

# Equations for Pop Select in Pop Update

MidHEUG 2017

#3022

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# Overview

- Using Equation Engine as the Pop Selection tool in Pop Update

# Agenda/Contents

- Introduction
- Review
  - Pop Update setup and security
  - Equation Engine overview and prep
  - Requirements for Pop Select in Pop Update
- An Example
- Recommendations

# University of Missouri-System



# Campus Solutions

- Version 9.0
- Bundle #46
- Financial Aid Critical Fix
- PeopleTools 8.55.15

# Pop Update Setup

## Security Setup Run Control

# Population Update Security

Set Up SACR > Security > Secure Student Administration > User ID > Population Update Security

The screenshot shows a software application window titled "Population Update Security". The top navigation bar includes "Favorites", "Main Menu", "Set Up SACR", "Security", "Secure Student Administration", "User ID", and "Population Update Security". Below the title, the text "User ID: STUWRKFA01" is displayed. A table with two columns, "Record (Table) Name" and "Description", shows a single entry: "STDNT\_AID\_ATRBT" and "Packaging Status Summary". To the right of the table are buttons for "Find", "First", "Last", "Access Code", and "Read/Write".

Record (Table) Name	Description
STDNT_AID_ATRBT	Packaging Status Summary

# Population Update Setup

Set Up SACR > System Administration >  
Utilities > Population Update > Population  
Update Setup

Favorites Main Menu > Set Up SACR > System Administration > Utilities > Population Update > Population Update Setup

## Population Update Setup

**Fields Available for Update**

Record (Table) Name STDNT\_AID\_ATRBT Packaging Status Summary

*Field Name	Field Long Name	Personalize	Find	First	1-4 of 4	Last
AID_APP_STATUS	Aid Application Status	[+]	[-]			
FA_SS_AWD_SECURITY	Self Service Awarding Access	[+]	[-]			
PROCESSING_STATUS	Aid Package Processing Status	[+]	[-]			
SAT_ACADEMIC_PRG	Satisfactory Academic Progress	[+]	[-]			

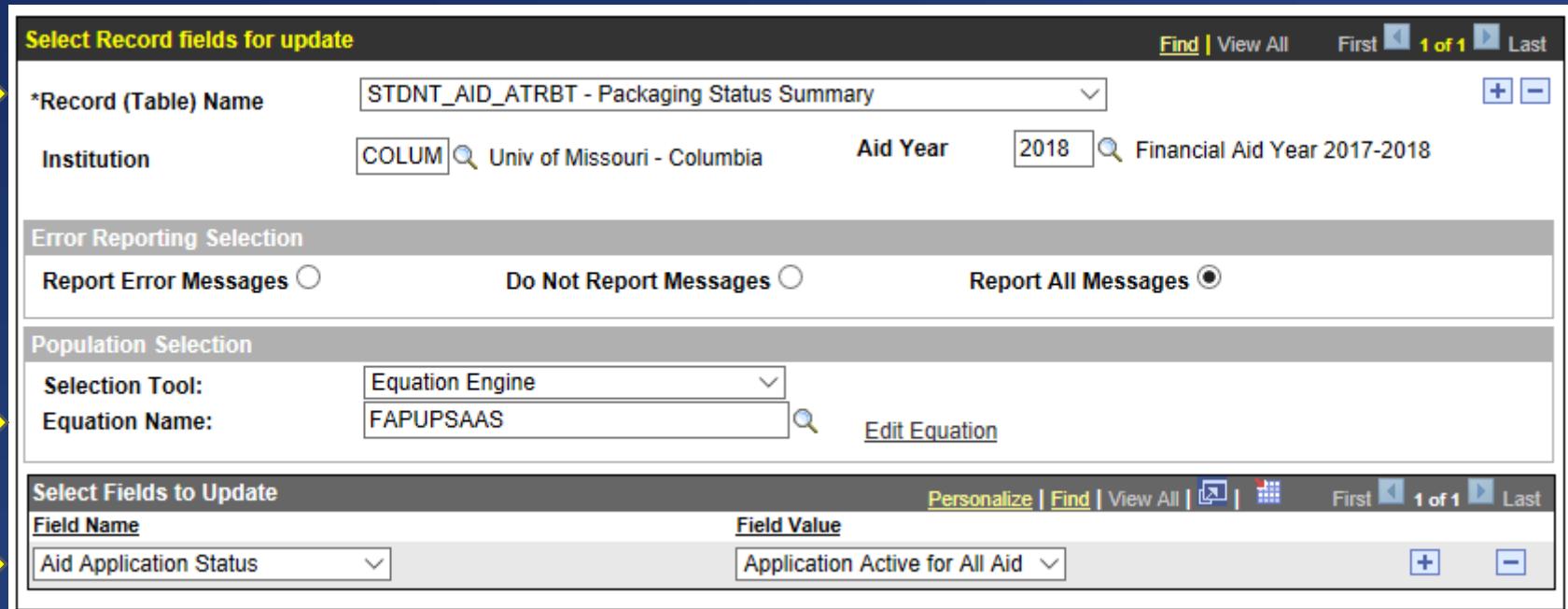


# Pop Update Run Control

Set Up SACR > System Administration >  
Utilities > Population Update > Population  
Update Process

