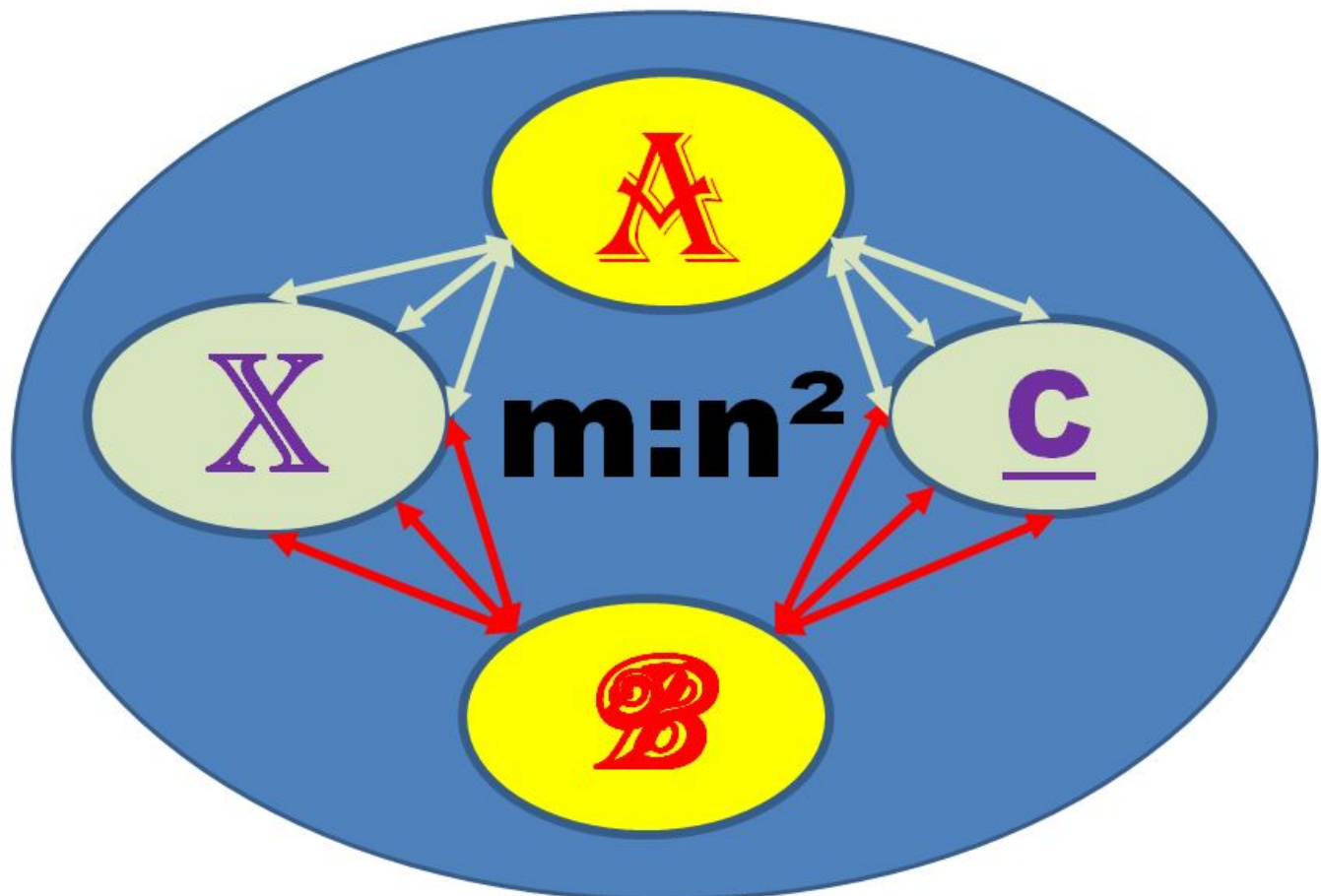Article
Robert Cemper · May 14, 2022
8m read

M:N in Contest #2

Implementation

- B is the Winner Table: It holds the region and a numeric as ID. Short name is left empty for privacy protection in this Demo
- A is the table of all contests with dates
- X,C are the arrays of prizes. They are projected as SQL tables.   When assigned they refer to 1 winner

User guide

Start the demo in Docker from IRIS console or in Webterminal

```
USER>do ##class(dc.rcc.Main).Menue()
```

You jump on top of fresh page

```
Welcome to OEX Contest Statistics

Select Contests, Prizes, Winners, Assign, Statistics, eXit (C,P,W,A,S,X) :
```

<u>Contests, Prizes, Winners</u> have the same maintenance functions and show the
data status before and after processing.

```
Contest List, Edit, New, Delete, eXit (L,E,N,D,X) :
Prizes List, Edit, New, Delete, eXit (L,E,N,D,X) :
Winners List, Edit, New, Delete, eXit (L,E,N,D,X) :
```

