

## Release Notes for SAS® Fraud Management 6.1\_M0, Hot Fix 12

Description	Component	Summary and Business Impact	Test Scenario
<p>When you use the REST API to status an alert, the alert is left in a suspended state.</p>	<p>ANALYST WORKSTATION</p>	<p><b>Summary:</b> The REST API call to give an alert an assessment leaves the alert in a suspended state. An entry for the alert remains in the FCM_ALERT_SUSPEND table with the CHECKOUT_COUNT = 0. Instead, the REST call should release the alert suspension after successful completion.</p> <p><b>Business Impact:</b> Alerts remain suspended after using the REST call to status the alert. Another analyst must click the <b>Force checkout this alert</b> link in the Analyst Workstation to work with suspended alerts.</p>	<p>After you apply the hot fix, the REST call to status an alert no longer leaves the alert in a suspended state.</p>
<p>When you upload an edited file for a lookup list, the user name is not updated correctly.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> The name of the user who last updated a lookup list is not correct on the Lookup List Details window. Instead, the name of the user that created the lookup list is displayed.</p> <p>Also, in the FCM_LOOKUP_LIST_DEFINITIONS table in the SOR database, the LSTUPDT_USER and the LSTUPDT_TIMESTAMP values are not updated.</p> <p><b>Business Impact:</b> The name of the user who last uploaded a lookup list is not shown correctly in Rules Studio and is not stored in the database. The behavior prevents proper auditing of lookup list changes.</p>	<p>After you apply the hot fix, the name of the user who last uploaded an edited version of a lookup list is displayed in Rules Studio. The LSTUPDT_USER and the LSTUPDT_TIMESTAMP values are correctly stored in the FCM_LOOKUP_LIST_DEFINITIONS table.</p>
<p>The <b>Last Updated Time</b> and <b>Last Updated By</b> columns are not included in the <b>Testing</b> and <b>Production</b> folders on the <b>Rules</b> tab.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> The <b>Last Updated Time</b> and <b>Last Updated By</b> columns are not included in the rules list in the <b>Testing</b> and <b>Production</b> folders on the <b>Rules</b> tab. You can see the information for each rule by either clicking the <b>View History</b> button or the <b>Print</b> button.</p> <p>The information can be seen for production rules on the <b>Console</b> tab, but users might not have the permissions to view this tab.</p>	<p>After you apply the hot fix, the <b>Last Updated Time</b> and <b>Last Updated By</b> columns are included in the <b>Testing</b> and <b>Production</b> folders on the <b>Rules</b> tab.</p>

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		<p><b>Business Impact:</b> Rule writers cannot see the <b>Last Updated Time</b> and <b>Last Updated By</b> information for all rules that are listed in the <b>Testing</b> or <b>Production</b> folders. Instead, rule writers must view the data for each rule separately by using either the <b>Show History</b> or the <b>Print</b> options. These options are less convenient and take more time.</p>	
<p>You can add, modify, and delete a lookup list without having the privilege.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> There is a privilege named <b>Add/Delete/Modify Lookup List</b> that should be required for a user to be able to perform these tasks. However, a user who has a role without this privilege can add, modify, and delete a lookup list.</p> <p><b>Business Impact:</b> Users can add, modify, and delete lookup lists even if they have not been assigned the privilege to do so.</p>	<p>After you apply the hot fix, a user without the <b>Add/Delete/Modify Lookup List</b> privilege cannot add, delete, or modify lookup lists.</p>
<p>The 06.01.00.xml file is not created by a new rule deployment if the 06.01.00_addendum.xml file exists.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> The 06.01.00_addendum.xml file contains information about client input variables and user variables. The 06.01.00.xml file contains information about the system segments. The creation and update of these files should be independent. However, if the 06.01.00_addendum.xml file exists in the MessageAPI folder, then the 06.01.00.xml file is not created when a new rules file is deployed.</p> <p>The workaround for this issue is to move the 06.01.00_addendum.xml file to the Archive directory before deploying the new rules file.</p> <p><b>Business Impact:</b> This issue impacts customers who use custom segments. If custom segments are not used, then the 06.01.00.xml file does not change during a rule deployment.</p>	<p>After you apply the hot fix, a rule deployment will always generate a new 06.01.00.xml file.</p>

