progress (APAR PO09456).
- The index value in a Masterdata query and Hyperlink queries were not correctly escaped leading in some occasions to empty results or potentially invalid JSON that would pop up an error message in the User Interface (APAR PO09277).
- PMML string arrays were not correctly parsed in case the values inside the array were not enclosed in double quotes.

- The "view model structure" visualization for PMML random forest and PMML boosted trees is correctly displayed (APAR PO09320).
- If the noTrueChildStrategy set in PMML boosted tree model is returnLastPrediction and if there is no child node that meets the criteria, Safer Payments does not use the score attribute value in the parent node (APAR PO09196).
- Saving the modeling section or the revision general page caused a running rule generation on a remote instance to be stopped and could have caused wrong simulation results (APAR PO09285).
- 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 parse error "Unexpected Token in JSON at position" could occur when opening an investigation query that was migrated into the configuration from another instance with enabled encryption and different encryption keys (APAR PO09027).
- In very rare cases, when a lot of investigation cases were added or archived, there could be an issue for working queues that worked on the the same cases.
- The system could have crashed when deleting a challenger in which rule generation was running.
- When a user changed their password, Safer Payments did not invalidate the old session ID and other session related tokens.
- When adding a new defined risk list entry from a query, the default life time is now correctly setup. Also, risk list entries are enabled by default during creation (APAR PO09362).
- In the old User Interface, having the privilege "Reset FLI" disabled would cause the whole maintenance function dropdown to disappear (APAR PO09393).
- The internal calculation of available/used memory on the RHEL system have been improved by fixing 32-bit integer overflow problem and taking into account MemAvailable or SReclaimable field values from /proc/meminfo to provide more accurate results (APAR PO09166, PO07255).
- If checksum check was enabled and transaction data contained a double quote followed by a closing curly bracket, the FLI could get stuck (APAR PO09335).
- 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.
- There was a potential deadlock while computing index and updating KPI which could block incoming computation and block the instance from shutdown.
- MCI doesn'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.

## Minor changes

- Add exception handling while adding the same condition to the rule (APAR PO09187).
- 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 simulation report would show an incorrect message when the selected instance for a simulation was not enabled for simulation (APAR PO09138).
- Download of files that contain non ASCII characters on the filename are now correctly named (APAR PO09346).
- 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 should not be used for the interface ports of the Safer Payments instances (APAR PO09134).



## Download instructions

---

Download IBM Safer Payments 6.1.0.09 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
<a href="#">Safer Payments 6.1.0.09 download link</a>	03 Aug 2021	English	151.08 MB

For more 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\_1\_0\_09.zip:

cb10adee6598e80c4beb4d0a019094b33824af9789e890da8d911d56d3dbcb24

- MD5

SaferPayments\_6\_1\_0\_09.zip:

d754cf883a2fee6ff7f45f5dbbd61ef7



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## Chapter 13. 6.1.0.10 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.10.

This release changed the version number from 6.1.0.09 to 6.1.0.10 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.10 includes enhancements.

#### Release highlights

- None

#### Additional enhancements

- The words "blocklist" "blocklist" "allowlist" "allowlist" were replaced with the words "blocklist" "block list" "allowlist" and "allow list" in the User Interface (APAR PO09400).
- On all pages where a date selector is shown a hint is shown now which timezone the date and time is in.
- New log messages were added to mark the FLI buffer roll over.

### Update information

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IBM Safer Payments 6.1.0.10 includes changes that you need to know about if you are updating from an earlier version.

- We are no longer supporting Python 2.6 version. If you were using this version make sure to first upgrade the Python version on your system to a version that is supported by Safer Payments. Python 2.7 will still work as before.

### Change log

---

IBM Safer Payments 6.1.0.10 includes major and minor bug fixes and APARs.

