

Release Notes for SAS® Fraud Management 4.1_M0, Hot Fix 1

Description	Component	Summary	Test Scenario
A record deadlock occurs after a segment is inserted.	JOSE	When a high frequency of record inserts occurs and low-key cardinality is present in processing transactions, two threads might become deadlocked. This problem occurs because of the way that records are currently locked.	After you apply the hot fix the frequency of thread lock situations should be reduced significantly.
To increase JAVA OnDemand Scoring Engine (JOSE) throughput, the OR clause in a multi-read query needs to be changed to a UNION clause.	JOSE	In order for SQL to perform better, the OR clause needs to be replaced with the UNION clause. This change enables faster reads of the data from the Multi-Entity History (MEH) database by incorporating multiple transaction-processor threads.	After the hot fix is in place, you should notice a quicker response from JOSE as records are selected from the MEH database.
The FT-DEPOSITS-5006-RQO_TRAN_DATE field in DATETIME variable always results in a value of 02 for the RHX_SCORE_1_SAS_MATCH_INDF field.	Fraud Tagging	Oracle stores dates as full datetime values (for example, hours, minutes, seconds), but the modeling macros expecting a date value. With Oracle databases only, this behavior causes an incorrect match index. Changing the variable from DATETIME to DATE corrects this problem.	When you apply the hot fix, the modeling macro consistently obtains the anticipated column type.
The JOSE client program can store and forward (SAF) transactions when the primary and secondary Alert Generation Server (AGS) queues become full.	JOSE	It is possible that incoming transaction counts will exceed the IBM recommended sizes for JOSE-local SAF queues. When this occurs, transactions might not be written to the AGS and can be lost. The hot fix includes an option to turn on the feature that prevents lost transactions going to the AGS.	After you apply the hot fix, four properties for output interfaces are available: AlertQ , SumQ , ObdeQ and <i>(continued)</i>

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			<p>LogQ. If any of these properties are set so that they do not allow dropped transactions, the AGS queue might fill up, and SAF holds them until the queue is empty.</p>
<p>You need to configure JOSE to use the FORK function so that when you restart JOSE, the scoring engine starts in a timely manner.</p>	JOSE	<p>When transactions are processed and a restart is called, the SAS® sessions take significantly longer to invoke. Proper error handling of the slow SAS sessions is needed in order to enable the restarting of the scoring engine within an acceptable timeframe.</p>	<p>After you apply the hot fix, the RESTARTSCORE function accommodates slower startup of SAS sessions.</p>
<p>The addition of the FORK function to UWUXMSFN DATA step functions is required in order to start SAS sessions.</p>	OSE	<p>Invocation of SAS sessions can take time. Using the FORK function enables faster process time.</p>	<p>After you apply the hot fix, you can send a command-and-control (SCC) transaction that enables the current SAS session to fork and start up more quickly.</p>
<p>When an interface socket is paused, connect and send actions are possible. However, there is no response from the system.</p>	UUSC	<p>When an interface socket is paused, you can issue a subsequent connect action that seems to succeed. However, the transaction is not sent. The transaction remains in the socket buffer until either the connection is closed or the socket resumes. If a socket is paused, no connection to the socket should occur.</p>	<p>After you apply the hot fix, you cannot connect to a socket when the interface is paused.</p>

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JOSE should allow a blank queue-manager name for operations in the MQ cluster.	JOSE	In order for JOSE to operate properly in an AGS MQ cluster, JOSE should not specify a queue-manager name when it connects.	After you apply the hot fix, when you work in an MQ clustered environment, the operations in a cluster of AGS servers are more flexible.
Oracle Range Partition table indexes need to be created in a tablespace with a 32K page size.	DATABASE	The FRH_RULE_FIRE_FACT table for the standard Oracle Range Partition data definition language (DDL) is configured to build the indexes in an 8K tablespace. The table that is built in a 32K tablespace. This behavior causes errors when you roll the partitions on the table.	After you apply the hot fix, the rolling partitions work correctly.
–In an Oracle implementation, the DAILY_RPT_SNAPSHOT and HR_RPT_SNAPSHOT procedures produce incorrect results on rollup because of the Oracle date.	DATABASE	Oracle produce the DATE data type as a timestamp. In the DAILY_RPT_SNAPSHOT and HR_RPT_SNAPSHOT procedures, the data type is a rolling update by timestamp (rather than by date), and it produces incorrect results.	After you apply the hot fix, the procedures produce correct results in Oracle implementations.
Oracle implementations should not include the CREATE ANY TABLE authorization from the APPROLE database management services (DBMS) role.	DATABASE	The CREATE ANY TABLE authorization is a security violation. You do not require this authorization when the temporary tables are created by the Reporting History (RH) DDL package for Oracle.	After you apply the hot fix, the security violation is fixed in Oracle implementations.
The SOR schema installation generates SP2-0734 warnings upon creation of VXX tables.	DATABASE	For a standard Oracle installation, an empty line is present in the VXX tables that causes the following warning: SP2-0734: unknown command beginning "TABLESPACE...	After you apply the hot fix, the empty line is removed and the table is created in the defined tablespace.

