Release Notes for SAS® Fraud Management 6.1_M0, Hot Fix 4

Description	Component	Summary and Business Impact	Test Scenario
Google Chrome and Microsoft Edge browsers are not supported.	BROWSER	**Summary:** You can use only Microsoft Internet Explorer 11 for the SAS Fraud Management web application. Chrome and Edge cannot be used. **Business Impact:** The biggest impact is poor UI performance when you use Internet Explorer 11.	After you apply the hot fix, you can use Chrome or Edge browsers for the web application.
With Chrome and Edge browsers, you cannot download an analyst list.	RULES	**Summary:** In the Chrome or Edge browser, nothing happens when you click the **Download** button for the selected analyst list. That is, the dialog box that should open so that you can save the list is not displayed. **Business Impact:** You must use Internet Explorer 11 to download the contents of an analyst list to a file. One issue, as noted in the first note above, is that poor UI performance occurs with Internet Explorer 11.	After you apply the hot fix, you can download an analyst list by using Chrome, Edge, and Internet Explorer.
When you create or edit a rule, the selections in the **Transaction Type** selection list are truncated.	RULES	**Summary:** The **Transaction Type** selection list in the rule-properties dialog box is not wide enough. The values are truncated, and they can be difficult to read, especially in languages other than English. **Business Impact:** Rule writers might have difficulty selecting the correct transaction type when they create or edit rules.	After you apply the hot fix, the **Transaction Type** selection list is wide enough to display the transaction-type values.

Description	Component	Summary and Business Impact	Test Scenario
The detailed page of the Call Control Monitor report is blank when you click the strategy name.	REPORTS	**Summary:** On the Call Control Monitor report, the strategy name is a hyperlink to a detailed report that lists the alert values that are being actively worked. When you click this hyperlink, the detailed report is empty. **Business Impact:** You cannot use the Call Control Monitor to view the list of alert values in a strategy that analysts are currently working on.	After you apply the hot fix, the detailed page of the Call Control Monitor report displays the alert values for the selected strategy.
When you create a new user by copying an existing user, the multi-organization selections are not copied.	ADMIN	**Summary**: On the **Users** tab, you create a new user by selecting an existing user and clicking the **Copy** button. When you do this, the new user is created successfully. However, no multi-organization selections are assigned. **Business Impact:** Administrators might require more time to create new users if the multi-organizational structure is complex. The administrator must manually update every new user to select the multi-organization selections.	After you apply the hot fix, the multi-organization selections are correct for users that are copied from existing users.
The **Alert Destination** selection list is limited to 100 queues.	RULES and EXPLORE	**Summary:** On the **Explore** tab, you can create an alert for a transaction in the grid by right-clicking the transaction and selecting **Create an Alert** from the menu. In the Create Alert dialog box, the **Alert Destination** drop-down contains a list of active queues. That list contains the first 100 queues in alphabetical order. If there are more than 100, you cannot create an alert on those additional queues. When you edit a rule using the Guided Approach, the **Alert Destination** drop-down is also displayed when you click (*continued on next page*)	After you apply the hot fix, the **Alert Destination** drop-down will display up to 100,000 queues.

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		the **Create an Alert** check box. You encounter this same issue when there are more than 100 available queues. You can select from the first 100 queues only. **Business Impact:** If more than 100 queues are available, then both rule writers and analysts are unable to select some of the queues in the **Alert Destination** drop-down list. This prevents these users from both editing rules and creating manual alerts for some queues.	
For Python models, the timestamps are not stored in the System Routing and Performance (SRP) segment.	ENGINE	**Summary:** The SRP timestamp fields capture times, and you can use this information to determine how long the scoring engine spends processing the model and processing the rules for each transaction. When a Python model is used, these times are not stored. **Business Impact:** Because the SRP timestamps are not stored for Python models, you cannot use them to determine the detailed processing time of the scoring engine. Transaction scoring is not impacted by this issue.	After you apply the hot fix, the SRP timestamp values are stored for Python models.

The REST API methods that update an alert status (by alert ID or entity value) fail.	REST API	**Summary:** If you specify a value for the systemBlockCode field when you give an assessment to an alert, the REST API call fails. When the failure occurs, the following response is returned:
		`{`
		`"errorCode": 3,`
		`"message": "Unexpected failure occurred.",`
		`"details": [],`
		`"remediation": "",`
		(*continued on next page*)
			After you apply the hot fix, the update of alert status by using the REST API completes successfully.

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		<pre>"links": [],
		"version": 1,
		"httpStatusCode": 500
		}</pre>
		These two methods are impacted:
		• **/alerts/specifiedEntity/actions/status**
		• **/alerts/{alertId}/actions/status**
		Business Impact: This failure occurs when a system or transaction block code is specified. If a block is not applied, subsequent transactions (possibly fraudulent) are not blocked for the entity.	