#### Critical changes

- None

#### Major changes

- Remote instances could crash when running a curtail masterdata job (APAR PO09584).
- When changing pages in the new user interface there was a chance that the user will get an Unexpected Error page (APAR PO09240).
- 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.
- An instance could crash in rare cases if the operating system was able to open a file but could not close the file properly for some reason (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.

- Switched OpenSSL 1.1.1.k to OpenSSL 1.1.1.l as countermeasure against CVE-2021-3711 and CVE-2021-3712.
- The performance on the User Interface has been improved when performing changes in the forms for configurations with many mandators.
- The "setOffline" request did not close files obtained by the application before this fix, which could have caused problems during backup of an instance after using the "setOffline" request. Now after the "setOffline" API request execution, all files obtained by the application instance except the backtrace file will be closed. The request "setOnline" will re-obtain files.
- It was possible to do certain changes, e.g. copying/deleting elements via context menu, on a revision that was waiting to perform a golive, e.g. 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 could have failed, causing the remote instance to shut down and become invalidated (APAR PO09477).
- When a cluster update happened on an instance while it was shutting down a crash could occur. It could for example happen during a restore on the restore recipient instance (APAR PO09480).
- Starting a simulation while saving a revision element could cause a crash (APAR PO09483).
- Query results could 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).
- 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).
- 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.
- 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).
- In new User Interface the date selector did not allow to define the time in hours, minutes and seconds in 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).
- 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).
- Safer Payments now support all Python 3 versions starting with 3.2.
- When a PMML model component is copied, the uploaded PMML file would be copied as well. Therefore, the PMML model file won't be missing (APAR PO09379).
- When saving the same model element twice at the same time, the system could have crashed if during save an output attribute was replaced (APAR PO09446).
- Saving the simulation data selection repeatedly during a small frame of time could lead to a crash (APAR PO09449).
- 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).
- Deleting a Key Performance Indicator could rarely result in an application crash.
- A backtrace could have happened in index based evaluations due to outdated condition references.

- A deadlock could have occurred 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).
- When simulating rules, more rules than necessary could 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).
- In attribute settings of new User Interface, after changing storage type to `not stored` the attribute could only be saved if the DDC capacity had been set to 0 manually before that.
- In new User Interface the default storage type and xdc capacities defined in system configuration were not used when creating new attributes in counters, profiles and device identification. Additionally when changing storage type in an attribute definition capacities could 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 from the new User Interface (APAR PO09410).
- Performing a change on an attribute in a sub mandator while executing a golive on an upper mandator, could lead to a crash (APAR PO09495).
- Changing the data selection on a rule generation that is already running could lead to a crash (APAR PO09450).
- Simultaneous shutdown of MCI interface and a MCI connection request could result in an instance crash. Closing an MCI connection during deactivation of the MCI might be slower than before in case the sending side keeps the connection to SP open until the MCI is deactivated. In a worst case scenario the overall additional time it takes during the deactivation of the MCI could be the number of connections \* 1 second (APAR PO09435).
- When Text or Hex values were computed with Python, used in Conclusion or Formula expressions, the return values leaked in memory (APAR PO09405).

## Minor changes

- The User Interface was attempting to parse any response as JSON and would fail for example when a Proxy/CDN returns a non JSON response which gives the "Unexpected token < in JSON at position 0" message, this behavior is now replaced with a more informative modal (APAR PO09504).
- A new event log id 827 was added for errors from file closing, instead of using the event log id 0.
- 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 actually 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).
- 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 fatal error log message (APAR PO09386).
- 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 info 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 (APAR PO09545).
- In the case workflow definition it was possible to set a comment for a case transition as mandatory, but not allowed, which could 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.
- Sorting of numeric columns in query results that belong to output attributes would be sorted alphabetically instead of numerically (APAR PO09488).
- For model revision elements, the "New element" button is active for inherited elements, even though that is not possible.
- There were some typos in the online help and the User Interface which have been corrected (APAR PO09441).
- In new User Interface, shortcut Ctrl+S didn't save changes done to date fields when the field was still focused.
- In the new 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 default xdc capacities setting in system configuration of the new User Interface, it was not validated that the MDC is smaller or equal to DDC capacity. This however was validated on server. Additional validation behavior was improved in attribute and index sequence settings.
- Adjusted the displayed values in the query results when the attributes were not present in DDC and `include DDC` is disabled in the query, and when data is not available (APAR PO09132).

