```
CREATE OR REPLACE PACKAGE BODY ADD ORS.ADD UE AS
 2
 3
    FUNCTION show version
       RETURN cmxlb.cmx med str
 5
    addue version cmxlb.cmx med str := 'Version 1.4 (2014-03-13 16:02:00)';
7
     BEGIN
8
        RETURN addue version;
9
    END;
10
11
    FUNCTION GET PARAMETER (in name VARCHAR2, in dft VARCHAR2) RETURN VARCHAR2 AS
12
          result VARCHAR2 (255);
13
     BEGIN
14
          SELECT VALUE INTO result FROM C PARAMETERS WHERE NAME = in name;
15
         return result;
16
    EXCEPTION
17
      WHEN OTHERS THEN
18
             RETURN in dft;
19
     END;
20
21
    PROCEDURE chk acct ids
22
23
      acct_rowid_object varchar2,
24
       acct sys_name
                             varchar2,
25
       acct sys id
                             varchar2,
26
       acct cd
                             varchar2,
27
       src nf ok
                             boolean,
28
       out rowid object OUT varchar2,
29
       out pkey src obj OUT varchar2,
       out_err_flg OUT char,
30
31
       out err msg
                       OUT varchar2
32 )
33 AS
34 sql stmt varchar2(2000);
35 t src sys name varchar2(10);
    t src sys id varchar2(40);
36
37
    t rowid object varchar2(14);
38
    t count
                   integer;
39
   BEGIN
40
     IF acct rowid object is not null THEN
41
       BEGIN
          -- Check if the rowid object is valid
42
43
          sql stmt := 'select src sys name, src sys id from c hm accounts where rowid object =
     ''' || acct rowid object || '''';
44
          --dbms output.put line('sql stmt = ' || sql stmt);
45
          EXECUTE IMMEDIATE sql stmt into t src sys name, t src sys id;
          --dbms output.put line('account found');
46
47
          -- Rowid found
48
          out rowid object := acct rowid object;
49
          -- Version 1.4 - Always use account rowid object to build pkey source object
          out pkey src obj := 'BATCH' || ':' || acct_rowid_object;
50
51
          out err flg := 'N';
52
          out err msg := '';
53
          EXCEPTION
54
           WHEN NO DATA FOUND THEN
55
              --dbms output.put line('account not found');
56
               out rowid object := NULL;
57
               out pkey src obj := NULL;
58
               out err flg := 'Y';
59
               out err msg := 'Invalid account rowid object: ' || acct rowid object;
60
        END;
61
        ELSIF (acct sys name is NOT NULL and acct sys id is NOT NULL) THEN
```

```
62
         BEGIN
 63
            -- Check if there is an account with the provided source keys
 64
            sql stmt := 'select rowid object from c hm accounts where src sys name = :1 and
      src sys id = :2';
 65
            dbms output.put line('Executing:' || sql stmt);
 66
            dbms output.put line('Using src sys name = ' || acct sys name || ' src sys Id: ' ||
      acct sys id);
 67
            EXECUTE IMMEDIATE sql stmt into t rowid object using acct sys name, acct sys id;
 68
            -- Rowid found
 69
            out rowid object := t rowid object;
 70
            out pkey src obj := acct sys name || ':' || acct sys id;
 71
            out err flq := 'N';
 72
            out err msg := '';
 73
            EXCEPTION
 74
              WHEN NO DATA FOUND THEN
 75
                IF src nf ok THEN
 76
                  -- No existing record with this key combo, treat it as a new account
 77
                   dbms output.put line('No data found, src nf ok is true');
 78
                   out rowid object := NULL;
 79
                   out pkey src obj := acct sys name || ':' || acct sys id;
 80
                   out_err flg := 'N';
 81
                   out err msg := '';
 82
                ELSE
 83
                   dbms output.put line('No data found, src nf ok is false');
 84
                   out rowid object := NULL;
 85
                   out pkey src obj := NULL;
 86
                   out err flq := 'Y';
 87
                   out err msg := 'Account source key not found: ' || acct sys id || ':' ||
      acct rowid object;
 88
                END IF;
 89
         END;
 90