Yellow arrows point to the following fields:

- \*Record (Table) Name: STDNT\_AID\_ATRBT - Packaging Status Summary
- Institution: COLUM Univ of Missouri - Columbia
- Aid Year: 2018 Financial Aid Year 2017-2018
- Report Error Messages (radio button)
- Do Not Report Messages (radio button)
- Report All Messages (radio button, selected)
- Selection Tool: Equation Engine
- Equation Name: FAPUPSAAS
- Select Fields to Update:
  - Field Name: Aid Application Status
  - Field Value: Application Active for All Aid



# Equation Engine Setup

Layout

Equation Data Tables and Security

# Equation Engine, top...

Set Up SACR > Common Definitions > Equation Engine > Equation Editor

Equation Name	MIDHEUG			
<b>Equation Table</b>				
*Eff Date	<input type="text" value="09/08/2017"/>			
Short Desc	<input type="text"/>			
Compile Status	Not Yet Compiled			
Equation Edit Function	<input type="text"/>			
<b>Equation Detail</b>				
Sel	Line Keyword	Operand Type	Operand	Comment:
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# ...to bottom

Set Up SACR > Common Definitions > Equation Engine > Equation Editor

Application Prompts		
*Application Prompt ID		
1 No Application Selected		

Parameters		
Global	Type	Description
1		

# Equation Data Tables

Set Up SACR > Common Definitions > Equation Engine > Equation Data Tables

**Equation Data Tables**

Equation Data Record Name: STDNT\_AID\_ATRBT

Table Information			Personalize	Find	View All	First	1 of 1	Last
*Eff Date	*Status	*Description						
01/01/1900	Active	Student Aid Attributes Table	<a href="#">+</a> <a href="#">-</a>					

# Tables and Views

Set Up SACR > Security > Equation Tree  
Security > Tables and Views > Tables and Views

Equation Table Auth Class: PUBLIC

Description: Everyone has access to public

Comments: Public Access

Data Record	*Authorization Level	Authorization Propagation Type
SCCPU_STDNT_BND	Read	No Propagation
SCCPU_STDNT_TRG	Write	No Propagation
STDNT_AID_ATRBT	Read	No Propagation



# Equation Engine for Pop Update

Application Prompts  
Required information  
INSERT

# Application Prompts

Set Up SACR > Common  
Definition > Equation Engine  
> Equation Application  
Prompts

DESCR	SCC_APPL_PROMPT_ID
Population Upd ADM_APPL_DATA	107
Population Upd SFA_ASG_ORG_DTL	79
Population Upd STDNT_AGGR_LIFE	110
Population Update ADM_APPL_RCR	36
Population Update ADM_PRSPCT_C	74
Population Update INAS_CAL	76
Population Update INAS_FED_EXT	83
Population Update INAS_PRO_EXT	86
Population Update ISIR_CONTROL	75
Population Update LOAN_DISBMNT	98
Population Update PELL_DISBMNT	93
Population Update PELL_ORIG_DT	78
Population Update PERS_INST_RE	35
Population Update SAP_STDNT2	100
Population Update SAP_STDNT3	101
Population Update SAP_STDNT4	102
Population Update SFA_SLC_STUD	73
Population Update STDNT_AID_AT	34
Population Update STDNT_AWARDS	81
Population Update STDNT_CAR_TE	37
Population Update STDNT_CAREER	41
Population Update STDNT_ENRL	42
Population Update STDNT_EQUTN_	38
Population Update STDNT_FA_TER	40
Population Update STDNT_PKG_VA	39
PopulationUpdate LOAN_ORIG_DTL	84
PopulationUpdate LOAN_ORIGINATN	88
PopulationUpdate PELL_ORIGINATN	80
PopulationUpdate SFA_EASTAGE_DT	85

# Existing Pop Update Equations

```
SELECT A.EQUATION_NAME, A.EFF_STATUS, A.DESCR
, B.SCC_APPL_PROMPT_ID, B.SCC_DATA_TYPE_CD
, C.DESCR, C.DESCRSHORT
FROM PS_EQUATION_TBL A, PS_SCC_APPL_PRMPT B, PS_SCC_APPL_PR_TBL C
WHERE B.SCC_APPL_PROMPT_ID = C.SCC_APPL_PROMPT_ID
AND A.EQUATION_NAME = B.EQUATION_NAME
AND A.EFFDT = (SELECT MAX(A_ED.EFFDT)
                FROM PS_EQUATION_DTL A_ED
               WHERE A.EQUATION_NAME = A_ED.EQUATION_NAME
                 AND A_ED.EFFDT <= SYSDATE)
AND A.EFF_STATUS = 'A'
AND B.SCC_APPL_PROMPT_ID = 34
```



