## CA Repository for z/OS 7.2
### CA RS 1509 Service List

<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>RO83227</td>
<td>VARIOUS FIXES</td>
<td>PTF</td>
</tr>
<tr>
<td></td>
<td>RO83233</td>
<td>DATE AND DATETIME2 NOT RECOGNIZED</td>
<td>PTF</td>
</tr>
<tr>
<td></td>
<td>RO83236</td>
<td>DATE AND DATETIME2 NOT RECOGNIZED</td>
<td>PTF</td>
</tr>
<tr>
<td></td>
<td>RO83511</td>
<td>DBXOR03 - FORGNKEY MISSING TABLE CONNECTION</td>
<td>PTF</td>
</tr>
<tr>
<td></td>
<td>RO83531</td>
<td>DBXSMRG - INCORRECT MESSAGE IN SEGMERG</td>
<td>PTF</td>
</tr>
</tbody>
</table>

The CA RS 1509 service count for this release is 5
The CA RS 1509 service count for this FMID is 1
### CA Repository for z/OS

#### CA RS 1509 Service List for COF7200

<table>
<thead>
<tr>
<th>FMID</th>
<th>Service</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>COF7200</td>
<td>RO83531</td>
<td>DBXSMRG - INCORRECT MESSAGE IN SEGMERG</td>
<td>PTF</td>
</tr>
</tbody>
</table>

The CA RS 1509 service count for this FMID is 1
<table>
<thead>
<tr>
<th>FMID</th>
<th>Service</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>COH7200</td>
<td>RO83233</td>
<td>DATE AND DATETIME2 NOT RECOGNIZED</td>
<td>PTF</td>
</tr>
</tbody>
</table>

The CA RS 1509 service count for this FMID is 1
<table>
<thead>
<tr>
<th>FMID</th>
<th>Service</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>COI7200</td>
<td>RO83511</td>
<td>DBXOR03 - FORGNKEY MISSING TABLE CONNECTION</td>
<td>PTF</td>
</tr>
</tbody>
</table>

The CA RS 1509 service count for this FMID is 1
<table>
<thead>
<tr>
<th>FMID</th>
<th>Service</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP$7200</td>
<td>RO83236</td>
<td>DATE AND DATETIME2 NOT RECOGNIZED</td>
<td>PTF</td>
</tr>
</tbody>
</table>

The CA RS 1509 service count for this FMID is 1.
**CA Repository for z/OS 7.2**  
**CA RS 1509 - PTF RO83227 Details**

