Release Notes for SAS® Fraud Management 4.4_M1, Hot Fix 5
Version 5, Release 11

Description	Component	Summary and Business Impact	Test Scenario
Numeric variables in the Multi-Entity History (MEH) database that are less than 8 bytes in length are not converted from S370 floating-point notation to IEEE notation when signatures are migrated off the mainframe.	OSE	**Summary:** When numeric signature variables are migrated off the mainframe, they must be converted from S370 floating-point notation to IEEE notation. Currently, only 8-byte numeric variable converted. As a result, the values of these variables are interpreted incorrectly. **Business Impact:** Numeric signature variables with lengths of 4, 3, or 2 bytes are not converted to IEEE. As a result, the values of these variables are interpreted incorrectly.	After you apply this hot fix, all numeric variables are converted to IEEE when signatures are migrated off the mainframe.
You cannot download an analyst list.	RULES	**Summary:** On the **Rules** tab, when you select an analyst list and click **Download**, nothing happens. In particular, the list is not downloaded to a local file. **Business Impact:** The contents of an analyst list cannot be saved in a local file. However, this issue does not impact the functionality of the SAS Fraud Management application.	After you apply this hot fix, you can download an analyst list to your PC (that is, you can make a local copy in a CSV file or in a SAS data set).
The primary key indexes for the signature tables in the Multi-entity History (MEH) are not clustered in the range-partition installation for DB2.	DATABASE	**Summary:** The primary key indexes for the FMH_V_DATA and FMH_Z_DATA tables are not clustered when range partitioning is specified. **Business Impact:** When the primary key indexes are not clustered, queries against the signature tables in the MEH might be less efficient.	After you apply this hot fix, if a new partitioned MEH database is created, the primary key indexes are clustered for the signature tables. The hot fix installation does not impact existing MEH database tables.

Description	Component	Summary and Business Impact	Test Scenario
The Multi-entity History (MEH) database's update step of the 4.4M1 HF3 installation might be slow in Oracle.	DATABASE	**Summary:** This issue is described in detail in SAS Note 63933, "The Multi-Entity History database update for SAS Fraud Management 4.4M1 Hot Fix 3 (Version 5, Release 9) might be slow in Oracle." This performance issue impacts Oracle systems that are at Hot Fix 3 or earlier. **Business Impact:** When you install Hot Fix 3 for release 4.4M1, the database update might take much longer than expected.	After you apply this hot fix on Oracle systems that are at 4.4M1 Hot Fix 3 or earlier, the MEH database update is more efficient. ***Important note for systems currently at 4.4M1 Hot Fix 2 or earlier:*** If partition compression is enabled for the FMH_Z_DATA table or the FMH_V_DATA table, then you must implement the workaround that is described in SAS Note 63933 before installing this hot fix.
Performance might be slow for Oracle packages in the Multi-entity History (MEH) database.	DATABASE	**Summary:** The performance of the Oracle packages in the MEH database might be slow because the packages use dynamic Structured Query Language (SQL). Oracle parses dynamic SQL at execution time. Performance can be improved by using static SQL that uses a static execution plan. **Business Impact:** The performance of Oracle packages that select, insert, and update data in the MEH might be slow.	After you apply this hot fix, the MEH packages for Oracle use static SQL and are more efficient.
Performance might be slow for the queries that are used in rule estimation.	ESTIMATION	**Summary:** Queries that are used by rule estimation might not perform well because they use dynamic Structured Query Language (SQL). **Business Impact:** A rule estimation might run slower than you expect.	After you apply this hot fix, static queries might perform better. As a result, estimation performance might improve.

Description	Component	Summary and Business Impact	Test Scenario
The transaction scope for an estimation is not limited to the multi-organizational level of the selected rule(s).	ESTIMATION	**Summary:** A query run in rule estimation reads more data from the Transaction Data Repository (TDR) database than is required for the selected rules. Instead of limiting the data to the multi-organization of the rules, the tenant root is used. **Business Impact:** Estimation might be slower than expected.	After you apply this hot fix, the estimation process scopes transactions based on the multi-organization of the rules involved.