EQUATION_NAME	EFF_STATUS	DESCR	SCC_APPL_PROMPT_ID	SCC_DATA_TYPE_CD	DESCR_1	DESCRSHORT
CCPUPSSTAID	A	Pop Updt Std Aid Attr Empl Rng	34	D	Population Update STDNT_AID_AT Upd Attrib	
FAPUPSAAS	A	Select for pop upd Aid App St	34	C	Population Update STDNT_AID_AT Upd Attrib	

# Required Records

- Set Up SACR > System Administration > Utilities > Population Selection > Context Definition, Selection Mapping tab

The screenshot shows a software application window with the following details:

- Navigation Bar:** Favorites, Main Menu, Set Up SACR, System Administration, Utilities, Population Selection, Context Definition.
- Tabs:** Context Definition (disabled), Selection Mapping (selected).
- Context Definition Details:**
  - Context Name: Population Update
  - Status: Active
- Pop Selection Integration:**
  - Context varies per Application Data
  - Additions Allowed
- Process Required Fields:**

Field	Type	Description
Population Update	STDNT_AID_ATRBT	Target for Population Update
Results Record	SCCPU_STDNT_TRG	Bind for Population Update
Required Fields Record	SCCPU_STDNT_BND	
- Pagination:** Find | View All, First, 23 of 29, Last.

# Required Fields

- Set Up SACR > System Administration > Utilities > Population Selection > Context Definition, Selection Mapping tab

Required Fields Mapping		
Mapping Information		Personalize   Find   View All         First  1-2 of 2  Last
<u>Results Record Fields</u>	<u>*Mapping Action</u>	<u>Required Fields</u>
1 EMPLID	Direct	EMPLID
2 PROCESS_INSTANCE	Process Instance	

# Bind Records

```
SELECT B.*  
FROM PS_SCCPS_CNTXT_DFN A,  
PS_SCCPS_CNTXT_BND B  
WHERE A.PRCSSNAME = 'SCC_POP_UPD'  
AND B.SCCPS_CNTXT_HDR_ID =  
A.SCCPS_CNTXT_HDR_ID
```

SCCPS_BIND_VIEW	SCCPS_MAP_VALUE
SCCPU_ADAPL_BND	ADM_APPL_DATA
SCCPU_APRCR_BND	ADM_APPL_RCR_CA
SCCPU_ASGOD_BND	SFA_ASG_ORG_DTL
SCCPU_CARTM_BND	STDNT_CAR_TERM
SCCPU_EADTL_BND	SFA_EASTAGE_DTL
SCCPU_EQUTN_BND	STDNT_EQUTN_VAR
SCCPU_FATRM_BND	STDNT_FA_TERM
SCCPU_ISIRC_BND	ISIR_CONTROL
SCCPU_LNDSB_BND	LOAN_DISBMNT
SCCPU_LNORD_BND	LOAN_ORIG_DTL
SCCPU_LNORG_BND	LOAN_ORIGINATN
SCCPU_PELDS_BND	PELL_DISBMNT
SCCPU_PELOD_BND	PELL_ORIG_DTL
SCCPU_PELOR_BND	PELL_ORIGINATN
SCCPU_PERS_BND	PERS_INST_REL
SCCPU_PRSCR_BND	ADM_PRSPCT_CAR
SCCPU_SAP2_BND	SFA_SAP_STDNT2
SCCPU_SAP3_BND	SFA_SAP_STDNT3
SCCPU_SAP4_BND	SFA_SAP_STDNT4
SCCPU_SLCST_BND	SFA_SLC_STUDENT
SCCPU_STAGR_BND	STDNT_AGGR_LIFE
SCCPU_STAWD_BND	STDNT_AWARDS
SCCPU_STDCR_BND	STDNT_CAREER
SCCPU_STDNT_BND	INAS_CALC_RECS
	INAS_FED_EXT
	INAS_PROF_EXT
	STDNT_AID_ATRBT
	STDNT_PKG_VAR
SSRPU_CHESN_BND	SSR_STDNT_DATA

# INSERT

- Puts the records into the Target Record
- From PeopleBooks ([link](#)):

Equation Keyword	Operand Type	Operand
INSERT	TABLE	<table name>
[<statement block>]		
<INTO	FIELD	<field name>
FROM	<expression>	>...
[CHOOSE	EQUATION	<equation name>]
WHERE	<where expression>	
END INSERT		

# INSERT (Alternate Syntax)

- Puts the records into the Results Record

Equation Keyword	Operand Type	Operand
INSERT	GLOBAL	<recname>.
[<statement block>]		
[CHOOSE	EQUATION	<equation name>]
WHERE		<where expression>
END DELETE		← End Insert