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		When this happens, the table is created in your default tablespace instead of the tablespace that is defined.	
When load balancers are used in an implementation, they create a high quantity of database connection calls that affect performance.	JOSE	The load balancer currently uses the Telnet protocol to connect to each interface (Input, InputSaf, and InputBatch) every 5 seconds. Then, load balancer immediately closes the socket. The problem is that the mere connection causes a database connection to be initiated. This high volume of database connection calls creates a severe negative impact on the database server, actually halting development and testing.	After you apply the hot fix,, the load balancer does not cause unnecessary connection calls to the database server.
A new property to deny remote connections to the JOSE command port is required for some configurations.	JOSE	By default, remote connections to the JOSE command port are allowed. You cannot configure this behavior otherwise.	After you apply the hot fix, the new property socketAllowRemote.Command is available. The default value for this property is true , which allows the connections. Setting the property to false enables the command port to refuse remote connections.
The demographics date format displays incorrectly.	UI	A date in the demographics display appears twice: once in the original date format and once in the date format that is specific to your UI.	After you apply the hot fix and you then view demographics information where a

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			date is displayed, the date only appears once per field.
Transactions of type CSCA that are placed on the One Behind Data Exit (OBDE) queue by the Java On-Demand Scoring Engine (JOSE) contain incorrect segments.	UUSC	<p>The incorrect segments are: SMH, SRP, SUS, RRR, RQO, XQO, AQO, AQD, UCM, HQO, HCT, TCA, DNS, DMX, RUA, ROB, RUR, RRF, CMX, CQV, ZMD, and ZOO.</p> <p>The correct segments should be SMH, SRP, RRR, RQO, XQO, AQO, AQD, UCM, HQO, HCT, TNG, DNS, DMX, RUA, ROB, and RUR.</p>	After you apply the hot fix, use your specific process for reading the OBDE to confirm that the proper segments are included for the message.
The JOSE does not properly recover after the socket is closed. This issue occurs because of an excessive transaction time.	UUSC	A scenario was encountered in which running transactions through JOSE and the Batch Processing Interface (BPI) forced a timeout because of resource constraints on the server. The BPI interface returned an SMH_RESP_REQ value of 4. When the JOSE attempted to recover from the timeout BPI interface, it could not do so because of an issue with improper shut down of the JOSE.	<p>The property TranProcMaxLimitMs controls the time-out value for the JOSE that listens on the inbound socket port, and the default value is 15,000 milliseconds. After you apply the hot fix, set the value to a lower number to force the timeout of the socket request. BPI will receive an SMH_RESP_REG value of 4. The JOSE should</p> <p style="text-align: right;"><i>(continued)</i></p>

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			properly recover and any transactions that are in the queue should be processed.
Transactions sent to the Store and Forward (SAF) queue are not handled properly by JOSE.	UUSC	After JOSE processes an incoming message, the message is placed on an IMB MQ series queue to be retrieved by the Alert Generation Server (AGS). In certain circumstances, transactions are written to an SAF queue. Once messages are written to the SAF queue, it is not possible to retrieve those messages.	To test this fix, stop the AGS to allow transactions to build up in the queue. Send enough transactions through JOSE to exceed the limit of the transaction size for the AGS queue. Check the queue using a queue monitoring tool to ensure that the AGS and SAF queues contain transactions. Restart the AGS and verify the transactions have been read from both queues.