         ELSIF acct cd IS NOT NULL THEN
 91
 92
            -- Check if there are multiple accounts with this account code
 93
            sql stmt := 'select count(*) from c hm accounts where account cd = :a1';
            EXECUTE IMMEDIATE sql stmt into t count using acct cd;
 94
 95
 96
            -- Bugfix for 3.11. Moved the single row select statment down so it is executed
      *after* checking that the record count=1
 97
            IF t count = 0 THEN
 98
 99
                IF src nf ok THEN
100
                 -- No existing record with this account code, treat it as a new account
                 out rowid object := NULL;
101
102
                 out pkey src obj := 'BATCH' || ':' || acct cd;
                 out err flg := 'N';
103
104
                 out err msg := '';
105
                ELSE
106
                   out rowid object := NULL;
107
                   out pkey src obj := NULL;
108
                   out err flq := 'Y';
109
                   out err msg := 'No account found for account code: ' || acct cd;
110
                END IF;
111
            ELSIF t count = 1 THEN
112
              -- Get the id of the account with the provided account cd
113
              sql stmt := 'select rowid object from c hm accounts where account cd = :a1';
              EXECUTE IMMEDIATE sql stmt into t rowid object using acct cd;
114
              out rowid object := t rowid object;
115
              out pkey src obj := 'BATCH' || ':' || acct_cd;
116
117
              out err flg := 'N';
              out err msg := '';
118
119
            ELSE
```

```
120
              out rowid object := NULL;
121
              out pkey src obj := NULL;
122
              out err flg := 'Y';
123
              out err msg := 'More than one row found for account Code: ' || acct cd;
124
            END IF;
125
            EXCEPTION
              WHEN NO DATA FOUND THEN
126
127
                IF src nf ok THEN
128
                 -- No existing record with this account code, treat it as a new account
129
                 out rowid object := NULL;
130
                 out pkey src obj := 'BATCH' || ':' || acct cd;
131
                 out err flq := 'N';
132
                 out err msg := '';
133
                ELSE
134
                   out rowid object := NULL;
135
                   out pkey src obj := NULL;
136
                   out err flg := 'Y';
137
                   out err msg := 'No account found for account code: ' || acct cd;
138
                END IF;
139
         END;
140
        ELSE
           -- No account identifiers provided
141
142
           out rowid object := NULL;
           out pkey src obj := NULL;
143
144
           out err flg := 'Y';
145
           out err msg := 'At least one account identifier should be provided';
146
         END IF;
147
148
      END chk acct ids;
149
150
      --
151
      PROCEDURE chk ptac ids
152
153
          ptac rowid object
                                varchar2,
154
          ptac sys name
                                 varchar2,
155
         ptac sys id
                                 varchar2,
156
         out rowid object OUT
                                varchar2,
157
          out err flg OUT
                                char,
158
          out err msg
                          OUT
                                varchar2
159
      )
160
      AS
161
      sql stmt varchar2(2000);
162
      t src sys name varchar2(10);
      t src sys id varchar2(40);
163
      t rowid object varchar2(14);
164
165
      t count
                      integer;
      BEGIN
166
167
         IF ptac rowid object is not null THEN
168
         BEGIN
169
            -- Check if the rowid object is valid
170
            sql stmt := 'select rowid object from c bo party acct where rowid object = :rid';
171
            EXECUTE IMMEDIATE sql stmt into t rowid object using ptac rowid object;
172
            -- Rowid found
173
            out rowid object := ptac rowid object;
174
            out err flg := 'N';
175
            out err msg := '';
176
            EXCEPTION
177
              WHEN NO DATA FOUND THEN