<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>RO83227</td>
<td>M.C.S. ENTRIES = ++APAR (RO83227)</td>
</tr>
</tbody>
</table>

```
DESC (VARIOUS FIXES)
/-------------------------------------------------------------------
PRODUCT: CA Repository Exchange for COBOL
RELEASE: 7.2
DATE: 27 JUL 2015
HYPER: NO
STARTTRK PROBLEM PRODUCT NAME: XSC PROBLEM NUMBER: 104
-------------------------------------------------------------------
VARIOUS FIXES
-------------------------------------------------------------------
RO70097 (XSC 97) introduced a problem where PRG DATA relations were formed with incorrect paragraph names. The problem was propagated to RO73111 (XSC 99), RO73304 (XSC 100) and RO77103 (XSC 101).
In addition, certain COBOL listings, for instance those containing the keyword SKIP3, have been found to go into an infinite loop, requiring that the program be cancelled.
This solution corrects the looping problem, as well as the PRG DATA relations with incorrect paragraph names introduced by RO70097 (XSC 097), and also incorporates corrected solutions for RO73111 (XSC 99), RO73304 (XSC 100) and RO77103 (XSC 101).
The descriptions of all these fixes (in reverse order) are listed below:
(XSC 104)
PROBLEM DESCRIPTION:
Certain COBOL listing, for instance ones that contain SKIP3, can go into an infinite loop and the scan job has to be cancelled.
SYMPTOMS:
The SCAN1 job simple does not end. No error messages are produced.
IMPACT:
The associated listing simply cannot be scanned into the Repository.
CIRCUMVENTION:
None.
(XSC 102)
PROBLEM DESCRIPTION:
The COBOL scanner, MSCANDB2 (SCAN1), is incorrectly outputting the REFER and REFERSUM output files. The REFER-PARAGRAPH values are not correct for any COBOL listing.
SYMPTOMS:
The Paragraph Name on the PRG DATA relationships which are formed from the metadata in these files is incorrect.
IMPACT:
The PRG DATA relationship will be formed with a Paragraph Name that is certainly incorrect and probably not even a paragraph name.
CIRCUMVENTION:
None.
(XSC 101, RO77103)
PROBLEM DESCRIPTION:
The COBOL scanner, MSCANDB2 (SCAN1), does not recognize that identifiers defined in an SQL cursor statement do not define columns. It therefore treats them as columns, and makes a corresponding entry in the SQL output file as a column.
This results in a "COLUMN" not found error message and a RC=04.
SYMPTOMS:
A COBOL program containing (for example):
EXEC SQL
DECLARE C3_ROLE CURSOR FOR
SELECT ROLES.DIRECTORY_ID,
ROLES.PRODUCT_CODE,
ROLES.ROLE_SEQUENCE,
SUBSTR(ADDRX.ADDRESS_LINE_5,31,2) STATE_CODE <<<
FROM ADDRX JOIN ROLES
ON ADDRX.DIRECTORY_ID = ROLES.DIRECTORY_ID
-
Will add STATE_CODE to the SQL output file. When run
into the subsequent load step this will result in the message:
Error:
THE COLUMN "STATE_CODE" OF TABLE "DB2P.PJ1P.ADDRX" WAS
NOT FOUND.
IMPACT:
A COBOL program containing a cursor with an implicit define
cannot be scanned into the Repository without generating
warning messages.
CIRCUMVENTION:
None.
(XSC 100, RO73304)

PROBLEM DESCRIPTION:
The COBOL scanner, MSCANDB2 (SCAN1), does not recognize the DB2
function TIMESTAMP_FORMAT and treats it as a column name.
This results in a "COLUMN" not found error message and a RC=04.

SYMPTOMS:
A COBOL program containing (for example):
*****EXEC SQL
****** SELECT *
****** FROM QEPUL01T
****** WHERE (DATE(CRET_TMSP) <
****** DATE(TIMESTAMP_FORMAT(:WK-CURR-CYC-DATE,'DDMMYYYY'))
will get the message:
THE COLUMN "TIMESTAMP_FORMAT" OF TABLE "PROD.QEPUL01T"
WAS NOT FOUND.
IMPACT:
A COBOL program containing the function TIMESTAMP_FORMAT
cannot be scanned into the Repository without warnings.
CIRCUMVENTION:
None.
(XSC 99, RO73111)

PROBLEM DESCRIPTION:
The COBOL scanner, MSCANDB2 (SCAN1), does not always ignore SQL
INCLUDE statements which have been "commented out " by the programmer
This results in a PRG COPY relationship
which should not be created.

SYMPTOMS:
A COBOL program containing (for example):
CR0512* EXEC SQL
CR0512* INCLUDE COPYBOOK
CR0512* END-EXEC.
Will create an entry
PROGRAMCOPYBOOK
(where PROGRAM is the name of the PROGRAM), in the COPY
output file.
IMPACT:
A PRG COPY association will be created between the program
"PROGRAM"and the copybook "COPYBOOK".
CIRCUMVENTION:
None.
(XSC 97, RO70097)

PROBLEM DESCRIPTION:
The CA Repository COBOL scanner, MSCANDB2, does not correctly
scan listings that are produced by the Serena Changeman(R) code
manager. In particular, when a DCLGEN is introduced via a
COPYBOOK, the copybook name will be used in the RECORD name,
instead of the actual 01 Record name.

SYMPTOMS:
When a program contains a COPY ESAIDTBL statement, and the
copybook contains a DCLGEN, such as
EXEC SQL DECLARE M0B.TB097_Prog_Serv_User_Map TABLE
## CA Repository for z/OS 7.2
### CA RS 1509 - PTF RO83227 Details

<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( APPL_PROG_ID CHAR(8) NOT NULL, ...) END-EXEC.</td>
</tr>
</tbody>
</table>

The REFER file will be produced with ESAIDTB0 as the 01 Record name instead of DCLTB097-PROG-SERV-USER-MAP.

**IMPACT:**
A COBOL program containing a DCLGEN copybook will not scan properly into the Repository.

**CIRCUMVENTION:**
None.

**PRODUCT(S) AFFECTED:**
CA Repository Exchange for COBOL r7.2

-------------------------------------------------------------------*/.
++VER (Z038) FMID(CNW7200)
SUP (T54R577,T54R412,T54R231,T54R181,T54R148,T54R068,
T54R016,RO58240,RO70096,T54R044,RO57536,T54V182,
T54V106,RO26865,RO30379,RO58507,RO56794,T54V998,
T54V101,RO26994,RO64650,RO65311,T54V576,RO44218,
RO55369,T54V970,AR48152,T54V590,T54R029,T54R058,
T54R207,RO70097,RO64100,RO61368,RO44914,RO48152,
T54V647,RO50702,T54V822,T54V922,RO73111,RO73304,
RO77103).
The CA Repository MSSQL Server catsync process does not recognize the MSSQL SERVER data types "DATE" or "DATETIME2".  

**SYMPTOMS:**
When an extract file from MSSQL Server is catsynced into the Repository, elements with data types "DATE" or "DATETIME2" will be represented in Repository as having data type "USER".  

**IMPACT:**
Inaccurate representation of MSSQL meta data in the Repository.  Since the Repository attribute DATA TYPE is limited to eight characters, the value "DATETIME2" cannot actually be assigned. Therefore, the corrected values will be "DATE" and "DATETIM2".  Please see RI83228 for additional information on how to correct EXISTING entries in the Repository with DATA TYPE "USER".  

**CIRCUMVENTION:**
None.

**PRODUCT(S) AFFECTED:**
CA Repository for z/OS r7.2  
CA Repository Exchange for MS SQLServer r7.2

---

Once the SMP/e portion of the fix application is complete, the following instructions should be turned over to the DB2 DBA in charge of the repository for customization to your site's specific procedures.  

Bind the solution DBRM with the following parameters:

- **DSN** SYSTEM(SUBSYS)
- **BIND PACKAGE**(Collection name) -
- **QUALIFIER**(REPOSITORY QUAL) -
- **MEMBER**(DBXMSSL) -
- **LIBRARY**(DBRMLIB) -
- **VALIDATE**(BIND) -
- **DYNAMICRULES**(BIND) -
- **ISOLATION**(CS) -
<table>
<thead>
<tr>
<th>Release Service</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ENCODING(EBCDIC) -</td>
</tr>
<tr>
<td></td>
<td>EXPLAIN(NO) -</td>
</tr>
<tr>
<td></td>
<td>FLAG(I) -</td>
</tr>
<tr>
<td></td>
<td>RELEASE(COMMIT) -</td>
</tr>
<tr>
<td></td>
<td>ACTION(REPLACE) -</td>
</tr>
<tr>
<td></td>
<td>CURRENTDATA(NO) -</td>
</tr>
<tr>
<td></td>
<td>ENABLE(DB2CALL,BATCH,CICS)</td>
</tr>
<tr>
<td></td>
<td>END</td>
</tr>
</tbody>
</table>

* Make the following substitutions for the values of the parameters so they conform to your site's environment. |
- subsys to the db2 subsystem |
- collection name to the repository package collection |
- repository qual to the repository owner. |
- dbrmlib to DBRM library that contains the DBRMs associated with the PTFs that are applied. |

++HOLD(RO83233) SYSTEM REASON(DOC) FMID(COH7200) COMMENT(
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CA Repository Exchange for MS SQLServer r7.2</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>SEQUENCE</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>PURPOSE</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>USERS</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>AFFECTED</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>KNOWLEDGE</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>REQUIRED</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>ACCESS</td>
</tr>
<tr>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>REQUIRED</td>