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<p>An error occurs when you click the <b>All Rules</b> icon for some transactions in the transaction grid.</p>	<p>DBMS</p>	<p><b>Summary:</b> On DB2 systems, on the alert detail page, clicking the <b>All Rules</b> icon in the transaction grid fails to retrieve the rule list. The following message is displayed in the Rules Fired for Transaction window:</p> <p>Unable to retrieve rules.</p> <p>The DB2 database error is as follows:</p> <p>SQLCODE=-420, SQLSTATE=22018, SQLERRMC=DECFLOAT, DRIVER=4.15.82</p> <p><b>Business Impact:</b> For some transactions that are related to an alert, analysts cannot view a list of rules that fired. This inability to view a list of rules that fired might hinder the analysts' ability to properly assess the transactions that are impacted by this issue.</p>	<p>After you apply the hot fix, when you click the <b>All Rules</b> icon for a transaction, the list of fired rules is displayed.</p>
<p>You can delete a custom transaction type without having the necessary privilege</p>	<p>MANAGERS WORKBENCH</p>	<p><b>Summary:</b> There is a privilege named <b>Add/Delete/Modify Transaction Types</b> that should control whether a user can perform these actions. However, a user whose roles are not assigned this privilege can delete custom transaction types. These users cannot create or modify existing custom transaction types.</p> <p><b>Business Impact:</b> Users can delete custom transaction types even if they have not been assigned the privilege to do so.</p>	<p>After you apply the hot fix, only users that are in a role that has been assigned the <b>Add/Delete/Modify Transaction Types</b> can add, delete, or modify a transaction type.</p>
<p>A user with the <b>View Rules</b> privilege should be prevented from changing rule details.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> When a user has only the <b>View Rules</b> privilege, the only buttons that should be enabled when a rule is selected are the <b>Show History</b> and the <b>Print</b> buttons. Instead, buttons for other actions are enabled, and these buttons appear to allow a user to make unauthorized updates to rules. While the user can enter changes, the <b>Save</b> operation fails, and the rule details are not modified.</p> <p><b>Business Impact:</b> This issue can cause confusion for users that have only the <b>View Rules</b> privilege. It appears that these users are allowed</p>	<p>After you apply the hot fix, users with the <b>View Rules</b> privilege can click only the <b>Show History</b> and <b>Print</b> buttons. All other buttons are disabled.</p>

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		to modify rules. Buttons for actions that are not authorized should be disabled to avoid this confusion.	
The value of the <b>DBMS_VARIABLE_TYPE</b> column in the FCM_FIELD_DEFINITION table is incorrect for the FIELD_NAME equal to <b>tbt_billing_ref_num</b> .	DBMS	<p><b>Summary:</b> In the FCM_FIELD_DEFINITION table in the System of Record (SOR) database, the <b>DBMS_VARIABLE_TYPE</b> column is set to <b>VARCHAR(30)</b> for the <b>tbt_billing_ref_num</b> field. The correct value for this field is <b>VARCHAR(120)</b>.</p> <p><b>Business Impact:</b> If the values in the FCM_FIELD_DEFINITION table are used to generate SQL to create a custom transaction table, the resulting field size in the database table will be too small. An incoming transaction that contains a value that is larger than the defined field size will be rejected.</p>	After you apply the hot fix, the DBMS_VARIABLE_TYPE field is correct for the <b>tbt_billing_ref_num</b> field name.
A rule estimation with priming returns different results when DBSLICE is used.	ESTIMATION	<p><b>Summary:</b> If you run an estimation with priming when DBSLICE is enabled, the results are not correct. If DBSLICE is disabled, the results are correct. The issue occurs only when the database tables are partitioned.</p> <p>By default, DBSLICE is enabled for rule estimation. DBSLICE can be disabled by setting the estimation_allow_dbslice_ind property to 0.</p> <p><b>Business Impact:</b> Estimation results might be missing some transactions when both priming and DBSLICE are used. These missing transactions can impact the evaluation of new or modified rules.</p>	After you apply the hot fix, estimation results are correct when using priming when DBSLICE is enabled.