178
                 out rowid object := NULL;
179
                 out err flq := 'Y';
                 out err msg := 'Invalid primary customer rowid object: ' || ptac rowid object;
180
181
         END:
```

```
182
         ELSIF (ptac sys name is NOT NULL and ptac sys id is NOT NULL) THEN
183
         BEGIN
184
            -- Check if there is an account with the provided source keys
            sql stmt := 'select rowid object from c bo party acct xref where rowid system = ''' ||
185
       ptac sys name ||
                                  ''' and pkey src object = ''' || ptac sys id || '''';
186
            --dbms output.put line('Executing:' || sql stmt);
187
188
            --dbms output.put line('Using rowid system = ' || ptac sys name || ' Sys Id: ' ||
      ptac sys id);
            --EXECUTE IMMEDIATE sql stmt into t rowid object using ptac sys name, ptac sys id;
189
190
            EXECUTE IMMEDIATE sql stmt into t rowid object;
191
            -- Rowid found
192
            out rowid object := t rowid object;
193
            out err flg := 'N';
            out err msg := '';
194
195
            EXCEPTION
196
              WHEN NO DATA FOUND THEN
197
                 -- No existing PTAC record with this key combo, error
198
                 out rowid object := NULL;
199
                 out err flg := 'Y';
200
                 out err msg := 'No customer record found for provided source keys: ' ||
      ptac_sys_name || ':' || ptac_sys_id;
201
        END;
202
         ELSE
203
           -- No PTAC identifiers provided
204
          out rowid object := NULL;
           out err flq := 'N';
205
206
           out err msg := '';
207
         END IF;
208
      END chk ptac ids;
209
210
211
      PROCEDURE post landing
212
213
          in rowid job
                                  cmxlb.cmx rowid,
214
          in ldg table name
                                 cmxlb.cmx table name,
215
         in stg table name
                                 cmxlb.cmx table name,
216
         in prl table name
                                 cmxlb.cmx table name,
         out_error_msg     OUT cmxlb.cmx message,
217
218
                             OUT int
          out return code
219
      )
220
      AS
221
      t acc rowid object varchar2(14);
222
      t acc rowid object2 varchar2(14);
223
      t ptac rowid object varchar2(14);
224
      t pkey src obj varchar2(100);
225
      t pkey src obj2 varchar2(100);
226
      t err flg char(1);
227
      t err msg varchar2(2000);
228
229
      TYPE ref cursor is REF CURSOR;
230
      m cursor ref cursor;
231
232
      cursor c accts is
233
      select acc rowid object, account cd, src sys name, src sys id, ptac rowid object,
      ptac src name, ptac src key
234
      from c ldg hm accounts
235
      for update;
236
237
      cursor c accts rel is
238
      select acc rowid object 1, account cd 1, src sys name 1, src sys id 1,
239
             acc rowid object 2, account cd 2, src sys name 2, src sys id 2
```

```
240
      from
            c ldg accounts rel
241
      for update;
242
243
      cursor c accts ptac rel is
244
      select acc rowid object, account cd, src sys name, src sys id, ptac rowid object,
      ptac src name, ptac src key
      from C LDG HM ACCT PTY AC REL
245
246
      for update;
247
248
249
      BEGIN
250
          cmxlog.debug ('Inside ADD UE.post landing');
          IF in ldg table name = 'C LDG HM ACCOUNTS' AND in stg table name =
251
      'C STG HM ACCTS BATCH' THEN
252
            cmxlog.debug ('ADDUE: Landing table name is ' || in_ldg table name || ' Staging table
253
      name is ' || in stg table name);
254
            FOR r accts in c accts LOOP
255
              --Check the account identifiers
256
              chk acct ids (r accts.acc rowid object, r accts.src sys name, r accts.src sys id,
      r_accts.account_cd, TRUE, t_acc_rowid_object, t_pkey_src_obj, t_err_flg, t_err_msg);
257
              IF t err flg = 'N' THEN
258
                  chk ptac ids (r accts.ptac rowid object, r accts.ptac src name, r accts.
