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The Shadow[®] line of products from NEON Systems, Inc. includes Shadow Mainframe Adapter Server and Shadow Web Server. These release notes cover the enhancements and incident resolutions derived from Shadow Support Incidents related to SVFX 2149 through SVFX 4069.

SI-17- 4: Shadow Mainframe Adapter Server

Enhancement: ISPF panel now contains the high SVFX number of maintenance tape in use, as well as the date and time.

SI-1994: Shadow Mainframe Adapter Server

Support Incident: Customer requests implementation of sqleseti() function for compatibility.

Resolution: To implement this function, two new API functions were added: shadow_sqleseti() & shadow_sqleqryi(). Also an update was made to scpghd.h to map sqleseti() to shadow_sqleseti() and sqleqryi() to shadow_sqleqryi().

SI-2076: Shadow Mainframe Adapter Server

Support Incident: Customer needs list of secondary authids for user connections via option in SDF.

Resolution: A new line command was added to the SDF remote user display to list the DB2 secondary authorization IDs.

SI-4518: Shadow Interface for ADABAS

Enhancement: The Shadow Interface for ADABAS now supports the ORDER BY clause for table joins. If the user specifies ORDER BY when doing a join, the Shadow Interface for ADABAS will internally sort the result set based on the ORDER BY clause before sending the result set back to the client. The following are the restrictions for this support:

- Up to 10 columns are allowed in the ORDER BY clause. The keywords ASC|ASCENDING or DESC|DESCENDING can be specified after each column. The default is ASC.
- 2. The name of the column in the ORDER BY clause should be a column name in the result set or a column position. This means that if the user uses a correlation ID for the

column, either the correlation ID or the column position must be used in the ORDER BY clause.

Note: Since a sort will be done when ORDER BY is specified in a join, to avoid overhead and have better performance, it is strongly recommended that ORDER BY be used only when necessary and the size of result set to be sorted should be minimized.

Along with this enhancement, a resolution has been included for an 0C3 abend that would occur when using JOIN and AS keyword correlation name support.

SI-4658: Shadow Interface for ADABAS

Support Incident: When using the Shadow Interface for ADABAS and setting the DBMS type to ADABAS (i.e., setting the Shadow Client keyword DBTY=ADABAS), the number of rows modified was not being correctly determined and the stmt.executeUpdate method always returned 0 (zero).

Resolution: Support was added to correctly determine the number of rows modified for INSERT operations, so the stmt.executeUpdate method will correctly return 1 (one) for INSERT operations, as ADABAS can only insert one row at a time. Note: Support was previously added to correctly determine the number of rows modified for UPDATE or DELETE operations with Shadow v 4.8 SVFX1489, with the maximum number that can be returned limited to 65,535.

SI-4660: Shadow Interface for VSAM

Support Incident: When using the Shadow Interface for VSAM and Sequential Files, the sequential file extract option to create a data map that includes columns for viewing or searching the dataset name and/or PDS member name was not working properly. Although the extract was performed by specifying a member column name and by indicating that searches by columns would be allowed, the following query would return a blank result set:

```
SELECT * FROM PDSMEM WHERE MEMBER-COLUMNNAME = MEMBER-NAME
```

Resolution: A malfunction in the extract process for cases when a dataset and member were specified for the PDS was causing a problem with the record selection. The problem has been corrected. Note: If the member name was specified at extract time, those maps need to be re-extracted and refreshed.

SI-4791: Shadow Interface for Natural

Enhancement: The Shadow Interface for Natural will now allow ACI servers to register with just a map name rather then the entire triple name. To do this, the application programmer must specify the following fields in the REGISTER call:

- #ETBCB-SERVER-NAME: Specify the map name in this field as 'MAP=xxxxxxxx'.
- #ETBCB-SERVER-CLASS: Leave this field blank.
- #ETBCB-SERVICE: Leave this field blank.

This will help to minimize user errors since only a map name is required. Also, if the triple name in the map is changed, no change will be required in the REGISTER call in the Natural program, thus preventing a triple name mismatch.

An example of a REGISTER call that uses map name follows:

```
ASSIGN #ETBCB.#ETBCB-SERVER-NAME = 'MAP=REGMAPNM'

ASSIGN #ETBCB.#ETBCB-SERVER-CLASS = ' '

ASSIGN #ETBCB.#ETBCB-SERVICE = ' '

ASSIGN #ETBCB.#ETBCB-FUNCTION = #FCT-REGISTER

CALL 'BROKER' #ETBCB-API #SEND-AREA(*) #RECEIVE-AREA(*) #ERROR-AREA
```

SI-5833: Shadow Mainframe Adapter Server

Support Incident: Several of the ISPF help panels for the Shadow Data Mapping Facility (accessed from the Shadow Mainframe Adapter Server Primary Option Menu Option 10) were incorrect.

Resolution: The help panels for the Shadow Data Mapping Facility have been corrected.

SI-6077: Shadow AutoHTML for CICS

Enhancement: Added help panels to CICS autoHTML.

SI-6626: Shadow Enterprise Auditing

Enhancement: This enhancement adds a new Shadow Mainframe Adapter Server parameter, SMFGENERICUSERIDS, which controls whether the generic and extended userids supplied by any client connection will be accepted and placed in displays and SMF records. The generic userids will not be used for authorization unless the rules concerning Shadow Enterprise Auditing (formerly TLS) userids are met (see #3, below). The default value for SMFGENERICUSERIDS is NO.

The introduction of the SMFGENERICUSERIDS parameter changes the licensing restrictions regarding the use of generic and extended userids as follows:

- For the client to set the generic and extended userids, SMFGENERICUSERIDS must be set to YES. Licenses for Shadow Event Facility (SEF) and Shadow Enterprise Auditing are no longer required.
- To enable generic and extended userids to be placed in displays and SMF records, SMFGENERICUSERIDS must be set to YES. Licenses for SEF and Shadow Enterprise Auditing are no longer required.

The locations where the generic and extended userids will be displayed include 06, 13, and 15 SMF records; the Remote Users application (accessed from the **Shadow Mainframe Adapter Server Primary Option Menu** Option 4); and the CALL SHADOW_SERVER('getconnectioninfo',...) result set.

 To enable the TLSDYNAMICUSERIDS Shadow Mainframe Adapter Server parameter, licenses for SEF and Shadow Enterprise Auditing are required. In addition, ATH.AUPWENTL=1 must be set in the SEF rule.

When the generic userid is validated via Shadow Enterprise Auditing, the new SMF field, SMxxGNVL, which is a one byte character field, will be set to Y. It is set to N if the generic userid was not validated.

Note: There is also a Shadow Client change required for this enhancement.

SI-6786: Shadow Interface for IMS/DB

Support Incident: When using the Shadow Data Mapping Facility (accessed from the **Shadow Mainframe Adapter Server Primary Option Menu** Option 2.2) to make changes to any existing IMS data map, upon refreshing the data maps, a new member was created in the data map dataset. This was incorrect; instead, the original member should have been updated.

Resolution: With IMS, the Shadow Data Mapping Facility creates the data mapping structures in memory for the IMS DBD and PSB data map members. Changes to these structures were not being saved back into the original members. The problem has been corrected.

SI-6979: Shadow Data Mapping Facility (DMF)

Support Incident: After using the Shadow Data Mapping Facility (DMF) to create an input map for the CICSEX stored procedure support, when trying to disable a field in the map, the following error message would be returned:

UNABLE TO OBTAIN DATA - THE STORAGE FUNCTION COULD NOT RETURN THE REQUESTED DATA

Resolution: The map name was being overwritten during an authorization check and not restored after the check. Code was added to save and restore the map name.

SI-7022: Shadow Interface for CICS/TS

Support Incident: The CICSEX stored procedure support does not allow the client to override the connection name and transaction name setting in the map via client parameters CNNA (connection name) and TRNA (transaction name).

Resolution: Now, when the user sets the connection name/transaction name in client parameters CNNA and TRNA, these will override the connection name/transaction name in the map in the CICSEX procedure.

SI-7205: Shadow Interface for VSAM

Enhancement: The Shadow Interface for VSAM for CICS (read/write access) has been enhanced to support additional SQL syntax statements for INSERT and UPDATE to comply with ANSI syntax standards.

SI-7231: Shadow Enterprise Auditing

Support Incident: The Shadow TLS feature was renamed to Shadow Enterprise Auditing; however, the Shadow Mainframe Adapter Server SDx4137T message was still incorrectly referring to TLS instead of Shadow Enterprise Auditing.