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<p>If you have only the permission to view rules, the production rule list is not displayed.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> A user who has only the <b>View Rules</b> and the <b>General Manager Access</b> privileges cannot view a list of production rules.</p> <p><b>Business Impact:</b> Analysts with the view-only rule access cannot view the production rules. This inability to view the production rules can hinder the analysts' ability to fully investigate alerts and identify possible fraud.</p>	<p>After you apply the hot fix, users who have only the <b>View Rules</b> and the <b>General Manager Access</b> privileges can view the list of production rules.</p>
<p>An unsuccessful REST API call to status an alert leaves the alert checked out.</p>	<p>ANALYST WORKSTATION</p>	<p><b>Summary:</b> When you use the automation API to status an alert and the REST call is unsuccessful, the alert remains checked out.</p> <p>The Return Alerts for Servicing batch job (job 3030) will return the alert to an <b>ACTIVE</b> status if the number of hours that are specified by the analyst.alert.uncheckout.interval property has elapsed when the job runs.</p> <p><b>Business Impact:</b> Alerts remain checked out and unavailable for servicing by users in the Analyst Workstation.</p>	<p>After you apply the hot fix, a failed REST API call to status an alert does not leave the alert checked out.</p>
<p>The analytic extract job 5007 does not copy all transactions to the analytic data sets.</p>	<p>BATCH</p>	<p><b>Summary:</b> The analytic extract job is ran periodically to copy selected data from transaction tables in the Transaction Data Repository (TDR) database to SAS data sets. Due to the timestamp's differences between the subsequent runs of the 5007 job, some transactions are not copied to the SAS data sets.</p> <p><b>Business Impact:</b> The analytic extract data sets support fraud tagging, common point of purchase, and analytical reports. Missing transactions will impact the accuracy of these processes.</p>	<p>After you apply the hot fix, the analytic extract job 5007 identifies and copies the correct number of transactions to the data sets.</p>

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<p>If you assign a Python model to multiple multi-organizations, the Python engine will not start.</p>	<p>Python Models</p>	<p><b>Summary:</b> In Manager's Workbench, you can register a Python model to more than one multi-organization. If you register a Python model to more than one multi-organization, the Python engine fails to start.</p> <p>A workaround for this issue is to copy the model for each multi-organization that will use the model and then register the model for each multi-organization.</p> <p><b>Business Impact:</b> If a Python model is needed for more than one multi-organization, then the model must be copied for each and registered separately. This copying increases the resources that are required to run the models.</p>	<p>After you apply the hot fix, a Python model can be assigned to more than one multi-organization.</p>
<p>You cannot see the value of custom API fields in the rule estimation results.</p>	<p>ESTIMATION, RULES STUDIO</p>	<p><b>Summary:</b> When you create a custom output segment, the %ACTION_RETURN_RESULT macro can be used in a rule to set a field in the segment to a value. If you run a rule estimation, the field value is not displayed in the transaction list in the estimation results.</p> <p><b>Business Impact:</b> Evaluation of new or updated rules is more difficult when the values of custom API fields cannot be seen in the estimation results.</p>	<p>After you apply the hot fix, the values for fields in a custom API segment set by the %ACTION_RETURN_MACRO are displayed in the estimation results.</p>
<p>You cannot create a manual alert on the <b>Explore</b> tab for alert types other than the valid alert types for CSCA transactions.</p>	<p>EXPLORE</p>	<p><b>Summary:</b> When you create a manual alert on the <b>Explore</b> tab for a transaction type other than CSCA, the <b>Alert Type</b> selection list does not contain the list of alert types for that transaction type. Instead, the selection list contains the alert types that are valid for the CSCA transaction type.</p> <p><b>Business Impact:</b> Analysts cannot create manual alerts for some alert types on the <b>Explore</b> tab.</p>	<p>After you apply the hot fix, the <b>Alert Type</b> selection list that is displayed when creating a manual alert on the <b>Explore</b> tab contains all valid alert types for the transaction type.</p>

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<p>You can disable a rule action used by a production rule.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> If a production rule uses a rule action, the web application should not allow you to disable the rule action on the Actions list on the <b>Rules</b> tab. The check box next to the action is grayed out, which prevents you from clearing the check box. However, if you clear the top check box in the column heading, all the rule actions for the transaction type are cleared. Clearing the top check box in the column heading disables all rule actions, including the one that is used by the production rule.</p> <p><b>Business Impact:</b> A user can inadvertently disable a rule action that is currently being used in a production rule. The disabled rule action can prevent the rule from performing as intended.</p>	<p>After you apply the hot fix, a rule action that is used by a production rule cannot be disabled.</p>
<p>When creating rule using the Guided Approach, changing a Hold decision to <b>None</b> leaves the <b>Create an Alert</b> check box disabled.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> When you create a rule by using the Guided Approach, changing a Hold decision to <b>None</b> leaves the <b>Create an Alert</b> check box disabled. The check box should be enabled when the Hold decision is <b>None</b>.</p> <p>If you close the rule and open it, the check box is enabled again.</p> <p><b>Business Impact:</b> The impact is minimal. A rule writer might have to close and open a rule to enable the <b>Create an Alert</b> check box.</p>	<p>After you apply the hot fix, changing a Hold decision back to <b>None</b> enables the <b>Create an Alert</b> check box.</p>
<p>On the alert detail page, the alert overview is not positioned properly.</p>	<p>ANALYST WORKSTATION</p>	<p><b>Summary:</b> When the analyst.alert.alertInfoPanelDisplay property is set to the default value of <b>SPLIT</b>, the alert overview is not visible when you first open an alert. You must use the scroll bar to move to the right to view the alert overview.</p> <p>This issue occurs on all supported browsers.</p> <p>There are two workarounds for this issue:</p> <ul style="list-style-type: none"> <li>• Maximize the browser window.</li> </ul>	<p>After you apply the hot fix, the alert overview is properly positioned.</p>