      ptac src key, t ptac rowid object, t err flg, t err msg);
259
              END IF;
260
              UPDATE C LDG HM ACCOUNTS
261
              SET cmp acc rowid object = t acc rowid object,
262
                   cmp pkey src obj = t pkey src obj,
263
                   cmp ptac rowid object = t ptac rowid object,
264
                   error_flag = t_err_flg,
265
                   error msg = t err msg
266
              WHERE CURRENT OF c accts;
267
            END LOOP;
268
            COMMIT;
269
          END;
          ELSIF in ldg table name = 'C LDG ACCOUNTS REL' AND in stg table name =
270
      'C STG HM ACCTS REL BATCH' THEN
271
          BEGIN
272
            cmxlog.debug ('ADDUE: Landing table name is ' || in ldg table name || ' Staging table
      name is ' || in stg table name);
            FOR r accts rel in c accts rel LOOP
273
274
              --Check the account identifiers
275
              chk acct ids (r accts rel.acc rowid object 1, r accts rel.src sys name 1,
      r accts rel.src sys id 1, r accts rel.account cd 1, FALSE, t acc rowid object,
      t pkey src obj, t err flg, t err msg);
276
              IF t err flg = 'N' THEN
277
                  chk acct ids (r accts rel.acc rowid object 2, r accts rel.src sys name 2,
      r_accts_rel.src_sys_id_2, r_accts_rel.account_cd_2, FALSE, t_acc_rowid_object2,
      t_pkey_src_obj2, t_err_flg, t_err_msg);
278
              END IF;
279
              UPDATE C LDG ACCOUNTS REL
280
              SET cmp acc rowid object 1 = t acc rowid object,
281
                   cmp_pkey_src_obj = t_pkey_src_obj || ':' || t_pkey_src_obj2,
282
                   cmp acc rowid object 2 = t acc rowid object2,
283
                   error flag = t err flg,
284
                   error_msg = t_err_msg
              WHERE CURRENT OF c accts rel;
285
286
            END LOOP;
287
            COMMIT;
288
          END;
289
          ELSIF in ldg table name = 'C LDG HM ACCT PTY AC REL' AND in stg table name =
      'C STG HM ACCT PTAC BATCH' THEN
```

```
C:\L<sup>290</sup>
            BEGIN
 291
              cmxlog.debug ('ADDUE: Landing table name is ' || in ldg table name || ' Staging table
        name is ' || in stg table name);
              FOR r accts ptac rel in c accts ptac rel LOOP
 292
 293
                --Check the account identifiers
 294
                chk acct ids (r accts ptac rel.acc rowid object, r accts ptac rel.src sys name,
        r accts ptac rel.src sys id, r accts ptac rel.account cd, FALSE, t acc rowid object,
        t pkey src obj, t err flg, t err msg);
 295
                IF t err flg = 'N' THEN
 296
 297
                     chk ptac ids (r accts ptac rel.ptac rowid object, r accts ptac rel.ptac src name
        , r accts ptac rel.ptac src key, t ptac rowid object, t err flg, t err msg);
 298
                END IF;
 299
 300
 301
                IF r accts ptac rel.ptac src name is NOT NULL and r accts ptac rel.ptac src key IS
        NOT NULL THEN
 302
                     t pkey src obj2 := t pkey src obj || ':' || r accts ptac rel.ptac src name ||
        ':' || r accts ptac rel.ptac src key;
 303
 304
                     t_pkey_src_obj2 := t_pkey_src_obj || ':' || t_ptac_rowid_object;
 305
                END IF;
 306
 307
                UPDATE C LDG HM ACCT_PTY_AC_REL
 308
                SET cmp acc rowid object = t_acc_rowid_object,
 309
 310
                      cmp pkey src obj = t pkey src obj2,
 311
                      cmp ptac rowid object = t ptac rowid object,
 312
                     error flag = t err flg,
 313
                      error msg = t err msg
 314