The SAS Alert Management System (SAMS) configuration is not supported for use with PostgreSQL databases.	ANYLSTSWORK	**Summary:** The PostgreSQL database management system is not supported for the System of Record (SOR) and Transaction Data Repository (TDR) databases. Only the Multi-Entity History (MEH) database can be a PostgreSQL database. Therefore, only an external alert management system (XAMS) configuration is available. **Business Impact:** The Analyst Workstation functionality is not available when PostgreSQL is used.	After you apply the hot fix, a SAMS configuration is supported for PostgreSQL.
An error occurs when Python script files other than the score.py file are located the model-package directory.	ENGINE	**Summary:** When you register a Python model, all .py files in the model-package directory are checked to see whether the modules contain the model-package class name. If the modules do not contain the class name, the (*continued on next page*)	After you apply the hot fix, the check for the model-package class name is performed only on the score.py file, and no error occurs.

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		Python scoring engine shuts down. This check should be performed only on the score.py file. **Business Impact:** When this problem occurs, the Python model does not score transactions, and fraudulent transactions might not be identified. If a SAS® model is also in use, the model is not impacted by this issue.	
When you run a Python model, an error occurs when the code reads transactions that are longer than 128 kilobytes.	ENGINE	**Summary:** Transactions that are longer than 128 kilobytes are truncated when the code reads them from the socket that is connected to the Python engine. An error occurs when the process tries to deserialize these incomplete transactions. When this problem occurs, the following error appears in the Python log: `ose (receive) DEBUG: Caught exception :[Errno 104] Connection reset by peer Traceback (most recent call last): File "/sasvol01/SASConfig/Lev1/Applications/SASFraudManagement/6.1/SAMS/engine/Server1/bin/ose.py", line 878, in receive bytes = self.socket_read_n(4) File "/sasvol01/SASConfig/Lev1/Applications/SASFraudManagement/6.1/SAMS/engine/Server1/bin/ose.py", line 867, in socket_read_n data = self.sock.recv(n) ConnectionResetError: [Errno 104]` (*continued on next page*)	After you apply the hot fix, the code reads from the socket until the entire transaction is received. Transactions that are greater than 128 kilobytes are processed without error.

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		`Connection reset by peer`
		`ose (run) DEBUG: Terminating`
		`ose (main) INFO: Python scoring engine shutting down...`
		
		Business Impact: Transactions are not scored by the model, and fraudulent transactions might not be identified.	

When you use the LENGTH() function in conditional code in a rule, the syntax check fails.	RULES	**Summary:** The syntax check fails when you use the LENGTH() function in rule code like this example: `if length(aqo_acct_num) < 2 then do; end;` **Business Impact:** Rule writers cannot use LENGTH() in the rule code. As a result, rule writers need to rewrite the logic to remove LENGTH().	After you apply the hot fix, the rule syntax check is successful for code that uses the LENGTH() function.
The IVR Alerts Monitor report fails with an application error.	REPORTS	**Summary:** On the **Reports** tab, the IVR Alerts Monitor report fails, generating an application error. **Business Impact:** Analysts cannot use the IVR Alerts Monitor report to monitor the alerts that are processed by the Interactive Voice Response (IVR) web service.	After you apply the hot fix, the IVR Alerts Monitor report runs successfully.
When you use Python models, missing numeric variables have a value of **0**. Also, client input and user variable values are not reset between transactions.	ENGINE	**Summary:** Currently, the value for missing numeric fields defaults to **0**. This behavior can cause logic errors in the Python model because a field with a **0** value cannot be distinguished from a field that has no value or that is undefined. *(continued on next page)*	After you apply the hot fix, numeric fields are generated with a default value of **NaN** (Not a Number). In addition, values for client input variables and user variables are cleared between transactions.

Description	Component	Summary and Business Impact	Test Scenario
		Business Impact: If a custom Python model relies on the ability to determine whether a numeric field is missing its value, then a logic error can occur. When client input and user variable values are not cleared between transactions, a logic error also can occur. The impact of these errors depends on the custom code.	
The size for the Python transaction queue cannot be configured.	ENGINE	**Summary:** The size of the Python transaction queue cannot be configured, and the default size might not be large enough for high transaction volumes. If the queue size is not large enough, transactions are discarded before they are processed by the OnDemand Decision Engine. The default queue size is **2**, and that size cannot be overridden. **Business Impact:** If some transactions are not processed by the OnDemand Decision Engine, fraudulent transactions might not be identified.	After you apply the hot fix, the default queue size is increased to **25** and that value can be overridden. To customize the queue size, add the `queueSize` property to the `pythonController` bean in the ose.xml file. For example, to set the queue size to **50**, add this property: `<property name="config.queueSize" value="50" />`