</tr>
</tbody>
</table>

**************************
| PUBLICATION |
|**************************

Please see Product Documentation Change RI83228.

).
Release | Service | Details
------- | ------- | -------
7.2     | RO83236 | M.C.S. ENTRIES = ++PTF (RO83236) DESC (DATE AND DATETIME2 NOT RECOGNIZED)

The CA Repository MSSQL Server catsync process does not recognize the MSSQL Server data types "DATE" or "DATETIME2".

SYMPTOMS:
When an extract file from MSSQL Server is catsynced into the Repository, elements with data types "DATE" or "DATETIME2" will be represented in Repository as having data type "USER".

IMPACT:
Inaccurate representation of MSSQL meta data in the Repository. Since the Repository attribute DATA TYPE is limited to eight characters, the value "DATETIME2" cannot actually be assigned. Therefore, the corrected values will be "DATE" and "DATETIME".

Please see RI83228 for additional information on how to correct EXISTING entries in the Repository with DATA TYPE "USER".

CIRCUMVENTION:
None.

PRODUCT(S) AFFECTED: CA Repository for z/OS 7.2
CA Repository Exchange for MS SQLServer 7.2

++VER (Z038) FMID(CP$7200)
PRE (RO81502,RO69500)
SUP (T54R604).
++IF FMID(COH7200) THEN REQ(RO83233).
++HOLD(RO83236) SYSTEM REASON(ACTION) FMID(CP$7200) COMMENT(
+----------+-----------------------------------------------------------+
|        CA Repository for z/OS              Release:  7.2             |
+----------+-----------------------------------------------------------+
|SEQUENCE  | After Apply                                               |
+----------+-----------------------------------------------------------+
|PURPOSE   | Load new IO MAP tables                                    |
+----------+-----------------------------------------------------------+
|USERS     | All Users                                                 |
+----------+-----------------------------------------------------------+
|AFFECTED  |                                                           |
+----------+-----------------------------------------------------------+
|KNOWLEDGE | Install procedures for the Repository.                    |
+----------+-----------------------------------------------------------+
|REQUIRED  |                                                           |
+----------+-----------------------------------------------------------+
|ACCESS    | Load authority on relevant DB2 subsys                     |
+----------+-----------------------------------------------------------+
|REQUIRED  |                                                           |
+----------+-----------------------------------------------------------+

***************
* STEPS TO PERFORM *
***************

Once the SMP/e portion of the fix application is complete, follow the directions in the CA Repository for z/OS Installation Guide 7.2 under the 'Load the New Data' section, in 'Chapter 7: Migration Information'. At the Installation Upgrade Customization Menu, (Main Menu # 13)

* Select option 5 LOAD and set options as follows:
Load control tables...
### CA Repository for z/OS 7.2
### CA RS 1509 - PTF RO83236 Details

<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DIALOGs? ===&gt; N CODE TABLEs? ===&gt; Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENTITYs? ===&gt; N IO MAPs? ===&gt; N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MESSAGEs? ===&gt; N COMMANDs? ===&gt; N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set SQLID to? ===&gt; *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current Contents? ===&gt; A (A-add,R-replace,P-new products)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the generated JCL according to your site's standard.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leave only members provided by the solution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When following those instructions the custom data will be retained.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>)</td>
</tr>
</tbody>
</table>
### CA Repository Exchange for Oracle for z/OS r7.2 Details

<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>RO83511</td>
<td>M.C.S. ENTRIES = +PTF (RO83511)</td>
</tr>
</tbody>
</table>