## Download instructions

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Download IBM Safer Payments 6.1.0.10 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
<a href="#">Safer Payments 6.1.0.10 download link</a>	28 Oct 2021	English	158.441 MB

For more 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\_1\_0\_10.zip:

9d13fe62c360b035e31c866908e508c93e2c35653b3c67b2249025ca459eb9cd

- MD5

SaferPayments\_6\_1\_0\_10.zip:

8920ce0fc7e74602aec02fd2cd1181c6





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## Chapter 14. 6.1.0.11 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.0.11.

This release changed the version number from 6.1.0.10 to 6.1.0.11 and contains no impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.0.11 includes no new features and enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.0.11 includes changes that you need to know about if you are updating from an earlier version.

- SQL notifications previously only worked by manually adding single quotes around attribute placeholders in the message template. This is not required anymore and will actually result in errors now. If you've been using SQL notifications in the past, please update them accordingly.

### Change log

---

IBM Safer Payments 6.1.0.11 includes critical, major, and minor bug fixes and APARs.

#### Critical changes

- None

#### Major changes

- In very rare situation it was possible that SP was temporary blocked and looked like it was in a deadlock state. This mostly happened during high-traffic / high computation situations (APAR PO09661).
- Fixed a crash that could happen to an instance in rare cases where the outgoing FLI would timeout (APAR PO09610).
- In rare cases a model element could have been saved while simulation was running on a remote instance, which could have caused a crash on the remote instance (APAR PO09552).
- 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.
- 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.

- 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).
- An instance could have crashed when starting a simulation while saving a model element.
- In user-interface many numeric data fields did not allow numbers larger than 2,147,483,647 (APAR PO09640).
- When using remote simulation then after saving rule generation settings the simulation was stopped and needed to be started again in order 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).
- The order of computation in simulation was different than the real time computation. In simulation, profilings were not computed mandator wise but type wise, i.e. instead of iterating through all profilings of the head mandator first, then moving to the next lower mandator etc, it would simulate the calendars of all mandators, then the patterns of all mandators etc. 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, the application could crash or incorrect simulation results could 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).
- Safer payments in rare occasions could have miscalculated whether the FLI buffer was full and needs a rollover.
- 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).
- An instance could have crashed when running multiple simulation reports in parallel, which can happen via rule reports (APAR PO09383).
- A deadlock could have happened 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).
- Previously when trying to delete an attribute 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).

## Minor changes

- When multi value masterdata was started with limits, the limited value could be persisted on disk, if a revision write operation was triggered; for example when copying a revision or performing a golive. Multi value masterdata also uses the limit\_index parameter which could 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).
- In case multi value masterdata is corrupted for example due to a previous crash and infinite loops exist in their internal structure, the instance could become stuck.

- 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 audit files when they are already archived overwrites the archived .latest case file.
- SQL notifications could 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.
- Users could 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.
- Lists should always have at least one output value and condition, but on the new UI it was possible to delete the last value or condition and still save.
- User preferences for the field separator were ignored in CSV exports (APAR PO09465).
- Users who did not have the "Modelling..." privilege on their role were still able to see the "Modelling" 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.
- 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).

## Download instructions

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Download IBM Safer Payments 6.1.0.11 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
<a href="#">Safer Payments 6.1.0.11 download link</a>	21 Jan 2022	English	158.4 MB

For more 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\_1\_0\_11.zip:

a3c9adf4b4ecce8456070b646ed609ec2fece3ac26adce04147d70bf94d0124b

- MD5

SaferPayments\_6\_1\_0\_11.zip:

4b4772a547a760ee1b3405c7d93673aa



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## Chapter 15. 6.1.1.00 Release Notes

The IBM Safer Payments contain information about new features, update information, fixes, and known issues in IBM Safer Payments 6.1.1.00.