# A Real Life Example

2017 HEUG Midwest Regional



# Division of Labor

- FAPUPSAAS
  - The Handler equation
  - Interfaces with the run control
  
- FAPUCHAAS
  - The Chooser equation
  - Refines the record selection

Application Prompts	
*Application Prompt ID	
1	Population Update STDNT_AID_AT

Application Prompts	
*Application Prompt ID	
1	No Application Selected

# FAPUPSAAS

## The Handler

Equation Name FAPUPSAAS

**Equation Table** Find | View All First 1 of 2 Last + -

*Eff Date	12/13/2016	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Enable Preview Results
Short Desc	FAPUPSAAS	*Descr	Select for pop upd Aid App St
Compile Status	Successfully Parsed		

Equation Edit Function

**Equation Detail** Find | View All First 34-51 of 67 Last + -

Sel	Line Keyword	Operand Type	Operand	Comment:
<input type="checkbox"/>	34	Skip		Start insert into tar
<input type="checkbox"/>	35	Insert	SCCPU_STDNT_TRG	
<input type="checkbox"/>	36	Assign	EMPLID	
<input type="checkbox"/>	37	Table	SCCPU_STDNT_BND	

**Application Prompts** Personalize | Find | View All First 1 of 1 Last + -

*Application Prompt ID	1 Population Update STDNT_AID_AT
------------------------	----------------------------------

**Parameters** Personalize | Find | View All First 1 of 1 Last + -

Global	Type	Description
1		

# FAPUPSAAS

Simplify the Interface  
 INSERT  
 CHOOSE  
 WHERE

Assign (ASGN)	Local Variable (L) String (S)	RECNAME STDNT_AID_ATRBT
End Assign (ENC)		
Skip (SKIP)		
Find First (FIND)	Local Variable (L) Table (T)	FOUND_RUN_POP_UPD SCC_RUN_POP_UPD
		Keyed Global Equal (KGE OPRID)
		Keyed Global Equal (KGE RUN_CNTL_ID)
		Keyed Local Equal (KLEG RECNAME)
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	AID_YEAR SCC_RUN_POP_UPD AID_YEAR
End Assign (ENC)		
Call (CALL)	Equation (E)	FASFTCDLN
Assign (ASGN)	Local Variable (L) String (S)	FIELDNAME AID_APP_STATUS
End Assign (ENC)		
Find First (FIND)	Local Variable (L) Table (T)	FOUND_RUN_POP_OVR SCC_RUN_POP_OVR
		Keyed Global Equal (KGE OPRID)
		Keyed Global Equal (KGE RUN_CNTL_ID)
		Keyed Local Equal (KLEG RECNAME)
		Keyed Local Equal (KLEG FIELDNAME)
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS SCC_RUN_POP_OVR FIELDVALUE
End Assign (ENC)		
Skip (SKIP)		
Insert (INS)	Table (T)	SCCPU_STDNT_TRG
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	EMPLID SCCPU_STDNT_BND EMPLID
End Assign (ENC)		
Into (INTO)	Field (F)	PROCESS_INSTANCE
From (FROM)	Global Variable (G)	ICALLING-PROCESS-INST
Into (INTO)	Field (F)	EMPLID
From (FROM)	Table (T) Field (F)	SCCPU_STDNT_BND EMPLID
Choose (CHOS)	Equation (E)	FAPUCHAAS
Where (WHER)	Table (T) Field (F)	FAN_AIDATRBT_VW EMPLID
'= (EQ)	Table (T) Field (F)	SCCPU_STDNT_BND EMPLID
And (AND)	Table (T) Field (F)	FAN_AIDATRBT_VW INSTITUTION
'= (EQ)	Global Variable (G)	INSTITUTION
And (AND)	Table (T) Field (F)	FAN_AIDATRBT_VW AID_YEAR
'= (EQ)	Global Variable (G)	AID_YEAR
And (AND)	Table (T) Field (F)	FAN_AIDATRBT_VW AID_APP_STATUS
<> (NE)	Global Variable (G)	TRGT_AID_APP_STATUS
End Insert (ENDI)		

# INSERT

35	Insert	Table	SCCPU_STDNT_TRG
36	Assign	Global Variable	EMPLID
37		Table	SCCPU_STDNT_BND
38		Field	EMPLID
39	End Assign		
40	Into	Field	PROCESS_INSTANCE
41	From	Global Variable	!CALLING-PROCESS-INSTANCE
42	Into	Field	EMPLID
43	From	Table	SCCPU_STDNT_BND
44		Field	EMPLID
67	End Insert		

# Required Records

- Target      SCCPU\_STDNT\_TRG
- Bind        SCCPU\_STDNT\_BND

Favorites Main Menu > Set Up SACR > System Administration > Utilities > Population Selection > Context Definition

Context Definition Selection Mapping

Context Name	Population Update
Status	Active
Pop Selection Integration	
<input checked="" type="checkbox"/> Context varies per Application Data	Application Data Population Update
<input type="checkbox"/> Additions Allowed	
Process Required Fields	
Population Update	STDNT_AID_ATRBT
Results Record	SCCPUSCSTDNTTRG
Required Fields Record	SCCPUSCSTDNTBND