                WHERE CURRENT OF c accts ptac rel;
 315
              END LOOP;
 316
              COMMIT;
 317
            END;
 318
            ELSE
 319
              -- Do nothing
 320
              CMXlog.debug ('ADDUE Post Landing - no action taken');
 321
            END IF;
 322
        END;
 323
        PROCEDURE post stage concat
 324
 325
            in party acct id varchar2,
 326
            out txn div display OUT varchar2
 327
 328
        AS
 329
        --
 330
        BEGIN
 331
            with
 332
            stgbo as
 333
 334
            select party acct id, TXN DIV CD from C BO PTAC TXN DIV WHERE party acct id =
        in party acct id
 335
            union
 336
            select party acct id, TXN DIV CD from C STG PTAC TXN DIV WHERE PARTY ACCT ID =
        in party acct id
 337
            )
            select\ distinct\ TRIM(A||'\ '||B||'\ '||C||'\ '||D)\ into\ out\_txn\_div\_display\ from\ (select\ Continuous)
 338
        party acct id, TXN DIV CD from stqbo ) pivot( max(TXN DIV CD) for TXN DIV CD in ( 'ADC' A,
        'ADD' B, 'AMD' C, 'APOC' D)) WHERE PARTY ACCT ID = in party acct id;
 339
        END post stage concat;
 340
        PROCEDURE post stage
 341
```

```
342
          in rowid job
                                   cmxlb.cmx rowid,
343
          in ldg table name
                                  cmxlb.cmx table name,
344
                                 cmxlb.cmx table name,
          in stg table name
345
                             OUT cmxlb.cmx message,
          out error msg
346
          out return code
                             OUT int
347
      )
348
      AS
349
      sql stmt varchar2(2000);
350
      t party acct id varchar2(14);
351
      t txn div cd varchar2(20);
352
      t txn div display varchar2(50);
353
      commit count NUMBER := 0;
354
      commit inc NUMBER := 1000;
355
356
      CURSOR C PTAC TXN IS
      SELECT PARTY ACCT ID, TXN DIV CD, TXN DIV DISPLAY
357
            C STG PTAC TXN DIV;
358
      FROM
359
360
      BEGIN
361
362
          commit inc := to number(GET PARAMETER('post stage commit', commit inc));
363
          IF in ldg table name = 'C LDG PTAC TXN DIV' AND in stg table name = 'C STG PTAC TXN DIV'
       THEN
                20130225 SCK Update the stage txn div display col with a denormalized string
364
      derived from an aggregate of both staging and base object
365
              cmxlog.debug ('ADDUE: Landing table name is ' || in ldg table name || ' Staging
      table name is ' || in stg table name);
366
              BEGIN
367
                    FOR R PTAC TXN in C PTAC TXN LOOP
                          post stage concat (R PTAC TXN.PARTY ACCT ID, t txn div display);
368
369
                          UPDATE C STG PTAC TXN DIV
370
                          SET txn div display = t txn div display, create date = sysdate WHERE
      TXN DIV CD = R PTAC TXN.TXN DIV CD AND
371
                          PARTY ACCT ID = R PTAC TXN.PARTY ACCT ID; -- CURRENT OF C PTAC TXN;
372
                          commit count := commit count + commit inc;
                          IF MOD(commit count, 1000) = 0 THEN
373
374
                               cmxlog.debug ('ADDUE: post stage concat is: ' || commit count || ':'
       || R PTAC TXN.PARTY ACCT ID || ' : ' || t txn div display);
375
                               COMMIT;
376
                          END IF;
377
                    END LOOP;
378
                    COMMIT;
379
              END;
380
381
            CMXlog.debug ('ADDUE Post Stage - no action taken');
382
          END IF;
383
      END post stage;
384
      END ADD UE;
385
386
```