This release changed the version number from 6.1.0.11 to 6.1.1.00. It contains low impact changes according to PA-DSS.

### What's new

---

IBM Safer Payments 6.1.1.00 includes enhancements.

#### Release highlights

- None

#### Additional 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 6.1.1.00 includes changes that you need to know about if you are updating from an earlier version.

- 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 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 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 should ensure that the backtrace files are not moved along with the logs. All backtrace files should stay in the logs directory, and if any of them contain more than a single line then they should 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 which are not selected in the case class of the respective case. If you want to see additional reporting attributes, please 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 6.1.1.00 includes major and minor bug fixes and APARs.

### Critical changes

- None

### 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, defined risk list entries, and defined risk list upload alert lists.
- 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 time frame, 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).
- 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 will be 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).
- In rare cases where a deadlock prevented a simulation from being stopped, it would prevent the API being disabled, which could result in two instances having an API enabled. This change prioritizes deactivation to prevent that scenario (APAR PO09481).
- Running a curtailing masterdata job could 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.
- 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 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 generated by IBM Safer Payments could 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 could cause negative performance impact (APAR PO09399).

- 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 showed redundant computation element 'unknown' and printed '0' instead of 'External Model'.
- 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).
- 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 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 leads 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 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.

## 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 could 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 could 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 6.1.1.00 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
<a href="#">Safer Payments 6.1.1.00 download link</a>	13 Apr 2022	English	158.48 MB

For more 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\_1\_1\_00.zip:  
8e329ac5c5bd653914b808602b73c69201af303ee81d4905c833c315aad5976a
- MD5  
SaferPayments\_6\_1\_1\_00.zip:  
e64fbcbbbe0256b575ddab7215f487d80



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## Chapter 16. 6.1.1.01 Release Notes

The IBM Safer Payments contain information about defect fixes, changes, and updating to IBM Safer Payments 6.1.1.01.

This release changed the version number from 6.1.1.00 to 6.1.1.01. It contains No Impact changes according to PA-DSS.

### What's new

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IBM Safer Payments 6.1.1.01 includes no new enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.1.01 includes changes that you need to know about if you are updating from an earlier version.

- 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 6.1.1.01 includes critical, major, and minor defect fixes, APARs, and changes.

#### Critical defects

The following critical defects were fixed:

- 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 multivalued 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:

- A crash occurs if a defined risk list is concurrently queried and modified (APAR PO09854).
- 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).
- 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).
- Added a button to the System Internals general page to export the page to a zip file.
- 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 multivalued masterdata is erroneously detected during data deletion (APAR PO09808).
- Updated OpenSSL to 1.1.1n.
- 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.
- Documentation for maintenance function 'Create conclusion expression pair list' is missing in the online help (APAR PO08906).
- 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.
- 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).
- 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.
- Now, additional information is logged to more closely investigate and monitor the simulation operation.
- Enhanced the index performance after index size is increased. Fixed a potential buffer overflow after index size is decreased (APAR PO09578).
- 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).
- 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).
- A deadlock occurs when saving a cluster page during golive or when saving mandator/case class/case state/SAI/case workflow/user group/working queue/reminder/KPI/notification/external query / message while MCI is waiting for incoming messages (APAR PO09725).
- 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).
- The responder URL field on the MQI configuration page is erroneously marked as required (APAR PO09727).
- "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.
- 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).
- 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.