Find | View All First 23 of 29 Last

Target for Population Update  
Bind for Population Update

# Call CHOOSE

Simplify the  
Interface  
**INSERT**  
**CHOOSE**  
**WHERE**

Choose (CHOS) Equation (E) FAPUCHAAS

# FAPUCHAAS

## Equation Editor

Equation Name	FAPUCHAAS		
<b>Equation Table</b>			
<a href="#">Find</a>   <a href="#">View All</a> First <b>1 of 4</b>			
*Eff Date	07/14/2017	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Enable Preview Results
Short Desc	FAPUCHAAS	*Descr	Choose for pop up aid app stat
Compile Status	Successfully Parsed		
Equation Edit Function	<input type="button" value="▼"/>		
<b>Equation Detail</b>			
<a href="#">Find</a>   <a href="#">View 100</a> First <b>1-18 of 529</b>			

<b>Application Prompts</b>		
<a href="#">Personalize</a>   <a href="#">Find</a>   <a href="#">View All</a> First <b>1 of 1</b>		
<u>*Application Prompt ID</u>		
1	No Application Selected	
<b>Parameters</b>		
<a href="#">Personalize</a>   <a href="#">Find</a>   <a href="#">View 1</a> First <b>1-2 of 2</b>		
Global	Type	Description
1 AID_YEAR	String	AID_YEAR
2 TRGT_AID_APP_STATUS	String	TRGT_AID_APP_STATUS

# CHOOSE

- Calls the Choose Equation once for each row in the rowset

OPTIONS	TRUE conditions	FALSE conditions
<Equation name>	Anything other than 0 (zero)	0
A_SELECT	T,TRUE,t,true,Y,YES,y,yes	Anything else

# Declare CHOOSE global

Equation Name	FAPUCHAAS		
<b>Equation Table</b>			
*Eff Date	07/14/2017	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Enable Preview Results
Short Desc	FAPUCHAAS	*Descr	Choose for pop up aid app stat
Compile Status	Successfully Parsed		
Equation Edit Function			
<b>Equation Detail</b>			
Sel	Line Keyword	Operand Type	Operand
	9 Assign	Global Variable	FAPUCHAAS
	10	Number	0.0000000000
	11 End Assign		
		Comment:	
			SELECT?
		0/No	

# Set CHOOSE variable

516	If		check if new status	
517	Global Variable	TRGT_AID_APP_STATUS	<input type="button" value="🔍"/>	
518	=			
519	Global Variable	NEW_AID_APP_STATUS	<input type="button" value="🔍"/>	
520	Then			
521	Assign	Global Variable	FAPUCHAAS	<input type="button" value="🔍"/>
522	Number		1.0000000000	
523	End Assign			
524	End If		-end check if new	
525	Message	Global Variable	EMPLID	<input type="button" value="🔍"/>
526	String	Aid App Status:		
527	Global Variable	NEW_AID_APP_STATUS	<input type="button" value="🔍"/>	
528	End Message			
529	Return			

... return to FAPUPSAAS

# WHERE

Simplify the  
Interface  
**INSERT**  
**CHOOSE**  
**WHERE**

Assign (AIDT)	Local Variable (L)	PROGRAM
String (S)		STRT_AID_KRBT
End Assign (EMC)		
End If (IFC)		
Find First (FIND)	Local Variable (L)	FOUND_RRN_PSP_UPD
	Table (T)	RCC_PSP_PFP_UPD
		Kept Global Expressions (GPE)
		Kept Global Expressions (GPE), CNTL_ID
		Kept Local Expressions (LCE), PROGRAM
Find First (FIND)		
Assign (AIDT)	Global Variable (G)	AID_YEAR
	Table (T)	RCC_PSP_PFP_UPD
	Field (F)	AID_YEAR
End Assign (EMC)		
Case (CASE)	Elsewhere (E)	FAN_TIZLN
Assign (AIDT)	Local Variable (L)	FINDOKASC
String (S)		AID_APP_STATUS
End Assign (EMC)		
Find First (FIND)	Local Variable (L)	FOUND_RRN_PSP_UPD
	Table (T)	RCC_PSP_PFP_UPD
		Kept Global Expressions (GPE), CNTL_ID
		Kept Local Expressions (LCE), PROGRAM
		Kept Local Expressions (LCE), PROGRAM
Find Field (FINDF)		
Assign (AIDT)	Global Variable (G)	TRGT_AID_APP_STATUS
	Table (T)	RCC_PSP_PFP_UPD
	Field (F)	FIELDVALUE
End Assign (EMC)		
Assign (AIDT)	Table (T)	RCC_STRT_STRT_DYN
String (S)	Global Variable (G)	STRT_STRT_BND
End Assign (EMC)	Table (T)	RCC_STRT_STRT_DYN
Find (FIND)	Table (T)	RCC_STRT_STRT_DYN
Assign (AIDT)	Table (T)	PROCESS_INSTANCE
Process (FINDM)	Global Variable (G)	CALLINGPROCESSINSTANCE
End (FIND)	Table (T)	STRT_STRT_DYN
Assign (AIDT)	Table (T)	STRT_STRT_DYN
Choose (CHZ)	Elsewhere (E)	FAN_PSP_UPD
Where (WHDR)		
> (EQ)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	EMPLID
And (AND)	Table (T)	SCCPU_STDTN_BND
	Field (F)	EMPLID
'= (EQ)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	INSTITUTION
And (AND)	Global Variable (G)	INSTITUTION
'= (EQ)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	AID_YEAR
And (AND)	Global Variable (G)	AID_YEAR
'> (NE)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	AID_APP_STATUS
Or (OR)	Global Variable (G)	TRGT_AID_APP_STATUS
End If (IFC)		