Resolution: The reference in message SDx4137T was changed from TLS to Enterprise Auditing.

SI-7367 Shadow Data Mapping Facility

Support Incident: Problem with formatting result sets with format verbs.

Resolution: A new OCCURS parameter was added to the MAP keyword. Map should just have occurs fields enabled. Also added a check to see if a map was passed when (FORMAT(VERT) specified this requires data to be moved differently:

```
call shadow_cics('EXCI','EXC3','EXCI','DFH$AXCS',2,'FILEA ','
1','',75,'','MAP(NAME(testmap1) FIELDS(*) FORMAT(VERT) OFFSET(10)
ROWSIZE(08) OCCURS(10))').
```

SI-7434: Shadow Interface for ADABAS

Enhancement: A new parameter has been added, ADABASSETUSERID. When this is set to YES, it will cause an OP command to be performed for each DBID accessed which will set the ETID (i.e, USERID in PLOG) to 'SDBxcccc' where SDBx is the subsystem name and xxxx is the binary Virtual Connection ID. This OP command is only done once for the first UPDATE/INSERT/DELETE, and will stay in affect for the rest of the user session.

SI-7511: Shadow Interface for DB2

Support Incident: Upon switching to RRSAF, after an hour or so, there were numerous 0C3 abends, seemingly all preceded by a plan access failure (00F30034 message).

Resolution: A problem existed in the RRSAF OPEN logic when the SEF LOGON exit changed the plan name. If a reconnect was done, the user was not authorized to the plan name in the logon buffer, but the SEF LOGON exit had changed the plan name to one for which the user is authorized.

The following example scenario illustrates the problem:

- 1. A thread that had been used with DB2 plan named "A" is reused.
- 2. A new user signs on. This user is **not** authorized to use DB2 plan "A" but the logon buffer specifies "A".
- 3. The SEF LOGON exit changes the plan name to "B".
- 4. The RRSAF OPEN logic checks the logon buffer for the plan name to see if it should terminate the thread because the plan name changed. It doesn't appear as if termination of the thread is necessary because when the SEF LOGON exit changed the plan name, it was not reflected in the logon buffer. So, it does not terminate the thread.
- The RRSAF OPEN logic issues the signon. DB2 checks whether the new user is authorized to the current plan. The user is not authorized, DB2 issues the 00F30034 error.

The problem has been corrected.

SI-7710: Shadow Interface for ADABAS

Enhancement: The Shadow Interface now offers the following:

Support for specifying the column position within the ORDER BY clause.

Column name correlation ID support. This enhancement adds a new Shadow Mainframe Adapter Server parameter, ADABASCORRELATIONIDS. Setting ADABASCORRELATIONIDS to YES enables column name correlation ID support. The default for ADABASCORRELATIONIDS is NO. Note: Setting this parameter to YES to support column name correlation IDs may cause a conflict with earlier versions of the Shadow Interface for ADABAS, which accepted SQL syntax statements of the following form (note that there are no commas to separate the operands):

SELECT AA AB FROM EMPQA1

With this parameter set to NO (or on earlier versions of the Shadow Interface for ADABAS), this will select two columns, AA and AB. With this parameter set to YES, AB will be considered a correlation name for AA.

To select two columns when this parameter is set to YES, commas must be used to separate the two column names as follows:

SELECT AA, AB FROM EMPQA1

SI-7757: Shadow Interface for Natural

Enhancement: Exception records will now be created for the following ACI events to enhance the control and monitoring of the Shadow Interface for Natural:

- Timeout waiting for an ACI server.
- Timeout waiting for a response.
- Duplicate triple names.
- ACI server abend.
- Submission lock release failure.
- ACI servers not being started.

SI-7960: Shadow Data Mapping Facility

Support Incident: The COBOL map does not behave the same way as Natural map when it is used for ACLCML

Resolution: This problem has been corrected.

SI-8066: Shadow Interface for VSAM

Support Incident: There was a misspelling in the output message returned when a column was too large.

Resolution: The message has been corrected.

SI-8092: Shadow Interface for VSAM

Support Incident: When using the Shadow Interface for VSAM for CICS (read/write access), when setting the DBMS type to VSAMCICS (i.e., setting the Shadow Client keyword DBTY=VSAMCICS), the SQLColumns call would return columns for all tables instead of one table.

Resolution: Code was added to search for the correct map name based on a WHERE clause on the columns catalog call. Note: Corrections for other problems associated with SI-8092 were previously added with Shadow v4.8 SVFX2140.

SI-8095: Shadow Interface for ADABAS

Support Incident: When the user is testing SQL statements. In most cases, the query retrieves two records, but in some situation, this query fails, raising this exception:

java.sql.SQLException: [NEON][SCOD32TR.DLL][DB2]SHADOW_ADABAS ERROR HAS OCCURRED RC -0021; SEE ADABAS MESSAGES AND CODES MANUAL

Resolution: In a very complex and long running query, ADABAS Support generated a command identifier based on the low order word of the TOD Clock. Randomly and very occasionally, this duplicated a previous command identifier resulting in an ADABAS Reason Code 21. Now, the command identifiers will begin with X'C0000000' and increment by one each time. This avoids the command identifiers which ADABAS generates (which begin with 1) and the character values the ADABAS support sometimes uses (like A001). A conflict will only occur after 256 million iterations.

SI-8098: Shadow Interface for ADABAS

Support Incident: When user issues a join, an error occurs indicating an INVALID CURSOR.

Resolution: This incident occurred when user was performing more complex JOINS and SELECT empgal.* JOINS. JOIN statements were optimized to reduce execution time.

SI-8123: Shadow Interface for Natural

Enhancement: The Shadow Interface for Natural was enhanced to automatically recover from situations when a task holding the ACI submission lock fails. The recovery process is as follows:

- The Shadow Mainframe Adapter Server records the time that the server lock is
 obtained and the type of request (CICS, started task, batch submission) in the same
 control block as the lock word (ADCO). Previously, the Shadow Mainframe Adapter
 Server would set the lock word to the value 1; now, the Shadow Mainframe Adapter
 Server will set it to the TCB address of the user that obtained the lock.
- If the attempt to get the submission lock fails, the "UNABLE TO OBTAIN START SERVER LOCK, WILL RETRY" message is issued, as it had been in the past. At that point, the Shadow Mainframe Adapter Server will now compare the elapsed time between the current time and the time the lock was obtained and then respond as follows:
 - If the elapsed time is less than 10 seconds, everything works as it had in the past.
 - If the elapsed time is greater than 10 seconds, an analysis is made as follows:

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- a. An ENQ is attempted on the resource ACISTARTFAILED. If this fails, it means another task in the system is attempting recovery, so the process by this task is skipped.
- b. A search is made of the CMTCs to see if there is one with the TCB address of the lock owner. If this fails, the lock is just reset. If the VCIDs don't match, that means the TCB was reassigned to a different connection. In this case, the lock is just reset.
- c. If the submission method was CICS or started task, the lock is just reset.
- d. If the submission method was batch submission, the Shadow Mainframe Adapter Server has to clean up the internal reader allocation, so the Shadow Mainframe Adapter Server has no choice but to cancel the task. After the task is canceled, Shadow Mainframe Adapter Server waits a second and then clears the locks.
- e. The ENQ is released.

SI-8125: Shadow Interface for VSAM

Support Incident: The Shadow Interface for VSAM for CICS (read/write access) was not returning SQL_ERROR for exceptions. Instead, it was returning SQL_SUCCESS_WITH_INFO. This was causing problems with certain client applications.

Resolution: SQL_ERROR is now appropriately returned. The Shadow Interface for VSAM was changed to return negative return codes for unsuccessful VSAM calls, which will cause an exception on the client.

SI-8131, SI-8282: Shadow Interface for DB2

Support Incident: When no rows were affected by an UPDATE or DELETE operation, SQLRowCount was incorrectly returning 1 (one).

Resolution: The row count was being returned from the prepare SQLCA. A check was added to see if the SQLCODE 100 was from a prepare/execute "FFD9." If so, the row count will be returned from the execute SQLCA and not from the prepare SQLCA.

SI-8197-3: Shadow Interface for ADABAS

Support Incident: User would like ADABAS Periodic fields to be selectable though a single column name.