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		<ul style="list-style-type: none"> <li>Set the analyst.alert.alertInfoPanelDisplay property on the <b>Preferences</b> tab to one of the other valid values: FIRST_TAB, SECOND_TAB, or LAST_TAB.</li> </ul> <p><b>Business Impact:</b> The impact of this issue is minor. If the analyst maximized the browser window, the alert overview is visible.</p>	
Encoded database passwords are displayed in web application debug logs.	ESTIMATION	<p><b>Summary:</b> If the web application logging level is set to DEBUG, the encoded database passwords are displayed in the log.</p> <p><b>Business Impact:</b> This is a security issue. The logging level in production server should not be set to DEBUG under normal circumstances. Regardless, SAS encoded passwords should never be written to a log file, even in DEBUG mode.</p>	After you apply the hot fix, all encoded passwords are masked as "X" characters in the web application log.
Encoded and decoded passwords from the SAS Metadata Repository are displayed in web application debug logs.	ESTIMATION	<p><b>Summary:</b> If the web application logging level is set to DEBUG, the encoded and decoded passwords for several groups that are stored in the SAS Metadata Repository are displayed in the log.</p> <p><b>Business Impact:</b> This is a security issue. The logging level in production server should not be set to DEBUG under normal circumstances. Regardless, encoded or decoded passwords should never be written to a log file, even in DEBUG mode.</p>	After you apply the hot fix, all encoded and decoded passwords are masked as "X" characters in the web application log.
A rule estimation fails when the rules refer to too many user variables.	ESTIMATION	<p><b>Summary:</b> When you submit an estimation for rules that refer to many user variables, the estimation fails. The estimation remains in a <b>Running</b> status and the estimate.log file contains the following error message:</p> <pre>ERROR: The text expression length (65535) exceeds maximum length (65534)</pre> <p><b>Business Impact:</b> Rule writers cannot run a rule estimation when the selected rules refer to many user variables.</p>	After you apply the hot fix, rule estimation runs successfully on rules that use a large number of user variables.

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An entry with no value is added to the end of the lookup list when you upload a lookup list from a CSV file.	RULES STUDIO	<p><b>Summary:</b> When you download a lookup list and then upload the CSV file back to the lookup list, an empty entry is added at the end of the lookup list.</p> <p><b>Business Impact:</b> Blank entries in the lookup lists can cause unwanted behavior in rules.</p>	After you apply the hot fix, uploading a downloaded lookup list CSV file does not add an empty entry to the end of the lookup list.
The <b>Last Updated</b> timestamp is not correctly displayed in the print view for rules.	RULES STUDIO	<p><b>Summary:</b> In the rule list in the Coding folder of Rules Studio, the <b>Last Updated Time</b> column is displayed correctly for the local time zone. However, when you click the <b>Print</b> button, both the <b>Created</b> and <b>Last Updated</b> times are not shown in the local time zone.</p> <p><b>Business Impact:</b> The time at which a rule was created and last updated is unclear to users.</p>	After you apply the hot fix, the rule print window displays the <b>Created</b> and <b>Last Updated</b> times in the local time zone.
A rule estimation fails for some rules that succeeded in an earlier version of SAS Fraud Management.	ESTIMATION	<p><b>Summary:</b> In SAS Fraud Management 6.1, estimation fails for some rules that completed successfully in SAS Fraud Management 4.3. The errors are similar to the following messages:</p> <pre>ERROR: Source Bit Arrays are of different length (1 != 2)</pre> <pre>NOTE: Argument 1 to function BITOPOR(' ', ' ') at line 369332 column 204 is invalid.</pre> <p><b>Business Impact:</b> Estimation cannot be used for evaluating some rules.</p>	After you apply the hot fix, rule estimation is successful.
When the two-pass solution is configured for the OnDemand Decision Engine, the estimation results are incorrect.	ESTIMATION	<p><b>Summary:</b> The rule estimation process does not consider the mapfile file when the two-pass solution is implemented for the OnDemand Decision Engine. As a result, some transactions that should be included in the estimation are not included.</p> <p><b>Business Impact:</b> In rule estimation, transactions for some multi-organizations are not included in the results. These missing</p>	After you apply the hot fix, rule estimation results are correct when the two-pass solution is configured.