## Download instructions

Download IBM Safer Payments 6.1.1.01 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
<a href="#">Safer Payments 6.1.1.01 download link</a>	29 Jul 2022	English	151 MB

For more 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\_1\_1\_01.zip:

ebc7e7a0b3a1bef267d2a6ddcf5dda666880c8ef5621dfd00ca18bfee0da2949

- MD5

SaferPayments\_6\_1\_1\_01.zip:

40f1d9c7652977242fee9faa0dcdfce3



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## Chapter 17. 6.1.1.02 Release Notes

The IBM Safer Payments contain information about defect fixes, changes, and updating to IBM Safer Payments 6.1.1.02.

This release changed the version number from 6.1.1.01 to 6.1.1.02. It contains No Impact changes according to PA-DSS.

### What's new

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IBM Safer Payments 6.1.1.02 includes no new enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.1.02 includes changes that you need to know about if you are updating from an earlier version.

- 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.
- 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 6.1.1.02 includes major and minor defect fixes, APARs, and changes.

#### 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).
- 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.

- 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).
- 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).
- 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.
- 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 YYYYDDDhmmss format, for example 202200000000, is sent (APAR PO09882).
- 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).
- 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.
- 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 Safer Payments time zone into account if the system time meta-attribute is used (APAR PO09894).
- 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).
- Simulation MDC is created for overwritable inputs when data for that input is already available in MDC.
- 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).
- 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).
- Golives can hang if there is a simultaneous case action activity in the user interface to send case actions (APAR PO09952).

## Minor defects and changes

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

- 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.
- 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 log message 518 prints the message "Ignoring incoming SSL API connection" not only for the API but also for all SSL interfaces, for example, MCI, ECI and API. Now, log message 518 displays the correct name of the interface (APAR PO08644).
- 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.
- The dropdown menu on the Send test case action prompt does not scroll correctly.
- 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

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Download IBM Safer Payments 6.1.1.02 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
<a href="#">Safer Payments 6.1.1.02 download link</a>	28 Oct 2022	English	151.60 MB

For more 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\_1\_1\_02.zip:

39351975ad4b3b389b1418d7e51e2e6b47b16db9d50f89600021471221b04b4c

- MD5

SaferPayments\_6\_1\_1\_02.zip:

2256d2ad5eebe0ad3890d46b4e131b7c

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## Chapter 18. 6.1.1.03 Release Notes

The IBM Safer Payments contain information about defect fixes, changes, and updating to IBM Safer Payments 6.1.1.03.

This release changed the version number from 6.1.1.02 to 6.1.1.03. It contains No Impact changes according to PA-DSS.

### What's new

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IBM Safer Payments 6.1.1.03 includes no new enhancements.

#### Release highlights

- None

#### Additional enhancements

- None

### Update information

---

IBM Safer Payments 6.1.1.03 includes changes that you need to know about if you are updating from an earlier version.

- 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, 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 plan to upgrade to a newer major release when a fix is available that allows you to control the white spaces.

### Change log

---

IBM Safer Payments 6.1.1.03 includes major and minor defect fixes, APARs, and changes.

#### Major defects and changes

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

- 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).
- MCI responses of type JSON contain unnecessary white space.
- Unconsolidated alarms can cause the application to hang during shutdown.
- PCI DSS-relevant event log message number 834 is not automatically enabled for audit logs on fresh installations.
- 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.

- 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).
- 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 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.
- 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.
- Logs do not show who sent the signal (APAR PO09958).
- Logs for simulation show the user name.
- Realtime computation performance is slow if many outputs and mappings are processed (APAR PO09955, PO09959).
- A crash can occur if a save request for a persistent connection outgoing channel configuration is sent without a connectionPoolPriorities field.
- 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.

## Minor defects and changes

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

- 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).
- 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.
- 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).

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### Follow the installation instructions

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

### Download the installation image

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Download link	Release Date	Language	Size
<a href="#">Safer Payments 6.1.1.03 Download link</a>	31 Jan 2023	English	158.95 MB

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SaferPayments\_6\_1\_1\_03.zip:

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- MD5

SaferPayments\_6\_1\_1\_03.zip:

70f786b78a9e69ae50427f47f433f286



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