Resolution: A new parameter was added -- ADABASPRUNMUPE=ALL/NO/ NOTCOUNT-- to support AI(*) type selection criteria and to Prune Result Set of unnecessary columns. ALL (default) indicates to prune all non-referenced columns, NO indicates to prune no columns, and NOTCOUNT indicates to prune all columns except Count Column. Additionally, the check that suppressed returning the count field in an MU within a PE was removed so that it returns for ranged cases and not just when asterisk(s) are specified.

SI-8210: Shadow Interface for Natural

Support Incident: When the third data map for a Shadow Interface for Natural query could not be found, an incorrect ACI client error code message was returned. In addition,

the "DATA MAP n CANNOT BE FOUND" ACI client error code numbers conflicted with error codes for other errors.

Resolution: The ACI client error code message was corrected for cases where the third data map could not be found. In addition, the "DATA MAP n CANNOT BE FOUND" ACI client error code numbers were renumbered and changed to -1042 (for map 2) through -1045 (for map 5).

SI-8219: Shadow Interface for Natural

Support Incident: The SDDMEXNA and SDDEXNB Natural extracts incorrectly generated occurrences for non-array fields. When the data map was generated, although certain fields had no occurrences, the subfields generated contained an occurrence number.

Resolution: The array fields were not building properly. SDDMEXNA and SDDEXNB now correctly build array fields to terminate properly at the change of level to a lower level.

SI-8238: Shadow Interface for Natural

Support Incident: From the active ACI server display (accessed from the **Shadow Mainframe Adapter Server Primary Option Menu** Option 11.4), the MAXIMUM LAST ACTIVE column was not displaying the correct value.

Resolution: The value being displayed for the MAXIMUM LAST ACTIVE was actually the LAST ACTIVE TIME value, instead. The display has been corrected.

SI-8254: Shadow Interface for ADABAS

Support Incident: User was not able to insert a literal that contains a double-quote or quote into an ADABAS field when using DBTY=ADABAS.

Resolution: This problem requires the user to install a new Shadow client driver and server. For the Shadow client driver, the user needs to install 3-8-816 and above, and for server V4.8 SVXF2711 and above.

SI-8255: Shadow Interface for DB2

Support Incident: When using RRSAF with the Shadow Mainframe Adapter Server parameter REUSETHREADS set to NO, at connection time, DSNRLI CLOSE-THREAD and DSNRLI OPEN-THREAD trace browse messages were being issued; however, the messages were confusing because no work appeared to be done.

Resolution: A spurious CLOSE-THREAD trace browse message was being issued. The CLOSE-THREAD message has been eliminated. The OPEN-THREAD message is the global trace browse message for the OPEN request and will still be issued.

SI-8268: Shadow Mainframe Adapter Server

Support Incident: The documented function of the Shadow Mainframe Adapter Server parameter LOGEXCEPTIONSTABLE was to specify the table name for the recording of the SQL exceptions generated; however, the Shadow Mainframe Adapter Server parameter LOGSQLERRORS supplies the same support.

Resolution: The LOGEXCEPTIONSTABLE parameter was removed because it was never actually implemented.

SI-8273: Shadow Mainframe Adapter Server

Support Incident: The copyright information displayed to the user via the Shadow ISPF panels was outdated.

Resolution: The copyright information has been updated.

SI-8275: Shadow Interface for ADABAS

Support Incident: When running SDADEX with an ADAREP 7.4.1 report, an S0C7 abend would result.

Resolution: The problem was caused by the fact that the text in the ADAREP report in ADABAS 7.4.1 is now in mixed-case, whereas with previous versions the text was only in uppercase. SDADEX was not taking this into account, therefore resulting in an abend. The problem has been corrected: Note: A workaround is to uppercase the ADAREP 7.4.1 report before running SDADEX.

SI-8284: Shadow Interface for ADABAS

Support Incident: SDADEX was returning the following message in situations that were not a problem with previous versions of Shadow:

```
SCALE TOO BIG FOR LENGTH ** FILE n FIELD x
```

Resolution: SDADEX was attempting to validate the length of the scale override but was not changing the length into a precision before doing the comparison. The code was modified to add the proper calculation to test the scale size in relation to the field precision.

SI-8297: Shadow Interface for ADABAS

Support Incident: The Shadow Interface for ADABAS offer dynamic mapping, which allows the creation of a map for ADABAS "on-the-fly", obtaining information from ADABAS. When ADABAS was down, the Shadow Interface for ADABAS cannot obtain this information, yet the map was still created, resulting in a bad map that causes subsequent SQL statements to fail even after ADABAS came back up.

Resolution: When using dynamic mapping with the Shadow Interface for ADABAS, if ADABAS is down, the map will not be created.

SI-8303: Shadow Interface for ADABAS

Support Incident: User reports that autocommit for DBTY=ADABAS is no longer working after 3.8.775 driver has been installed.

Resolution: The Server will now honor the autocommit mode if the ADABASAUTOCOMMITBIND parameter is set to YES, which is the default.

SI-8319: Shadow Work Load Manager

Support Incident: An ECSA storage creep exists in Shadow Mainframe Adapter Server. The storage leak occurs in subpool 245, > 16M line, and eats into the ECSA storage.

Resolution: An EOT cleanup routine was added for the WLM Enclave support.

SI-8407: Shadow Mainframe Adapter Server

Support Incident: Product parameters were added in the PRODSECURITY group to change the STAT= & LOG= parms on RACROUTE calls. User would like to have option to apply stats for the first connection for a user, but to bypass them for the VCF reconnects.

Resolution: Changed module OPST. Added parameters to set default values for LOG= and STAT= values used for RACF client logon and logoff requests. Allow separate values when logon is for a VCF re- connect. Expose these to SEF ATH rules so that they can be changed programatically.

SI-8439: Shadow Interface for CICS/TS

Support Incident: There was a system abend while using Shadow_CICS with the map format parms:

```
call shadow_cics('EXCI','EXCS','EXCI','SDCOSEP3','SEP2DPA023007228',
'','','','','','MAP(FORMAT(VERT) ROWSIZE(80) OFFSET(0))').
```

Resolution: Data being moved from the CICS buffer into the local buffer was overlying the length field when using FORMAT(VERT).

SI-8446: Shadow Interface for IMS/DB

Support Incident: For SQL IMS, disabled map fields are not carried thru on link.

Resolution: This problem was fixed by removing the line that enables fields by default. The value is now taken from the cobol map.

SI-8464: Shadow Mainframe Adapter Server

Support Incident: There was an error Message in RPC RULE example member ALL.

Resolution: The ALL member in the RPC ruleset was changed to have a better error message. It now reads:

```
RPC.MESSAGE = 'INSERT YOUR MESSAGE HERE' /* CAN BE CHANGED .
```

SI-8467: Shadow Mainframe Adapter Server

Support Incident: A Shadow password appears to have expired or Not Matched, when in fact it was fine.

Resolution: When a Logon is rejected for any reason from the Resident Security System (ACF2 or RACF) and there is no DB2 subsystem specified, the 0C3 will occur in PRCUHL when it tries to perform the CLOSE processing. The zap for svfx 2149 is:

NAME SDLINK OPCOSO VER 03569E 4400,C05E REP 03569E 47F0,C0C0

SI-8497: Shadow Mainframe Adapter Server

Support Incident: When a user was running 40 SQL operations results in 40 inserts into the Shadow.SQLSOurce table, the online monitor (option 8.2) and the record inserted into the Shadow.Sessions and SMF record shows 42.

Resolution: The SQLCount was being incremented for the INTERNAL COMMIT and INTERNAL ROLLBACK done as part of CLOSE processing. The count will now be reset to the number just before CLOSE processing.

SI-8500: Shadow Interface for ACI

Support Incident: Shadow returns a misleading message when the SMO (server output map) contains an invalid column name.

Resolution: A new message with return code -1087 will be issued. The new message is: "BIND COLUMN ERROR FOR ELEMENT: column-name". With this error message, the user then can review the trace browse to locate the column name that caused the error and take corrective action.

SI-8502: Shadow Interface for IMS/DB

Support Incident: User was attempting to run an IMS stored procedure created using COBOL instead of MFS extracted maps. MFS extracted maps have all fields set to BINARY where as Cobol maps have other data types defined for the fields which will cause problems.

Resolution: Customers MFS map was extracted and used to create a stored procedure that was run successfully up to the point of the call to IMS.