```c
/*---------------------------------------------*/
PRODUCT: CA Repository Exchange for Oracle
RELEASE: 7.2
DATE: 6 AUG 2015
HYPER: NO
STARTTRACK PROBLEM PRODUCT NAME: XOR PROBLEM NUMBER: 94

---------------------------------------------------------------------
DBXOR03 - FORGNKEY MISSING TABLE CONNECTION
---------------------------------------------------------------------

1. If a user CATSYNCs an Oracle table with multiple FOREIGN KEYS, some of them may not establish FORGNKEY relationships.
   This is specifically occurring when the foreign key rows are not contiguous in the input file.

2. If a user resyncs existing Oracle table in repository and this table has been modified in Oracle database, it may force incorrectly processing a foreign keys.
   This is specifically occurring when the number and/or content of foreign keys have been changed.

SYMPTOMS:
1. The FORGNKEY relationship connecting KEY to TABLE is not created. The corresponding KEY entity does not connect to the corresponding TABLE.
2. KEY entity is not deleted when the foreign key is deleted.

IMPACT:
The Metamodel is incomplete for the table with a foreign key.
DDL is generated from the Repository incorrectly.

CIRCUMVENTION:
N/A

PRODUCTS AFFECTED:
CA Repository Exchange for Oracle for z/OS r7.2.

| ++VER      | (Z038) FMID(COI7200) |
| PRE        | (RO81085) |
| SUP        | (T54R620). |
| ++HOLD(RO83511) SYSTEM REASON(DB2BIND) FMID(COI7200) COMMENT( | |
| | CA Repository Exchange for Oracle Release: 7.2 |
| | SEQUENCE | After Apply |
| | PURPOSE | Rebind DB2 objects because DBRMs have been changed. |
| | USERS | All Users |
| | AFFECTED |
| | KNOWLEDGE | Database Administration |
| | REQUIRED |
| | ACCESS | Database update |
| | REQUIRED |
```

---

### DBXOR03 - FORGNKEY MISSING TABLE CONNECTION

1. If a user CATSYNCs an Oracle table with multiple FOREIGN KEYS, some of them may not establish FORGNKEY relationships.
   This is specifically occurring when the foreign key rows are not contiguous in the input file.

2. If a user resyncs existing Oracle table in repository and this table has been modified in Oracle database, it may force incorrectly processing a foreign keys.
   This is specifically occurring when the number and/or content of foreign keys have been changed.

SYMPTOMS:
1. The FORGNKEY relationship connecting KEY to TABLE is not created. The corresponding KEY entity does not connect to the corresponding TABLE.
2. KEY entity is not deleted when the foreign key is deleted.

IMPACT:
The Metamodel is incomplete for the table with a foreign key.
DDL is generated from the Repository incorrectly.

CIRCUMVENTION:
N/A

PRODUCTS AFFECTED:
CA Repository Exchange for Oracle for z/OS r7.2.
Once the SMP/e portion of the fix application is complete, the following instructions should be turned over to the DB2 DBA in charge of the repository for customization to your site's specific procedures.

Bind the solution DBRM with the following parameters:

```
DSN SYSTEM(SUBSYS)
BIND PACKAGE(Collection name) -
QUALIFIER(REPOSITORY QUAL) -
MEMBER(DBXOR03 ) -
LIBRARY('DBRMLIB') -
VALIDATE(BIND) -
DYNAMICRULES(BIND) -
ISOLATION(CS) -
ENCODING(EBCDIC) -
EXPLAIN(NO) -
FLAG(I) -
RELEASE(COMMIT) -
ACTION(REPLACE) -
CURRENTDATA(NO) -
ENABLE(DB2CALL,BATCH,CICS)
END
```

Make the following substitutions for the values of the parameters so they conform to your site's environment.

- `subsys` to the `db2` subsystem
- `collection name` to the repository package collection
- `repository qual` to the repository owner.
- `dbrmlib` to DBRM library that contains the DBRMs associated with the PTFs that are applied.
When using the segment merge utility of the CA Repository Exchange for IMS, the program DBXSMRG merges 2 segments. In the case when an IMS Segment can't be found in the Repository, the DBXSMRG program erroneously issues an error message indicating that the problem exists with a COBOL Segment rather than an IMS segment. This is misleading the user and sends him/her down the wrong path of finding out why the COBOL Segment cannot be found.

**SYMPTOMS:**
The user will get Return Code 04 and the message:

**MESSAGE:** XIO00028

The SEGMENT entity xxxxxxxxC , IMSMRG , 000001 was not found.

Where xxxxxxxxC is the COBOL Segment name.

**IMPACT:**
The message is misleading and the user is sent down the wrong path.

**CIRCUMVENTION:**
None.

**PRODUCT(S) AFFECTED:**
CA Repository Exchange for IMS r7.2

---

**STEPS TO PERFORM**

Once the SMP/e portion of the fix application is complete, the following instructions should be turned over to the DB2 DBA in charge of the repository for customization to your site's specific procedures.

Bind the solution DBRM with the following parameters:

- **DSN SYSTEM(SUBSYS)**
- **BIND PACKAGE(Collection name)**
- **QUALIFIER(REPOSITORY QUAL)**
- **MEMBER(DBXSMRG)**
- **LIBRARY('DBRMLIB')**
<table>
<thead>
<tr>
<th>Release</th>
<th>Service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VALIDATE(BIND) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DYNAMICRULES(BIND) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ISOLATION(CS) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENCODING(EBCDIC) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EXPLAIN(NO) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FLAG(I) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RELEASE(COMMIT) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACTION(REPLACE) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CURRENTDATA(NO) -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENABLE(DB2CALL,BATCH,CICS) END</td>
<td></td>
</tr>
</tbody>
</table>

Make the following substitutions for the values of the parameters so they conform to your site's environment.
- subsys to the db2 subsystem
- collection name to the repository package collection
- repository qual to the repository owner.
- dbrmlib to DBRM library that contains the DBRMs associated with the PTFs that are applied. 

}