Condition (COND)	Expression (E)	Filter Options
Where (WHER)		
	Table (T)	FAN_AIDATRBT_VW
	Field (F)	EMPLID
'= (EQ)	Table (T)	SCCPU_STDTN_BND
	Field (F)	EMPLID
And (AND)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	INSTITUTION
'= (EQ)	Global Variable (G)	INSTITUTION
And (AND)	Table (T)	FAN_AIDATRBT_VW
	Field (F)	AID_YEAR
'> (NE)	Global Variable (G)	TRGT_AID_APP_STATUS
Or (OR)		

# Potential Population

- Select students who have been aid year activated for the **aid year** if their current aid app status record doesn't match the **target aid app status**

```
SELECT *
FROM PS_SCCPU_STDNT_BND A
, PS_FAN_AID_ATRBT_VW B
WHERE A.EMPLID = B.EMPLID
AND B.AID_YEAR = :1
AND B.AID_APP_STATUS <> :2
```

# Potential Population

Where	Table	FAN_AIDATRBT_VW
	Field	EMPLID
=	Table	SCCPU_STDNT_BND
	Field	EMPLID
And	Table	FAN_AIDATRBT_VW
	Field	INSTITUTION
=	Global Variable	INSTITUTION
And	Table	FAN_AIDATRBT_VW
	Field	AID_YEAR
=	Global Variable	AID_YEAR
And	Table	FAN_AIDATRBT_VW
	Field	AID_APP_STATUS
<>	Global Variable	TRGT_AID_APP_STATUS

# Simplify the Interface

Simplify the  
Interface  
**INSERT**  
**CHOOSE**  
**WHERE**

Assign (ASGN)	Local Variable (L) String (S)	RECNAME STDNT_AID_ATRBT
End Assign (ENC)		
Skip (SKIP)		
Find First (FIND)	Local Variable (L) Table (T) Keyed Global Equal (KGE OPRID)	FOUND_RUN_POP_UPD SCC_RUN_POP_UPD
Keyed Global Equal (KGE RUN_CNTL_ID)		
Keyed Local Equal (KLEG RECNAME)		
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	AD_YEAR SCC_RUN_POP_UPD
End Assign (ENC)		
Call (CALL)	Equation (E)	FASFTCDLN
Assign (ASGN)	Local Variable (L) String (S)	FIELDNAME AD_APP_STATUS
End Assign (ENC)		
Find First (FIND)	Local Variable (L) Table (T) Keyed Global Equal (KGE OPRID)	FOUND_RUN_POP_OVR SCC_RUN_POP_OVR
Keyed Global Equal (KGE RUN_CNTL_ID)		
Keyed Local Equal (KLEG RECNAME)		
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS AID_YEAR
End Assign (ENC)		
Call (CALL)	Equation (E)	FASFTCDLN
Assign (ASGN)	Local Variable (L) String (S)	FIELDNAME AID_APP_STATUS
End Assign (ENC)		
Find First (FIND)	Local Variable (L) Table (T)	FOUND_RUN_POP_OVR SCC_RUN_POP_OVR
Keyed Global Equal (KGE OPRID)		
Keyed Global Equal (KGE RUN_CNTL_ID)		
Keyed Local Equal (KLEG RECNAME)		
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS SCC_RUN_POP_OVR
End Assign (ENC)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS FIELDVALUE
End Assign (ENC)		

Assign (ASGN)	Local Variable (L) String (S)	RECNAME STDNT_AID_ATRBT
End Assign (ENC)		
Skip (SKIP)		
Find First (FIND)	Local Variable (L) Table (T)	FOUND_RUN_POP_UPD SCC_RUN_POP_UPD
Keyed Global Equal (KGE OPRID)		
Keyed Global Equal (KGE RUN_CNTL_ID)		
Keyed Local Equal (KLEG RECNAME)		
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	AID_YEAR SCC_RUN_POP_UPD
End Assign (ENC)		
Call (CALL)	Equation (E)	FASFTCDLN
Assign (ASGN)	Local Variable (L) String (S)	FIELDNAME AID_APP_STATUS
End Assign (ENC)		
Find First (FIND)	Local Variable (L) Table (T)	FOUND_RUN_POP_OVR SCC_RUN_POP_OVR
Keyed Global Equal (KGE OPRID)		
Keyed Global Equal (KGE RUN_CNTL_ID)		
Keyed Local Equal (KLEG RECNAME)		
End Find (ZNDF)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS SCC_RUN_POP_OVR
End Assign (ENC)		
Assign (ASGN)	Global Variable (G) Table (T) Field (F)	TRGT_AID_APP_STATUS FIELDVALUE
End Assign (ENC)		

