Release Notes for SAS® Fraud Management 4.4_M0, Hot Fix 5

Description	Component	Summary and Business Impact	Test Scenario
On Oracle systems, the GET_SIGNATURE function in the TDR does not parse the UVR_ID input parameter.	DATABASE	**Summary:** The UVR_ID input is a character string of comma-delimited values. The GET_SIGNATURE function does not parse the input variable correctly, causing the results of the function to be inaccurate. **Business Impact:** Results of the fast-path rule estimation are inaccurate.	After you apply this hot fix, the GET_SIGNATURE function produces accurate results.
Job 4515 can add duplicate rows to the database table RPT_FRQ_RULE_FIRING_DETAIL.	REPORTS	**Summary:** The loader for the Frequency of Rules Fired historical report is job 4515. The job can add duplicate rows to the RPT_FRQ_RULE_FIRING_DETAIL table in the System of Record (SOR) database. This behavior results in a unique constraint violation error. **Business Impact:** The Frequency of Rules Fired report does not contain the latest data until job 4515 completes successfully.	After you apply this hot fix, job 4515 does not add duplicate records to the RPT_FRQ_RULE_FIRING_DETAIL table.
Erroneous rule code might create an infinite loop that prevents the OnDemand Decision Engine (ODE) from shutting down SAS® processes during a redeployment.	ODE	**Summary:** Bad rule code can result in a transaction time-out and leave the SAS channel in an unusable state. Also, rule code that causes an infinite loop can prevent the OnDemand Decision Engine from shutting down SAS processes during a redeployment. This behavior can result in processes that consume 100% of the CPU resources. **Business Impact:** Erroneous rule code can cause the OnDemand Decision Engine to stop functioning, and 100% of CPU resources might be used by SAS processes.	After you apply this hot fix, the OnDemand Decision Engine performs the following actions: • It kills a SAS process if a transaction times out while it is waiting for a reply. • It creates a new SAS process when there is no SAS channel available for a configurable period and the maximum number of SAS processes has not been reached. *(continued on next page)*

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			The erroneous rule code must still be removed from the deployment.
Transactions that require the same Multi-Entity History (MEH) segment can block other transactions from processing.	ODE	**Summary:** Transactions that require the same MEH segment execute serially. In a worst-case scenario, all engine threads can be blocked by transactions that need the same segment. This situation can impact all transactions. Sorting transactions before sending them to the OnDemand Decision Engine can cause excessive contention. **Business Impact:** Transaction throughput is reduced when the engine threads are consumed by transactions that require the same MEH segment.	After you apply this hot fix, a transaction that is waiting for a lock increments the engine thread-pool size to account for its inactivity. This action helps throughput by providing engine threads for non-contentious transactions. The default value for the **`threadMaximumPoolSizeUnderContention`** property is **`500`**.
The error-handling code for a badly formed message can cause the OnDemand Decision Engine to stop processing.	ODE	**Summary:** If invalid data is located at an offset greater than 9999 in a message, the error-handling code can cause the SAS session to fail. The OnDemand Decision Engine stops processing incoming messages. **Business Impact:** The OnDemand Decision Engine fails in some cases when a badly formed message is received.	After you apply this hot fix, the error-handling code that is executed when a badly formed message is processed does not cause the OnDemand Decision Engine to stop processing.
You cannot add entries or remove entries from an analyst list.	RULES	**Summary:** An error occurs if you add or remove entries from an analyst list when the OnDemand Decision Engine session encoding and the transaction encoding are not the same. **Business Impact:** If an analyst cannot add an entry to an analyst list, then fraudulent transactions might not be identified. If an entry cannot be removed, then a valid transaction might be identified incorrectly as fraudulent.	After you apply this hot fix, you can add and remove entries from an analyst list when the encoding differs between the OnDemand Decision Engine and the transaction.

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On Oracle systems, the 4020 job fails with an error when the logon hour is 11:00 pm.	LOADERS	**Summary:** The 4020 job populates the database tables that are used by the Agent Time Analysis report. The job fails when the hour value of the logon timestamp is 11:00 pm. Adding one hour results in an hour value of 24, which is invalid for Oracle. When this problem happens, the following error is generated: `ERROR: Error fetching from cursor. ORACLE error is ORA-1850: hour must be between 0 and 23.` **Business Impact:** Agent Time Analysis Report data is not available.	After you apply this hot fix, the 4020 job completes when the logon timestamp is 11:00 pm.
On the **Alerts** tab, you cannot click to copy the entity value to the clipboard.	ANYLSTSWORK	**Summary:** In earlier releases of SAS® Fraud Management, you can click the entity links on the **Alerts** tab to copy the values to your clipboard. **Business Impact:** You cannot copy entity values to the clipboard from the **Alerts** tab.	After you apply this hot fix, you can click the entity values on the **Alerts** tab to copy the values to the clipboard.
The alert information panel is small and you must scroll to view the contents.	ANYLSTSWORK	**Summary:** In earlier releases of SAS Fraud Management, the alert information panel is across the top of the alert page. In release 4.4_M0, the panel is now on the right side of the page and it is scrollable. Some users might prefer the former location of the alert information panel. **Business Impact:** The entire content of the alert information panel is not visible without scrolling.	After you apply this hot fix, the location of the alert information panel is configurable. There is a new system property, **`analyst.alert.alertInfoPanelDisplay`**, to control the location. *(continued on next page)*

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			The valid property values are as follows: • SPLIT: The panel is on the right (default). • FIRST_TAB: The panel is the first tab in the tab group on the left. • SECOND_TAB: The panel is the second tab in the tab group on the left. • LAST_TAB: The panel is the last tab in the tab group on the left.
On the **Alerts** tab, the analyst marking cannot be removed from some transactions.	ANYLSTSWORK	**Summary:** The confirmed fraud (CF) analyst marking cannot be removed from a transaction under some circumstances. For example, if a transaction's marking is added under one alert, it cannot be removed under a different alert. It also cannot be removed under the same alert with a different version number. The CF markings are used in rule estimation. Also, if you add a CF marking to a transaction, a message is sent to an enterprise case management (ECM) system (if that system is configured). **Business Impact:** The CF analyst marking cannot be removed from some transactions.	After you apply this hot fix, you can remove the CF analyst marking from any transaction of an alert.