SI-8532: Shadow Interface for DB2

Support Incident: REUSETHREADS not functioning with RRSAF set to YES.

Resolution: REUSETHREADS=YES was still closing and reopening the DB2 connection if the RRS parameter was set to YES. This has been corrected.

SI-8536: Shadow Mainframe Adapter Server

Support Incident: User is running the ACI, and gets error msg RC -1050; UNKNOWN FUNCTION CODE REQUESTED followed by abend.

Resolution: The ACI based stack increment function has been added to fix this issue. This problem only occurs if the user runs a license code that has ACI function only. The problem does not occur if the user has EXCI and/or ADABAS feature available.

SI-8560: Shadow Interface for IMS/TM

Support Incident: Problem is that IMS Procedure definition (10.8) requires DB2 subsystem to be entered. This should not be a requirement.

Resolution: The problem was resolved by removing the requirement to have DB2 create stored procedures. DB2 SUBSYSTEM can be either BLANKS or the word NONE in which case DB2 PLAN NAME and TABLE NAME will be ignored.

SI-8592: Shadow Interface for Natural

Support Incident: User is running the ACI interface, and gets error msg RC -1050; UNKNOWN FUNCTION CODE REQUESTED followed by abend.

Resolution: The ACI based stack increment function has been added to fix this issue. This problem only occurs if the user runs a license code that has ACI function only. The problem does not occur if the user has EXCI and/or ADABAS feature available.

SI-8598: Shadow Interface for CICS/TS

Support Incident: Problem occurs when user generates a CICSEX procedure using SHADOW.ROUTINES on a DB2 V7 system. The SQL statement generated by Shadow to insert into the SHADOW.ROUTINES table receives a -199 SQL code.

Resolution: In DB2 V7, SCHEMA is a reserved keyword in addition to a table column. The SQL had to be adjusted for this. This has been corrected.

SI-8635: Shadow Interface for IMS/TM

Support Incident: The user s able to connect to one IMS using OTMA, but second and third definitions are not connecting.

Resolution: The solution involves creating a unique name when connecting to the XCF OTMA Group. IMSID was added to the XCF MEMBER name to create a unique name.

SI-8637: Shadow Interface for DB2

Support Incident: User reports that when calling a DB2 stored procedure that has no input parameter results in an abend.

Resolution: Problem has been corrected.

SI-8643: Shadow Interface for ADABAS

Support Incident: The UPDATE statement is updating the wrong ADABAS field.

Resolution: This problem occurs if user has server parameter ADABASCORRELATIONIDS set to YES which causes the parser to incorrectly parse the non-SELECT SQL statement. The parser now only processes column correlation id for FIND SELECT and SELECT statement.

SI-8665: Shadow Interface for ADABAS

Support Incident: The CONNECT statement does not work when customer uses DBTY=ADABAS.

Resolution: To correct this, a bug was fixed to enable the OPTIONS SUBSYS to work properly.

SI-8690: Shadow Data Mapping Facility

Support Incident: When using pli visual age compiler, "5655-B22 IBM(R) VisualAge(TM) PL/I for OS/390 V2.R2.24", customer gets a successful extract of only fields before first page break in listing.

Resolution: Added check to ignore title line in listing.

SI-8700: Shadow Interface for DB2

Support Incident: When using RRSAF or CAF with REUSETHREADS set to YES a commit and rollback is issued immediately before the BYPASSED-CLOSE to ensure all locks are freed before placing the connection for REUSE. The commit is issued regardless if a previous commit had already occurred. The COMMIT should be removed if it is not necessary.

Resolution: A flag is now set in the CMTC ENTRY to indicate that the last operation was a successful COMMIT or INTERNAL COMMIT. This is checked in both RRSAF and CAF CLOSE when SYNC is requested to avoid a second COMMIT.

SI-8706: Shadow Interface for CICS/TS

Support Incident: VSAM CICS fails when composite key used on insert.

Resolution: Support was added for use of composite key when inserting records using the VSAMCICS DBRM.

SI-8711: Shadow Interface for CICS/TS

Support Incident: A change in the autocommit mode was interpreted as mapname.

Resolution: CICS does not support the COMMIT/ROLLBACK functions (and therefore the SET AUTO-ON/OFF functions) unless these are XA (RRS) mode transactions. Therefore a more informative message has been added.

SI-8729: Shadow Mainframe Adapter Server

Support Incident: Customer is receiving X'0C3' AT PRCUHL/OPCOSO+X'000356A2' that is related to reuse thread.

Resolution: When REUSETHREADS=YES and the former user is using a plan not authorized for the next user, and the next user is authorized to next plan, a 00F30034 DB2 Error results which, at some SVFX levels, leads to an 0C3. The thread will now be closed if the plan name is different before the new user is signed on to DB2.

SI-8755: Shadow Enterprise Transactions

Support Incident: There is improper context for request XA-START - SQLCODE -6.

Resolution: To correct this, auto-commit processing was fixed after an XA transaction. Server fixes for XA-PREPARE. RRS APAR OA02556 are required.

SI-8781: Shadow Web Server

Enhancement: Made TRACESQLEVENTS and TRACESQLSOURCE parameters visible in SWS using product affinity setting. This will allow user to suppress 'sql' event records when there is nothing to change

SI-8794: Shadow Interface for Natural/ACI

Support Incident: User reports that RECEIVE-AREA does not contain data passed from the client after the RECEIVE call

Resolution: This incident is related to the Shadow Interface for Natural UOW enhancement in which the size of the ETBCB control block has been increased. If the user still uses the old ETBCB, and declares the RECEIVE-AREA followed right after the ETBCB area, the first 56 bytes of the RECEIVE-AREA will be overlaid when a RECEIEB is done. The user must change their Natural source and add the following fields *to the end* of the existing ETBCB control block in the Natural program:

#ETBCB-UOW-STATUS	(I001)
#ETBCB-UOW-TIME	(A8)
#ETBCB-UOW-ID	(A16)
#ETBCB-U-STATUS	(A32)
#ETBCB-UOW-STATUS-PERIST	(I001).

SI-8797: Shadow Mainframe Adapter Server

Support Incident: There was no explanation for the following message -- SDB0040S OPDE CONTROL BLOCK AT X'21748800' - INVALID OPDELNG VALUE.

Resolution: To correct this, an explanation was added.

SI-8815: Shadow Interface for CICS/TS

Enhancement: CICS EXCI error messages were updated for the Shadow Interface for CICS.

SI-8822: Shadow Interface for IMS/DB

Support Incident: The IMS/SQL "ignore procopt warning" on psb extract(2.2.2) is missing.

Resolution: To correct this, two panels and one exec member have been added to the distribution libraries.

SI-8850: Shadow Mainframe Adapter Server

Support Incident: Customer was receiving the message SD14393I OE STACK RETURNING TOO SOON .

Resolution: The source of the problem was that OPMAOT was not checking for passed sockets before issuing the message. This was corrected.

SI-8889: Shadow Interface for VSAM

Support Incident: User wants to clarify whether or not graphic literals are supported.

Resolution: The incident was clarified by supporting G'<data>'. When using this, do not specify SI/SO x'0e0f' bytes as part of the string.

SI-8963: Shadow Interface for IMS/TM (APPC)

Support Incident: User experienced several time periods in which the production ETS SWS application was trying to allocate APPC connections and failed. The LU Name was invalid.

Resolution: Incident appears to be caused by the reuse of a GSK SSL connection TCB by a non GSK SSL TCB when reusethreads is enabled. Work around is to turn off SSL support or set SSLENCLAVETERMINATE to YES in the Shadow Mainframe Adapter Server. User can correct the incident by installing updated version of the SWLEMDC load library module, if needed, to avoid updating the entire server load library.

SI-8964: Shadow Web Server

Support Incident: User is passing a lower-case mimetype (text/html) to the SWSFILE command. It appears that SWSFILE is converting the mimetype to upper-case before sending it out in the http header to the browser.

Resolution: Correction was made to maintain the case-sensitive strings in SWSFILE REXX API interface.

SI-8997: Shadow Interface for CICS/TS

Support Incident: VSAM CICS update fails when update > 1 col.

Resolution: This was fixed by correcting parse of the SQL UPDATE WHERE clause.

SI-9045: Shadow Interface for ADABAS

Support Incident: User reports that the UPDATE statement fails with RC -4020; INVALID CONNECTOR ggg IN WHERE if WHERE contains parenthesis. The incident is only applied to an UPDATE that has parenthesis in the WHERE clause AND the value in the WHERE has blanks in them.