# The Run Control revisited

- FAPUPSAAS collects values from page
  - AID\_YEAR
  - AID\_APP\_STATUS

Select Record fields for update

<a href="#">Find</a>   <a href="#">View All</a>	First	1 of 1	Last	
*Record (Table) Name	STDNT_AID_ATRBT - Packaging Status Summary	+ -		
Institution	COLUM  Univ of Missouri - Columbia	Aid Year	2018	1 Year 2017-2018
<b>Error Reporting Selection</b>				
<input type="radio"/> Report Error Messages		<input type="radio"/> Do Not Report Messages	<input checked="" type="radio"/> Report All Messages	
<b>Population Selection</b>				
Selection Tool:	Equation Engine			
Equation Name:	FAPUPSAAS		<a href="#">Edit Equation</a>	
<b>Select Fields to Update</b>				
Field Name	Field Value	<a href="#">Personalize</a>   <a href="#">Find</a>   <a href="#">View All</a>     First 1 of 1 Last		
Aid Application Status	Application Active for All Aid			

# Record and Field for Pop Update

5	Assign	Local Variable	RECNAME
6		String	STDNT_AID_ATRBT
7	End Assign		
8	Assign	Local Variable	FIELDNAME
9		String	AID_APP_STATUS
10	End Assign		



# Retrieve Aid Year

12	Find First	▼	Local Variable	▼	FOUND_RUN_POP_UPD
13			Table	▼	SCC_RUN_POP_UPD
14			Keyed Global Equal	▼	OPRID
15			Keyed Global Equal	▼	RUN_CNTL_ID
16			Keyed Local Equal	▼	RECNAME
17	End Find	▼			
18	Assign	▼	Global Variable	▼	AID_YEAR
19			Table	▼	SCC_RUN_POP_UPD
20			Field	▼	AID_YEAR
21	End Assign	▼			



# Retrieve target aid app status

23	Find First	Local Variable	FOUND_RUN_POP_OVR
24	Table	SCC_RUN_POP_OVR	
25	Keyed Global Equal	OPRID	
26	Keyed Global Equal	RUN_CNTL_ID	
27	Keyed Local Equal	RECNAME	
28	Keyed Local Equal	FIELDNAME	
29	End Find		
30	Assign	Global Variable	TRGT_AID_APP_STATUS
31	Table	SCC_RUN_POP_OVR	
32	Field	FIELDVALUE	
33	End Assign		



# Using target aid app status

23	Find First	Local Variable	FOUND_RUN_POP_OVR
24	Table	SCC_RUN_POP_OVR	
25	Keyed Global Equal	OPRID	
26	Keyed Global Equal	RUN_CNTL_ID	
27	Keyed Local Equal	RECNAME	
28	Keyed Local Equal	FIELDNAME	
29	End Find		
30	Assign	Global Variable	TRGT_AID_APP_STATUS
31	Table	SCC_RUN_POP_OVR	
32	Field	FIELDVALUE	
33	End Assign		



# Development

- What is the target record and what fields does it need?
- What is the smallest starting population I can begin with?
- What are the criteria for deciding whether to update?
- How do I simplify ongoing maintenance as much as possible?

# Recommendations

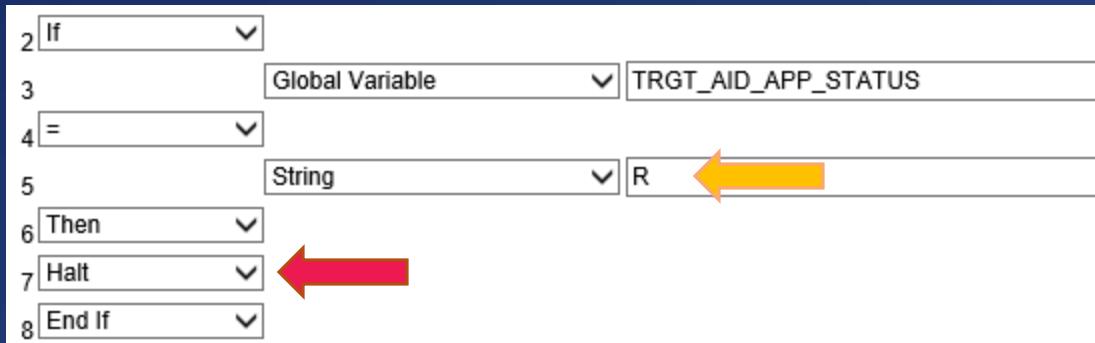
- Explore options
  - Pop Update or UPDATE
- Keep it modular
- Simplify your interface
- Effective dating

