HOW TO GENERATE THE DIAGRAM METADATA REPORTS (last updated 20190904)

STEP 1: STEREOTYPING

Make sure all desired diagrams have the stereotype of "BRIDG Home Page View" BEFORE you start this process. Also, when running these reports for an official BRIDG release, make sure all validation queries have been run and fixes made before starting this process as even an attribute order change can make the reports out of date.

You can run the following query if you want to check stereotypes (if anything's missing, update the .EAP before going on to next step:

SELECT t\_diagram.name as [DIAGRAM NAME]

FROM t\_diagram

WHERE t\_diagram.Stereotype = 'BRIDG Home Page View';

How to run a SQL query from within EA:

1. Edit > Search in Model

2. Change "Common Searches" in 1st dropdown to "My Searches"

3. Click on New Search ("+" on magnifying glass) and paste in the query above then run the query with the ">" button.

STEP 2: CONVERTING THE FILE TO ACCDB

Convert the BRIDG.EAP file into an .accdb file using a thumb drive and the old Samvit laptop with the old version of MS Access on it. (BRIDG.EAP > BRIDG.mdb > open .mdb > save as .accdb) Copy the .accdb to your laptop for use now and for future reference (handy for running quick queries).

STEP 3: RUNNING THE REPORT QUERY

Run this query - it returns rows for all diagrams with the stereotype above - then follow instructions for formatting individual reports below:

(WARNING: IF YOU DO ANY EDITS AND DON'T SAVE FIRST, IT EXPORTS QUERY RESULTS WITH PREVIOUSLY SAVED QUERY EVEN IF IT DISPLAYS ROWS FROM EDITED QUERY.

APPARENTLY EXPORT WORKS OFF WHAT YOU SAVED, NOT WHAT IS DISPLAYED.)

SELECT

t\_diagram.name AS [DIAGRAM NAME],

t\_object.name AS [CLASS NAME],

t\_attribute.name AS [ATTRIBUTE NAME],

t\_attribute.type AS [DATA TYPE],

t\_attribute.lowerbound+'..'+t\_attribute.upperbound AS [CARDINALITY],

t\_attribute.Notes AS [DESCRIPTION]

FROM ((t\_diagramobjects

INNER JOIN t\_object ON t\_object.Object\_ID = t\_diagramobjects.Object\_ID)

INNER JOIN t\_diagram ON t\_diagram.Diagram\_ID = t\_diagramobjects.Diagram\_ID)

INNER JOIN t\_attribute ON t\_attribute.Object\_ID = t\_object.Object\_ID

WHERE t\_object.Object\_Type = 'Class'

AND t\_diagram.Stereotype = 'BRIDG Home Page View'

AND (

(

(INSTR(t\_diagram.StyleEx,MID(t\_object.ea\_guid,2,6)) = 0)

AND (INSTR(t\_diagramobjects.ObjectStyle,'AttPro=0;AttPri=0;AttPub=0;AttPkg=0') = 0)

AND (INSTR(t\_diagramobjects.ObjectStyle,'AttCustom=0') = 0)

AND "COMMENT: this set brings back attributes for classes where nothing is hidden."

)

OR (

(INSTR(t\_diagramobjects.ObjectStyle,'AttPro=0;AttPri=0;AttPub=0;AttPkg=0') > 0)

AND (INSTR(t\_diagram.StyleEx,MID('S\_'+t\_object.ea\_guid,2,6)) > 0)

AND (INSTR(t\_diagram.StyleEx,MID(t\_attribute.ea\_guid,2,6)) = 0)

AND "COMMENT: this set evaluates to false so that it excludes attributes for classes where all attributes are hidden."

)

OR (

(INSTR(t\_diagram.StyleEx,MID(t\_attribute.ea\_guid,2,6)) = 0)

AND (INSTR(t\_diagram.StyleEx,MID(t\_object.ea\_guid,2,6)) > 0)

AND (INSTR(t\_diagramobjects.ObjectStyle,'AttCustom=0') > 0)

AND "COMMENT: this set shows unhidden attributes - if AttCustom=0 and attribute is NOT IN StyleEx then show the attribute."

)

OR (

(INSTR(t\_diagram.StyleEx,MID(t\_attribute.ea\_guid,2,6)) > 0)

AND (INSTR(t\_diagram.StyleEx,MID(t\_object.ea\_guid,2,6)) > 0)

AND (INSTR(t\_diagramobjects.ObjectStyle,'AttCustom=1') > 0)

AND "COMMENT: this set shows unhidden attributes - if AttCustom=1 and attribute IS IN StyleEx then show the attribute."

)

)

UNION ALL

SELECT

t\_diagram.name AS [DIAGRAM NAME],

t\_object.name AS [CLASS NAME],

'' AS [ATTRIBUTE NAME],

'' AS [DATA TYPE],

'' AS [CARDINALITY],

t\_object.Note AS [DESCRIPTION]

FROM ((t\_diagramobjects

INNER JOIN t\_object ON t\_object.Object\_ID = t\_diagramobjects.Object\_ID)

INNER JOIN t\_diagram ON t\_diagram.Diagram\_ID = t\_diagramobjects.Diagram\_ID)

WHERE t\_object.Object\_Type = 'Class'

AND t\_diagram.Stereotype = 'BRIDG Home Page View'

ORDER BY 1, 2, 3;

STEP 4: FORMATTING THE RESULTS

Here is the formatting to apply to the initial all-diagrams report and individual reports as appropriate (do as much as possible in the all-diagrams version because then when you copy it to make diagram-specific files it will already have most of the formatting done) - see the existing reports as examples to follow re column widths, etc.:

- Format it by adding a title row as "BRIDG <Diagram Name> Metadata Report, generated on <Mon. Day, Year>" in Bold font, size 16

- Add another row for the BRIDG URL: "BRIDGmodel.nci.nih.gov" in Bold font, size 14

- (leave out any further header info for now since it may change each time the model is published; keeping it simple)

- Bold the column heading row

- Set a fill color for the column heading cells

- Turn on display of the cell borders

- Widen columns so all data shows except in the DESCRIPTION column which needs to be widened AND have word wrap turned on

- Align data at top of all cells

- Freeze the top 3 rows (title, URL, headings)

- Set up filtering across all columns for all data rows (omitting title lines of course)

Now filter by diagram one at a time, copy the displayed rows for one diagram (including the headings you formatted) and paste them in a separate file Name the individual Excel files using the following convention:

BRIDG<version#>-<YYYYMMDD>-<DiagramNameNoSpacesNoSpecialChars>.xlsx

e.g. BRIDG5.3Beta-20190204-BRIDGBackBone.xlsx (replace "&" with "and", keep "." as is))

and make individual diagram-specific title changes as needed.

Then upload the file to GitHub in a version-specific folder: bridg-model / Documents / Diagram Metadata Reports / BRIDG5.3Beta-20190205 (for example) or BRIDG5.3 (for final version)

Follow separate instructions for uploading each of the individual reports to their respective diagrams in the .EAP file.