Resolution: Correction was made to ignore open and closed parenthesis when calculating the number of tokens in UPDATES WHERE clause for the purpose of inserting quotes around the literal(s) where necessary.

SI-9055: Shadow Data Mapping Facility

Support Incident: User gets an error when they created a stored procedure with 87 fields due to a compiler work space overflow.

Resolution: Additional instrumentation was put into place to allow changing the default workspace value. In addition, a correction was made in the line command override WORKSPACE keyword which expected a value expressed in Kilobytes, but did not multiply to get the actual byte count.

SI-9080: Shadow Data Mapping Facility

Support Incident: Natural extract incorrectly generates array index for 02 field followed the 03 field. This is a problem in the SDDMEXNA and SDDMEXNB Natural extract.

Resolution: Correction was made to provide additional diagnostics and to the logic errors within the extract process itself.

SI-9089: Shadow Web Server

Support Incident: User has RPCMAX set at 65 to limit concurrent RPC execution. An abend occurs which appears related to this support.

Resolution: The trace shows that a terminating RPC was posting another RPC to resume processing. The other RPC had already been posted causing the S202 ABEND. The target SMRW (RPC wait queue) entry was not removed until after the first task posted the waiting RPC and after ownership of the SMRW was released. This allows a task running on another processor to find the same SMRW entry and POST the same waiting RPC's ECB. The changes made will remove the SMRW entry before the POST is attempted and before SMRW ownership is released.

SI-9108: Shadow Interface for DB2

Support Incident: Decimal point has comma errors when a CICS Pseudo stored procedure is generated.

Resolution: Correction was made with the addition of a space after the comma on DECIMAL fields.

SI-9114: Shadow Web Server (Auto-HTML for IMS/TM)

Support Incident: User finds that form data posted to Shadow Web Server with partially filled fields specified to be right justified '0' zero padded (0xF0, EBCDIC) are incorrectly filled from the right instead of the left. For example, SWS currently turns "abcd" into "abcd0000" which is incorrect. It should be "0000abcd".

Resolution: Stricter formatting controls have been imposed on all output data values sent by the IMS application and no longer assumes that fields can be either trimmed or padded for HTML compatibility. It changes the comparison used to detect unchanged, MDT-off field input values when masking these so that they are not re-presented to the IMS application (HTML always sends data; 3270's only send modified data, so x_PROT is used to prevent non-3270-like behaviors). This fix incorporates support to detect embedded 0x3f bytes within data values, indicating truncation of the value. It also allows

certain of the special control characters, specifically identified by IMS MFS manuals (HT/CR/LF/BS) to be retained in output data values at character entity references, rather than being converted to ASCII blanks.

SI-9148: Shadow Interface for DB2

Support Incident: When using RRSAF, DB2 uses the started task id for authorization checking instead of the logging id.

Resolution: The issues lies with DB2 RRS. Shadow did use the userid SDCDBA for logging, but DB2 still uses the started userid for authorization checking. If you are running DB2 V6, make sure that you have APAR/PTF PQ63375/UQ69100 (PUT0209) applied. The incident is that one primary authid is established at IDENTIFY time. At signon time, the new primary authid goes through signon, which is supposed to invalidate the old one (but didn't). So the old one was still being used. This DB2 PTF addresses this issue, so make sure you have this on your DB2 subsystem. Also, to verify that Shadow did issue a SIGNON to change authorization id, you can go into option 5.2, do a D on PRODTRACE, and set this parm to YES:

TRACE RRSAF REQUESTS

YES

SI-9196: Shadow Interface for MDI

Support Incident: ABEND S0C1 occurs when using MDI support and COBOL, in which the release is unknown.

Resolution: Support was added for COBOL versions 2.x, 3.1 and 3.2. This was only a problem when a RPC called/linked to another RPC. Also added permitted COBOL versions.

SI-9206 Shadow Enterprise Transactions

Support Incident: A rollback of an IMS/OTMA transaction does not roll back the change and the changes to the IMS database were committed.

Resolution: Two-phase commit support for IMS/OTMA was corrected by removing error(s) in the commit processing where the client does not specify a DB2 subsystem in the connection string.

Note additional information below -- Enterprise Transactions -- 2PC/XA Support



Note:

When DB2 is specified, an IBM PMR has been opened for an issue with the DB2 Context Switch ID failure.

SI-9209: Shadow Load Balancing

Support Incident: Connections hang when user is using Group Director with Load Balancing after upgrading to NEON 4.8 SVFX3119.

Resolution: Incident was solved by eliminating socket descriptor analysis if the SELECT has been executed due to a session transfer.

SI-9211: Shadow Interface for Adabas

Support Incident: User has DBCS data stored in ADABAS alpha field which does not contain SO/SI characters, and currently, Shadow Interface for ADABAS requires that DBCS data stored in Alpha field contain SO/SI characters. An enhancement request was made to support this in the ADABAS interface to support this.

Resolution: The keyword DBCS was used as a field OVERRIDE. OPADEX, after making sure the OVERRIDE is used for ALPHA or BINARY formats and that the field length is an even integer, appends (DBCS) to the format. For example:

```
BEGIN_OVERRIDES
FILE=03,FIELD=AA,DBCS
END OVERRIDES
```

might translate to the following in the extract:

```
FIELD=01, AA, 020, A(DBCS)
```

OPADDM, when parsing A(DBCS), will set the flag OPDEADRU in the OPDE for field AA which will be visible in the datamap.

SI-9251: Shadow Web Server

Support Incident: User reported that Shadow Mainframe Adapter Server was no longer handling incoming RPC requests. After reviewing Remote users, user found that several connections were all in RPCWAIT state. The RPCMAX parm was set to 50, however CURRENTLY ACTIVE RPC VALUE was set to 0 and CONCURRENT RPC HIGH VALUE was set at 50.

Resolution: The current RPC active count was allowed to go negative preventing all suspended RPCS from being resumed. Code was updated to prevent the value from going negative.

SI-9279: Shadow Data Mapping Facility

Support Incident: User reports that VSAM extract fails when using IAM.

Resolution: Incident resolved by replacing the customer POS members in EXECFB for:

SDDMEXTR 2003/07/28 10:03:38 SDDMVSKT 2003/06/30 14:32:16

SI-9309: Shadow Interface for DB2

Support Incident: User would like to know how to set default schema name for DB2 stored procedures.

Resolution: To do this, the user should be able to to use the "set current_path = YourSchemaName, system path" to qualify unqualified DB2 stored procedure calls. A two-part name works just as well. You can also force all unqualified calls for the entire Shadow Mainframe Adapter Server to a specific id using the parameter and setting:

SPECIAL TABLE PREFIX ,'NEON'

setting to 5.2 PRODSQL group. Setting this to something other than neon will qualify those calls. Using the set current path is the preferred way.

SI-9341: Shadow Web Server Shadow Event Facility

Support Incident: GDGLOCS parameter was only being used for DYNALLOC requests forwarded through the SWSALLOC API interface routine.

Resolution: Code was changed to allow OPDYAL to apply the GDGLOCS parameter to ALL DYNALLOC requests passed to SVC 99.

SI-9353: Shadow Mainframe Adapter Server Load Balancing

Support Incident: User reported that you can dynamically add a shadow instance to a load balancing group when its license code does not permit load balancing.

Resolution: Incident was resolved by support of dynamically added GROUPS. This requires VCF authorization for Shadow, when GROUPs are added dynamically, or in the initialization exec. Shadow doesn't require VCF for load balancing. Eliminate Superfluous load balancing message queue checks were eliminated to improve performance.

SI-9375: Shadow Event Publisher

Support Incident: SEP was not recognizing all destinations associated with event.

Resolution: Incident was occurring because of an error in NEON client. Problem was resolved in the NEON Client 3.9.204.

SI-9398: Shadow Mainframe Adapter Server

Enhancement: A definition has been added to "external" "TRACEDETACHEVENTS" records. This definition describes the type of external task (ISPF, tracebrowse, STC, etc.) and the associated userid that caused the trace record to be written. The actual message for the normal trace browse exit has been changed to:

"RESMGR DETECTED TERMINATION OF TRACE BROWSE TASK FOR USERID AI38DJP"

SI-9406: Shadow Interface for DB2

Support Incident: User reported that there is no autocommit on stored procedures.