<u>List, Edit, Delete</u> ask for additional IDs of the records processed.
A typical EDIT sequence for the actual Contest

```
Select Contests, Prizes, Winners, Assign, Statistics, eXit (C,P,W,A,S,X) :c

Contest List, Edit, New, Delete, eXit (L,E,N,D,X) :e

Contest ID :24
ID        Start_Date       End_Date          Title
24        2022-05-09       2022-05-29        InterSystems Grand Prix 2022

1 Rows(s) Affected

Change Start_Date (ODBC Format)[2022-05-09] :

Change End_Date (ODBC Format)[2022-05-29] :

Change Title [InterSystems Grand Prix 2022] :

ID        Start_Date       End_Date          Title
24        2022-05-09       2022-05-29        InterSystems Grand Prix 2022

1 Rows(s) Affected
```

<u>Assign</u> also allows Remove or (implicitly) Overload assignment of a prize.

```
Select Contests, Prizes, Winners, Assign, Statistics, eXit (C,P,W,A,S,X) :A
Assign or Remove Winner (A,R) :a
Winner's region (as,br,eu,ru,us) :us
ID        Region    RegID    Short
us||1     us        1        ?
us||2     us        2        ?
us||3     us        3        ?
us||4     us        4        ?

4 Rows(s) Affected
Winner's RegID :4
Contest ID :5
ID      Cat      Rank     Value    WinrID   Short    Title
5       C        1        1000     br||1    ?        InterSystems IRIS for Health FHIR
5       C        2        500      br||2    ?        InterSystems IRIS for Health FHIR
5       X        1        1500     br||1    ?        InterSystems IRIS for Health FHIR
5       X        2        1500     br||2    ?        InterSystems IRIS for Health FHIR
5       X        3        500      br||5    ?        InterSystems IRIS for Health FHIR

5 Rows(s) Affected
Category (C,X) :c Rank :1
ID      Cat      Rank     Value    WinrID   Short    Title
5       C        1        1000     br||1    ?        InterSystems IRIS for Health FHIR
```

```
1 Rows(s) Affected
Assign Winner us||4 (Y,N) [N]:y
ID      Cat     Rank    Value   WinrID  Short   Title
5       C       1       1000    us||4   ?       InterSystems IRIS for Health FHIR

1 Rows(s) Affected
Contest ID :
```

Statistics is a collection of pre-composed queries.
You can always select the Category displayed: (C=Community, X=eXperts, *=All)
In order to inspire you for your own queries, you can also display the SQL statement used.

```
Select Contests, Prizes, Winners, Assign, Statistics, eXit (C,P,W,A,S,X) :s

Prepared Statistics
 1 - Total prizes by contest
 2 - Total prizes by region
 3 - Total prizes by winners
 4 - Winner's ranking in contest
 5 - Winner's Profile
 X - eXit
   Select statistic [X]:2
Category (C=Community,X=eXperts,*=All) :*

Cat     Prizes  Value   Region
  *       88     68170   br
  *       40     42425   ru
  *       27     19700   eu
  *       13     15825   as
  *        8      9000   us

5 Rows(s) Affected
    Show SQL Statement (YN) [N] :y

    SELECT LPAD(cat,3) Cat, LPAD(count(*),3) Prizes, Sum(val) Value, Region
     FROM ( SELECT '*' Cat,
    C_value val, C_winner->Region FROM dc_rcc.Contest_C
     UNION ALL SELECT '*' Cat,
    X_value val, X_Winner->Region FROM dc_rcc.Contest_X
     ) WHERE val>1 AND NOT Region IS NULL
     GROUP BY Region ORDER BY 3 DESC
```

or

```
Prepared Statistics
 1 - Total prizes by contest
 2 - Total prizes by region
 3 - Total prizes by winners
 4 - Winner's ranking in contest
 5 - Winner's Profile
 X - eXit
   Select statistic [X]:5
Category (C=Community,X=eXperts,*=All) :c

Cat     Contest Best    Winner  Value   ConCnt  ContestList - - - - - - - - - - - - - -
  -         RankList
```

```
C        1       1        ru||1    4750      7        1,11,13,16,21,22,23
         1,3,3,1,3,1,1
C        1       1        br||4    1770      5        1,2,15,18,19
         2,2,1,3,1
C        2       1        br||1    7250      11       2,5,6,7,9,10,12,13,14,17,18
         1,1,1,2,1,2,2,1,2,2,2
C        3       1        br||5    1750      3        3,4,14
         2,1,4
C        3       1        eu||3    1000      1        3
         1
C        4       1        br||2    4500      10       4,5,9,10,12,13,14,18,21,23
         2,2,2,3,3,2,1,1,1,2
C        4       1        br||3    2950      6        4,7,9,17,18,19
         3,1,3,1,4,2
C        6       2        ru||2    1075      3        6,19,22
         2,3,2
C        6       3        ru||8    250       1        6
         3
C        7       3        eu||1    750       3        7,12,17
         3,4,3
C        10      1        as||2    4000      2        10,11
         1,1
C        11      2        as||3    1500      1        11
         2
C        12      1        eu||2    750       1        12
         1
C        13      4        br||6    250       1        13
         4
C        14      3        ru||5    500       1        14
         3
C        16      2        as||5    500       1        16
         2
C        16      3        ru||3    250       1        16
         3
C        21      2        as||1    1000      2        21,23
         2,3
C        22      3        as||4    625       1        22
         3

19 Rows(s) Affected
    Show SQL Statement (YN) [N] :
```

Happy testing.

GitHub
Demo Video

Demo Server SMP
Demo Server WebTerminal

#Other