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		<p>transactions impact the ability to test the effectiveness of the rules that are being developed.</p>	
<p>You cannot exclude testing rules from an estimation.</p>	<p>ESTIMATION</p>	<p><b>Summary:</b> In SAS Fraud Management 4.3, there was a check box that enabled you to exclude testing rules from an estimation. That check box was removed in later versions. The result of removing this check box is that an estimation preferentially uses the testing version of a rule instead of the production version of the rule.</p> <p><b>Business Impact:</b> Users do not have the flexibility to exclude the testing version of a rule when running an estimation. This inability to exclude the testing version of a rule can impact their ability to compare estimation results of a production rule to a testing version of the same rule.</p>	<p>After you apply the hot fix, you can select the <b>Exclude Testing Rules</b> check box to prevent the estimation from using rules that are in the testing folder.</p>
<p>Some rule code is missing when you display the rule code on the estimation results page.</p>	<p>ESTIMATION</p>	<p><b>Summary:</b> On the estimation results page, if you view a rule using the <b>Properties</b> button, some of the code might not be displayed. The full rule code can be viewed in the prolog section of the estimation log. This issue does not impact the estimation itself.</p> <p><b>Business Impact:</b> This full rule code might not be displayed from the estimation page. The display issue does not impact the estimation results.</p>	<p>After you apply the hot fix, the full rule code is displayed on the estimation results page.</p>
<p>The rule syntax check does not report an error when an incorrect field name is used in the %DECLAREARRAY macro.</p>	<p>RULES STUDIO</p>	<p><b>Summary:</b> When declaring an array in a rule, the syntax check does not detect an error when the variable that is used for the upper bound of the array is incorrect.</p> <p>For example, if the upper bound is <code>_A_VAR_4</code> but you enter <code>_A_VAR_04</code> instead, the syntax check succeeds. The rule can be</p>	<p>After you apply the hot fix, the rule syntax check detects if the field that is used for the upper bound in %DECLAREARRAY statement is incorrect. The rule cannot be</p>

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		<p>deployed into production with this error. However, the OnDemand Decision Engine detects the error and will not start.</p> <p><b>Business Impact:</b> A rule can be deployed with a syntax error. The error is not detected until the OnDemand Decision Engine fails to start.</p>	<p>promoted until syntax error is fixed.</p>
<p>Exceptions can occur in a multiprocessor environment when multiple Python engines are running.</p>	<p>ENGINE</p>	<p><b>Summary:</b> In a multiprocessor environment that has multiple Python engines running, storage overlays can occur during transaction processing. The overlays produce varying exceptions and cause the Python engine to terminate. The exceptions can be seen in the OnDemand Decision Engine log. For example, exceptions similar to the following can occur:</p> <pre>INFO PythonSocket java.lang.ArrayOutOfBoundsException  INFO PythonSocket java.lang.UnsupportedOperationException  INFO PythonSocket java.lang.NullPointerException</pre> <p><b>Business Impact:</b> When all the Python engines have terminated, fraudulent transactions cannot be identified.</p>	<p>After you apply the hot fix, the exceptions no longer occur.</p>
<p>Queue rules do not execute for a tenant in a multi-tenant environment.</p>	<p>RULES</p>	<p><b>Summary:</b> In a multi-tenant environment, a rule deployment file is generated for each tenant. The queue rules from rule files for all tenants should be identified and executed. However, only the queue rules in the final rule deployment file execute.</p> <p><b>Business Impact:</b> The impact of this issue is high if many queue rules are contained in a rule file that is not the last to be deployed in a multi-tenant environment.</p>	<p>After you apply the hot fix, all enabled queue rules in rule deployment files for all tenants execute.</p>

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<p>After you update an alert queue definition or alert queue priority, disabled rules begin executing.</p>	<p>ENGINE</p>	<p><b>Summary:</b> After an alert queue is updated, the OnDemand Decision Engine begins to execute the disabled rules. The rules continue to show as disabled in the web application.</p> <p>The workaround for this issue is to force the OnDemand Decision Engine to reload the correct operational states of the rules. You can force the reload of the correct operation states of the rules by first enabling one of the disabled rules and then immediately disabling the rule on the <b>Rules</b> tab.</p> <p><b>Business Impact:</b> The impact of this issue can be high if rules are kept in a disabled state rather than being deleted.</p>	<p>After you apply the hot fix, updates to an alert queue definition or priority have no impact on disabled rules.</p>