Resolution: User had a stored procedure bound with release (deallocated) instead of release (commit). Both the NEON plan and the stored procedure should have been bound with release (commit).

SI-9431: Shadow Web Server

Support Incident: User reported that running a EXECSQL EXECSQL with a result set of 8000 rows and 13 Columns results in an S0C3 abend.

Resolution: This incident has been corrected by raising the limit from 16M to 48M. Note that the MAXHTTPRESPBYTES parameter in the PRODWWW parameter group needs to

be set accordingly if you plant to generate a large HTML file. Otherwise, a U722 abend will occur if the generated HTML exceeds this

SI-9436 Shadow Interface for VSAM

Support Incident: User reported that Shadow_cics ('EXVS'), NEON's SQL access to VSAM under CICS does not work with two-phase commit. The incident only occurs when returning large amounts of data which requires more than one DPL request in a single UOW.

Resolution: Incident was resolved by adding the capability to handle 1-n number of DPL requests under the same or different UOW.

SI-9463: Shadow Mainframe Adapter Server

Support Incident: User reported they were testing LPAR on their system. The LPAR was running z/OS 1.4 and ACF2 6.5. They received the following messages when the Neon started tasks were initiated:

```
SDB0133E ACF2 RELEASE UNKNOWN, RELEASE CODE IS X'65000000' SDB0130H INITIALIZING ACF2 RELEASE 6.X SECURITY ENVIRONMENT.
```

Resolution: Message SDB0133E was issued for ACF2 releases 6.5 and above. The release detection routine is updated to allow releases up to 15.15.

SI-9489: Shadow Interface for CICS/TS

Support Incident: User reported that when they upgraded their V4.8 server to SVXF3235, the following call:

```
CALL SHADOW_CICS('EXCI','SDT1','KBCI','WOO053 ','WOO053 000000000666K099609970996 YW123120020RBAA 0700','','','',55,'','MAP(NAME(WOO053) FORMAT(VERT) ROWSIZE(55))')
```

no longer returns any row in the resultset (i.e, empty resultset). After the user backs off to a previous level of SVFX2631, the incident no longer occurs.

Resolution: The incident was caused by the new OCCURS keyword added in SVFX2713. The correction will check for the OCCURS keyword before doing the OCCURS processing. Customer who run 4.8.3235 can apply the zap below to bypass the incident. Note that once the zap is applied, the OCCURS keyword can not be used any longer.

```
//ZAP
          EXEC PGM=AMASPZAP, PARM=IGNIDRFULL
//SYSUDUMP DD DUMMY
//SYSLIB DD DISP=SHR,DSN=AI38PHV.SV040800.LOAD.SVFX3235
//SYSPRINT DD SYSOUT=*
        DD *
//SYSIN
  NAME SDLINK OPCITP
  VER 007F4C 9140D804
                           TM
                                 USPA00, USPA00MN
  VER 007F50 47E0C8CE
                           BNO
                                 2254(R12)
  VER 007F54 5970DB70
                           C
                                 R7, USPAOCUR
  VER 007F58 47A0C91A
                           BC
                                 10,2330(R12)
  REP 007F58 4700C91A
                           NOP
//
```

SI-9558: Shadow Enterprise Transactions

Support Incident: User reports that they are getting a RETURN: 0000000C - REASON: 00B00101 issuing rollback on CICS transaction, when DB2 is not installed.

Resolution: The 00B00101 reason code was issued incorrectly and should not have caused the rollback to fail. The following zap at 4.8 SVF3235 will bypass this error:

```
NAMESDLINK OPCOSO
VER 025EA6 BFFF,A050
VER 025F0A 58F0,C858
VER 025F0E 5800,C85C
REP 025EA6 19FF,0700
REP 025F0A 58F0,A200
REP 025F0E 5800,A200
```

Note additional information below -- Enterprise Transactions -- 2PC/XA Support



Note:

When DB2 is specified, an IBM PMR has been opened for an issue with the DB2 Context Switch ID failure.

SI-9569: Shadow Enterprise Transactions

Support Incident: Problems with Shadow J2CA XA Client accessing CICS

Resolution: A return message is now issued to the client indicating RRSAF must be set as the DB2 attach facility type.

Note additional information below -- Enterprise Transactions -- 2PC/XA Support



Note:

When DB2 is specified, an IBM bug still exists.

SI-9653: Shadow Interface for DB2

Support Incident: User reports that thread timing out with RRSAF do not show a DB2 Correlation-id.

Resolution: For RRSAF, the correlation id was set to userid.

SI-9657: Shadow Data Mapping Facility

Support Incident: NEON ODBC driver is returning incorrect data lengths. The Shadow VSAM file shows the correct length, however the map into MS access show the lengths are off by 1+ byte.

Resolution: Condition occurred because the comments in source 73-80 contained a period. All data in these columns will now be ignored. This only affected execfb(sddmextr) so an update to that member will be the fix.

SI-9681: Shadow Interface for ADABAS

Support Incident: Incident involves a query not working when SELECT is used with super-descriptor and the pipe character |. The incident only has occurred after SVFX3545.

Resolution: The statement SELECT aa, h1, s1, s2 from empqa1 where s2 = "FINA01|JOUSSELIN" should return a row. However, it appears that the parser is taking | as part of the literal. This following statement works:

SELECT aa, h1, s1, s2 from empga1 where s2 = "FINA01JOUSSELIN"

SI-9688: Shadow Interface for ADABAS

Support Incident: The JOIN query with ORDER BY clause does not sort the resultset correctly.

Resolution: Sort routines were corrected.

SI-9694: Shadow Enterprise Transactions

Support Incident: The RRS macros need to be brought up to current levels.

Resolution: RRS macros were updated to the current levels.

Note additional information below -- Enterprise Transactions -- 2PC/XA Support



SI-9701: Shadow Interface for ADABAS

Support Incident: REDEFINE does not work for field that is defined in ADABAS as DE, UQ. The user should be able to redefine a unique descriptor field (i.e, UQ,DE field), and the parent field will have field level 07 instead of 16.

Resolution: This incident was resolved by added checking to determine if a field has been set to be the primary key via SET_AS_PRIMARYKEY REDEFINE or by virtue of being a unique descriptor. If a REDEFINE, field level will be set to 16. If UQ-DE, field level will be set to 7 if other REDEFINES are present.

SI-9705: Shadow Interface for ADABAS

Support Incident: Join using ISN returns one row of data even if more rows should have been returned.

Resolution: ADABASTRACEALLCMDS will now trace JOIN intermediate JOIN commands.

SI-9718: Shadow Data Mapping Facility

Support Incident: DBTY=VSAM versus DBTY=VSAMCICS both return the same metadata via the SQLTables ODBC call, even though some VSAM tables cannot be used with VSAMCICS and all VSAMCICS tables cannot be used with the VSAM option.

Resolution: A parameter was added to specify whether VSAM or VSAMCICS metadata is being returned via the SQLTables ODBC call. This will enable SQLTables to only return the available tables that can be used with the specified interface. This will also change the SCHEMA name (Table Owner) and Table Qualifier to distinguish the tables from each other. The parameter is CICSVSAMSCHEMA and the default is VSAM.

SI-9728: Shadow Interface for ADABAS

Support Incident: JOIN statement loops if SELECT * and ISN = xxx in used.

Resolution: The original ISN processing did not turn on/off the proper flags when selecting all table fields (table.*). It only did it when selecting discrete fields out of the table (i.e. table.aa, table.ab etc). To that extent, the flag to indicate a successful return from processing an ISN request was never turned off resulting in the first returned field to be repeated however many times MAXRECS was specified in a SELECT(X) query, or, when a SELECT * was queried, an error message would return when the maximum number of records was exceeded. This problem was corrected.

SI-9774: Shadow Interface for VSAM

Support Incident: User received "quotes not paired in statement" error message when the literal "G" or 'G' is specified in the statement..

Resolution: Parser was changed to allow "G" and 'G' as literals as well as graphic character delimiters.

SI-9856: Shadow Interface for CICS/TS

Enhancement: CICSEX now allows a special mirror transaction name called NULL to be used when using option 10.8 to generate the store procedure. When this mirror transaction is specified, Shadow will issue the DPL request with a NULL ptr for the transaction id address to allow for CICS transaction dynamic routing. Also, the new implementation allows the client application to specify NULL in the client setting Transaction Name (TRNA) as well, and if this is set by the client application, any CICSEX request issued by this client application will result in the DPL request with a NULL ptr for the transaction id address passed to CICS which will allow for CICS transaction dynamic routing.