# Bonus

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# HALT for non-valid field



# Equation Test Data

Favorites Main Menu > Set Up SACR > Common Definitions > Equation Engine > Equation Test Data

## Equation Test Data

Equation: FAPUCHAAS Choose for pop up aid app stat Test

Input Parameters			Find	View All	First	1-4 of 4	Last
Global	Type	Operand					
AID_YEAR	String	2018	<span style="border: 1px solid blue; padding: 2px;">+ -</span> <span style="border: 1px solid blue; padding: 2px;">+ -</span> <span style="border: 1px solid blue; padding: 2px;">+ -</span> <span style="border: 1px solid blue; padding: 2px;">+ -</span>				
EMPLID	String	88888888					
INSTITUTION	String	COLUM					
TRGT_AID_APP_STATUS	String	A					

# Equation Test Data Output

Global Variable Final Values		
Global	Type	Operand
!CALLING-PROCESS-INSTANCE	Number	0.0000000000
!CURRENT-DATE	Date	10/12/2017
!CURRENT-DATE-TIME	String	2017-10-12-22.43.29.880000
!CURRENT-TIME	String	22.43.29.880000
!EQTN-EFFDT	Date	10/12/2017
!EQTN-MSG-SEQ	Number	0.0000000000
!EQTN-RESULTS-PREVIEW	String	N
!EQTN-TEST	String	Y
!EQUATION-NAME	String	FAPUCHAAS
!GLOBAL-ARRAY-LOCATION	String	TABLE
!LOG-INFO-MSGS	String	Y
!MAX-ROWS-DELETABLE	Number	0.0000000000
!MAX-ROWS-INSERTABLE	Number	0.0000000000
!MAX-ROWS-UPDATABLE	Number	0.0000000000
!PROCESS-INSTANCE	Number	7401922.0000000000
!RUN-CNTL-ID	String	FAPUCHAAS
!SPACE-NAME-IN	String	FAPUCHAAS
!SPACE-NAME-OUT	String	FAPUCHAAS
!USE-SPACE-NAMES	String	N

# Pop Select in Run 3C Engine

Favorites Main Menu > Campus Community > Communications > Run 3C Engine 

**3C Engine Parameters** Manage Duplicate Assignment

Run Control ID: RUN\_3C\_ENGINE Report Manager Process Monitor **Run**

**Process 3Cs**

Population Selection  
 Trigger Table  
 Mass Change

**Process Joint Records**

No  
 Yes, all Joint IDs  
 Yes, if match exists

**Event Selection**

Academic Institution: COLUM  Univ of Missouri - Columbia  
Administrative Function: FINA  Financial Aid  
Event ID: FA\_FA7  Consumer Disclosure Emails [Detail](#)

**Communication Key**

FA7 Consumer Info Disclosures

**Checklist Code**

**Comment Category**

**Population Selection**

Selection Tool: Equation Engine  
Equation Name: FA3CPSFOS   [Edit Equation](#)

134	Skip	▼		BEGIN check of all
135	Call	▼	Equation	▼ FASCARTRMCTS
136	If	▼		check if all terms w
137			Global Variable	▼ COUNT_TERMS
138	>	▼		
139			Number	▼ 0.0000000000
140	And	▼		
141			Global Variable	▼ COUNT_TERMS_CAN
142	=	▼		
143			Global Variable	▼ COUNT_TERMS
144	Then	▼		
145	Assign	▼	Global Variable	▼ NEW_AID_APP_STATUS
146			String	▼ C
147	End Assign	▼		
148	If	▼		check if new status
149			Global Variable	▼ TRGT_AID_APP_STATUS
150	=	▼		
151			Global Variable	▼ NEW_AID_APP_STATUS
152	Then	▼		
153	Assign	▼	Global Variable	▼ FAPUCHAAS
154			Number	▼ 1.0000000000
155	End Assign	▼		
156	End If	▼		--end check if new
157	Message	▼	Global Variable	▼ EMPLID
158			String	▼ Term Activated:
159			Global Variable	▼ COUNT_TERMS
160			String	▼ Term Canceled:
161			Global Variable	▼ COUNT_TERMS_CAN
162	End Message	▼		
163	Message	▼	String	▼ New Aid App Status:
164			Global Variable	▼ NEW_AID_APP_STATUS
165	End Message	▼		
166	Return	▼		
167	End If	▼		--end canceled term

# Resources for Learning Eq Eng

- Using Equation Engine with Pop Select and Mass Assign (Alliance 2012 Session #30585)
- Population Selection It's not just for queries! (Session #30394 Alliance 2012)
- Equations for Population Selection (Campus Community Fundamentals)
- Understanding Equation Engine (Campus solutions Application Fundamentals)

# Questions?

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This presentation are  
available for download from  
the Conference site at  
[https://www.heug.org/page  
/us-alliance-conference-files](https://www.heug.org/page/us-alliance-conference-files)

Note: Sessions from previous HEUG  
conferences are also available.