SI-9858: Shadow Mainframe Adapter Server

Enhancement: The "LAST USERID" column was added to the SEF DISPLAY LINK HOST(*) output from an ADDRESS SDB host command environment. In addition, the limit on the number of lines of information returned was increased from 1000 to 2000.

SI-10009: Shadow Web Server

Problem: System abend using SWSSET.

Resolution: A workaround was provided to use "rescan SYSTEM/ERROR/301".

SI-10150: Shadow Data Mapping Facility

Support Incident: SDDMPROC panel has an incorrect checking of mirror transaction id in 10.8 extract. It is flagging a mirror tranid name less than 4 characters as invalid.

Resolution: The invalid verification of tranid for 4 bytes was removed.

SI-10168: Shadow Data Mapping Facility

Support Incident: DMF does not strip the period out of column names if there is no blank between them.

Resolution: Code was added to strip the "." from the column name.

SI-10170: Shadow Mainframe Adapter Server Enterprise Transactions

Support Incident: The NEON server code would fail when a single transaction was being managed by four threads. The four threads were related to the following:

- CICS
- DB2
- XA-PREPARE
- XA-COMMIT.

Resolution: Support was added for multiple transactions, PREPARE and COMMIT all on separate tcbs, but under the same unit of work.

Note additional information below -- Enterprise Transactions -- 2PC/XA Support



Note:

When DB2 is specified, an IBM PMR has been opened for an issue with the DB2 Context Switch ID failure.

SI-10365: Shadow Interface for IMS/DB

Support Incident: SYSTEM ABEND X'0C3' AT OPIM/OPIQTP+X'00003E2E' occurred when user issued an IMS SQL call

Resolution: The problem was an invalid recursion using all the stack space. The recursion loop was changed to recur only to each level of IMS and then a read loop was added at that level. Fields were changed after a GE to a consistent value of X'00'. Additionally, a bug was fixed with the SQL parser and mixed case and code was also added for a potential problem with quoted value.

SI-11503: Shadow Interface for IMS/TM

Support Incident: User is getting Abend S0C4 when executing SHADOW_IMS after the IMSLUEE0 parameter was set to (YES).

Resolution: The base register was not loaded before being referenced. Sequence instructions were changed to load base register first.

SI-11524: Shadow Interface for ADABAS

Support Incident: User tried to execute a query using a "preparedStatement" java object. The execution of the "executeQuery" method has resulted in an error message.Previousy this query was used in a "statement" java object instead of "preparedStatement" and it worked fine. User was replacing the parameters in the "preparedStatement" object with "0", "100", "10" values.

Resolution: The code now ignores parameter markers and just returns the column metadata information

SI-11580: Shadow Enterprise Transactions

Support Incident: User is unable to either commit or rollback DB2 updates and IMS updates that are participating in the same Distributed Transaction Coordinator transaction.

Resolution: The solution is to circumvent DB2 Context Switch Disallow, by creating Cascaded Transaction for DB2 and OTMA combination. Added Cascaded transaction support, and sibling transaction completion/backout support.

SI-11581: Shadow Event Publisher

Support Incident: Customer reports that SEP MQ XML is not correctly converting _O (oldvalues).

Resolution: The CICS GLUE was not processing the SET option correctly on READ updates. This resulted in bad data being written to the TSQ, which in turn caused bad old data values in captured data records.

SI-11600: Shadow Interface for VSAM

Support Incident: User reports an error message that GRAPHIC data type is unknown when using the VSAM interface.

Resolution: A check was added for graphic data type to routine cat0105.

SI-12028: Shadow Interface for IMS/TM OTMA

Enhancement: Previously, Shadow did not have OTMA to APPC/MVS abstraction where the client/user can use the call shadow_ims OTMA variant and redirect it to APPC/MVS. Now the client can use the Shadow OTMA variant, and Shadow redirects to APPC/MVS APIs based on Server definitions.

SI-12039: Shadow Interface for IMS/OTMA

Support Incident: User reports that the Shadow Interface for IMS/TM OTMA was adding blanks to a parameter, depending on the program name length.

Resolution: Set IMS transaction name in buffer to actual non-blank/non-zero length without requiring an additional length parameter on the API call.

SI-12044: Shadow Data Mapping Facility

Support Incident: User was getting an error message when trying to extract a COBOL map.

Resolution: User was updated with current prod code, which resolved problem.

SI-12088: Shadow Event Publisher

Support Incident: User reports that the record size of a segment in their database is 8422. A SYSTEM ABEND occurs when they are processing a large IMS segment with SEP.

Resolution: Support was added for chaining Shadow Event Publisher event records. It allows for capturing more than 32K data for a single event. This resolution will require the following steps to be performed by any Shadow Event Publisher customer upgrading to this new release:

- 1) SEP for DB2:
- -- Run the SEPBIND job to recopy the new DB2 SEP function and rebind the SEP plan. (Step 2 of SEP for DB2 installation)
- -- Run the SEPDEFDB job to recreate the DB2 SEP workfile. (Step 3 of SEP for DB2 installation)
- 2) SEP for CICS:
- -- Run the SEPDEFCI job to recreate the CICS SEP event and workfiles. (Step 1 of SEP for CICS installation)
- -- Copy the updated SDBEVENT map from the maintenance DATA.MAPS dataset to the active DATA.MAPS dataset. (Step 5 of SEP for CICS installation)
- 3) SEP for IMS:
- -- Rerun the IMS DBDGEN for the SDBEVENT database (Step 1 of SEP for IMS installation).
- -- Run the SEPDEFIM job to recreate the IMS event and work datasets. (Step 2 of SEP for IMS installation)

SI-12111: Shadow Mainframe Adapter Server

Support Incident: User abend for UNSUPPORTED RELEASE OF COBOL/MVS.

Resolution: The following zap was created:

NAME SDLINK OPCOSO

VER 013878 4780,C2F2 REP 013878 47F0,C2F2

The list of "supported" versions includes:

1.1.1, 1.2.0, 1.2.1, 1.2.2, 2.0.1, 2.1.0, 2.1.1, 2.1.2, 2.2.0, 2.2.1, 2.2.2, 3.1.0, 3.2.0.

SI-12117: Shadow Interface for CICS/TS

Support Incident: User was trying to get metadata for VSAM datasets. The length for the ResultSet.getString is always returning 2.

Resolution: Added support for "COLUMN_NAME" predicate on SQLCOLUMNS meta data call. This will only support 1 column name.

SI-12192: Shadow Data Mapping Facility.

Support Incident: User was receiving incorrect IMS DBD Map offsets.

Resolution: To correct this, the Rexx "PULL" statement uppercasing data was changed to "PARSE PULL".

SI-12206: Shadow Mainframe Adapter Server

Support Incident: User reports that DB2 error messages are being replaced when rc > 0.

Resolution: The previous parameter, IGNOREPOSITIVESC has been removed and a new parameter ROLLBACKPOSIVERC has been added. The default is YES and will cause positive SQLCodes to be properly returned to the client application.

SI-12247: Shadow Data Mapping Facility

Support Incident: Customer was having Data Mapping offset problems after upgrade. The 'new' Neon DataMaps were not copied to (or concatenated with) user's DataMaps and none of the 'new' Neon DB2 Plans were re-bound.

Resolution: Data mapping behavior was changed for format(vert) and offset() > 0 due to a customer enlacement request. The offset should only be used to cause data to be shipped at the beginning of the commarea that is not represented in the data map as disabled fields.Otherwise, the original behavior should prevail.

SI-12279: Shadow Interface Interface for IMS/TM OTMA

Support Incident: User having problem implementing an application using OTMA instead of APPC. The APPC version executes successfully, while the OTMA version does not.

Resolution: A parameter was created to correct the problem. The IMSOTMACLIENTMAP parameter is used to control whether the MAP name passed by the client or the IMS MOD name returned via OTMA will be used to map the data. The default is NO in order to preserve the current default product behavior.

SI-12286: Shadow Web Server

Support Incident: User reported that conversion or truncation problem was found while attempting to store variable 'OPBOSS01'.

Resolution: The problem was due to incorrect ordering of zvars variable list in master panel for SWS product only. TCB and SSID zvars were reversed causing truncation/value assignment error because of length mis-matches. Problem was corrected.

SI-12330: Shadow Event Publisher

Support Incident: Customer reported that the date filtering does not appear to work properly.

Resolution: Processing the work file did not properly skip to the next destination when records were encountered out of the specified time range filter. The date range now works properly.

SI-12375: Shadow Interface for IMS/TM

Support Incident: Customer needs to have IMS LTERM support added for 3-tier Shadow Direct clients.

Resolution: LTERM support was added for shadow_ims callers as 17th parm for APPC/ MVS callers, and 13th parm for OTMA callers. The parameter is passed using the standard IPaddress format '10.1.199.23'. Parameter should be bound as I/O parm like the two preceding it (Modname, and Conversion ID). If it is not, data will still be returned, with SQL_SUCCESS_WITH_INFO = 1 and a native error code of 40 indicating that input parameter cannot be modified.

SI-12390: Shadow Data Mapping Facility

Support Incident: SQLCOLUMNS call fails on SQL IMS map when signed numeric data.

Resolution: The value of opdeadru was changed due to miss-use of the opdeflg1 field by the cobol extract routine and relinked all modules that reference this equate.

SI-12420: Shadow Event Publisher

Support Incident: Customer is using Expeditor to perform a Delete on a VSAM/CICS dataset and an error occurs.

Resolution: The Expediter issues GENERIC deletes, which do not have to be preceded by a READ UPDATE. This update requirement has been removed.

SI-13615: Shadow Enterprise Transactions

Support Incident: Customer reported that any connection using JDBC or J2CA abends with SYSTEM ABEND X'0C1' AT RRBCFU/OPDBTP+X'00A38CC2'. Customer received the same error when using J2CA from Weblogic and later using JDC via JDEMO.

Resolution: A zap was created to fix the missing RRS modules problem. Source code change will ignore innocuous load failures for RRS modules. The parameter

RRSDELETEDSNARRS has been changed to default to NO. IBM PTF UQ51141 for APAR PQ36586 should be on the target system. If it is not, then the user may want to set RRSDELETEDSNARRS to YES.

SI-13660: Shadow Mainframe Adapter Server

Support Incident: When Shadow Mainframe Adapter Server starts, the following message appear:

```
SDB0036S LOAD OF ATREINT5 FAILED, RC=X'00000004', DETECTED ATOPRRRM+X'FF9B4DB8'
```

Resolution: ATREINT5 is an RRS module and alias of ATRRCSS. The module is not necessary with our current code. The following zap can be applied for Shadow to ignore the load failure for this module.

```
NAME SDLINK OPRRRM
VER 0508 47F0,C13C
REP 0508 4700,C13C
```

After the ZAP, the load failure message will still show, but Shadow will be fully functional.

Customers at or after v4.8 SVFX3870 will NOT require the ZAP. Message will be routed to trace browse.

SI-13738: Shadow Mainframe Adapter Server

Support Incident: Archive trace browse datasets does not show up in the 5.12.2 display.

Related Support Incident (SI-13838): Slow response time when a large number of archive dsn's exist.

Resolution: Code was added to issue "LISTC LVL" without the "ALL" option to create the table of archive dsn's and to issue "LISTC ENT" with the "ALL" option when a row is selected. This also resolves SI-13838.

SI-14056: Shadow Event Publisher

Support Incident: User was getting an internal error when the following statement was included in the HTX script.

```
<%request.addheader "Content-type" "text/xml"%>
```

Resolution: The following zap should fix this for versions of OPCVDARU back to 8/01/2003:

```
NAME SDLINK OPCVDARU
VER 21B6 BF4F,900C,4780
REP 21BA 4700
```

SI-14273: Shadow Mainframe Adapter Server

Support Incident: New license causes server failure upon start with getmain of console server failure messages.

Resolution: Initialization error messages SDB3202W and "SDB0250S GETMAIN OF CONSOLE SERVER AUTHIORIZATION BLOCK FAILED" can occur when the LICENSECODE includes the Console feature. This problem was corrected.

SI-14294: Shadow Data Mapping Facility

Support Incident: User is getting abend S106 when running SDADDM utility to create ADABAS map which has SCALE override for the map.

Resolution: This problem was caused by an invalid check for any P field that has a scale specification. The length check on the format field has been corrected.

SI-14487: Shadow Mainframe Adapter Server

Support Incident: New license causes server failure upon start with getmain of console server failure messages.

Resolution: Initialization error messages SDB3202W and "SDB0250S GETMAIN OF CONSOLE SERVER AUTHIORIZATION BLOCK FAILED" can occur when the LICENSECODE includes the Console feature. This problem was corrected.

SI-14554: Shadow Data Mapping Facility

Support Incident: User is getting client assertion error when performing an MFS Extract (10.1.5).

Resolution: XML was updated to handle the new date formats available on a MFLD statement in a MFS generation.

SI-14573: Shadow Event Publisher

Support Incident: User is getting an abend when publishing to MQ.

Resolution: A zap was supplied to correct the problem:

NAME SDLINK OPCOSQ

VER F3F6 92D9,7000

REP F3F6 92D8

SI-14590: Shadow Data Mapping Facility

Support Incident: User is getting a 'REXX Error 41' when extracting the Natural map. It appears that the extract does not handle two-dimensional array.

Resolution: The data mapping facility can now correctly define two-dimensional arrays.

SI-14600: Shadow Event Publisher

Support Incident: Events are resent after Shadow Mainframe Adapter Server is recycled.

Resolution: Records for HTTP destinations were not being properly removed from 'R' status to 'S' status. This is a result of a recent fix to MQ logic, where records were not being properly removed from 'Q' status to 'S' status.

SI-14629: Shadow Event Publisher

Support Incident: Shadow Mainframe Adapter Server goes into hard loop after upgrade from SVFX4012 to SVFX4017.

Resolution: Problem was corrected by having the following maintenance on:

PQ82416/UQ84581.

SI-14849: Shadow Interface for ADABAS

Support Incident: There is an inconsistency between what the Shadow Interface for ADABAS guide v4.8 (Jan 2004 rev.) and the actual behavior of the Shadow driver for Adabas. The manual states that the SELECT statement must be constructed with the OPTIONS HOLD clause at the end of the SELECT statement. This causes an error.

Resolution: A check was added where ORDER BY processing is exited when the SORT ON encounters a keyword (not ASC or DESC) after the first column name is read.

SI-15057: Shadow Interface for ADABAS

Support Incident: Customer reports receiving an Shadow ADABAS error message. The message indicates that a keyword is not valid when performing an UPDATE using WHERE ISN = in the following WHERE clause:

```
UPDATE mapname WHERE ISN = isn-number SET (column-1,...,column-n) VALUES(value-1,...,value-n) OPTIONS HOLD
```

Resolution: A check was added at the beginning of SET processing to make sure the flag indicating completion with WHERE clause processing in an UPDATE is not turned off if the WHERE conditional is a keyword (i.e. ISN=x) in the UPDATE table. If the flag is not turned off, it is switched.

Working with Customer Support

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Support Option	How to Access	How it Works	This Option is Best for:
E-mail	To contact Customer Support via e-mail: support@neonsys.com E-mail is available for receipt 24 hours a day, 7 days a week and is answered between 9AM-7PM CST Monday through Friday.	E-mail goes to the support queue, which is continuously monitored by a staff of crossfunctional technical experts. It is answered in the order it is received. It is logged in the support database and assigned a trouble ticket number for tracking purposes.	This type of support is excellent for low to medium priority requests. It is a proven method for providing further information on critical problems that may have been phoned in. E-mail is a convenient way of sending us a list of lower priority items you have collected at a time that is convenient for you.
Phone	To contact Customer Support, please call: 1-800-505-6366 (U. S. and Canada) 1-281-491-4200 (outside North America)	During normal working hours you will be transferred to someone who can usually answer your question on the first call. You may be required to page a support person via our phone mail system after hours.	This type of support is best for high priority requests and initial installation questions. Use this option for any obvious system errors or anytime you need the most rapid reply to your question.
Internet	To access Internet support, please visit our website at: www.neonsys.com	Simply visit our website. NEON Systems works to keep current, relevant materials on our Web site to support our trial and licensed customers.	This option provides immediate access to documentation, updated client-side adapters, and our product Knowledge Base. The Knowledge Base is a collection of questions answered by support. Use this option to answer your own questions or to get a better understanding of what customers ask on an ongoing basis.
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