# **The Power is in Their Hands:** Facilitating Data Usage Throughout the Institution

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Southern Association for Institutional Research (SAIR) Louisville, Kentucky October 11, 2021

Welcome to the Powerhouse.

UNIVERSITY of HOUSTON

# **Outline**

- Introductions
- What are Reporting Tables?
- Reporting Tables Schema
- Description of Tables
- Query Training Overview
- Demonstration

## **University of Houston**

- Flagship of the University of Houston System
- 16 colleges
- 114 bachelors, 111 masters, 47 doctoral, and 4 professional programs
- 47,031 students
- 11,544 degrees awarded annually





### **Institutional Research**

- www.uh.edu/ir
- 5 staff members
- 2 research assistants



## **Transactional vs. Reporting Systems**

Transactional System		Reporting System
Designed to run your bu	siness	Designed to manage your business
Modeled for data entry		Modeled for data analysis and dissemination
Data is constantly chang	ing	Data reflects snapshots/points in time
	Infor	mation
	Transactional	Analytical
	Required in data entry	Derived information used in <b>reporting</b>

## The Need for Reporting Tables

- Data access <u>before</u> PeopleSoft...
  - Data dump
  - No query ability
  - Little flexibility in terms of fields included
- Data access <u>after</u> PeopleSoft...
  - Opportunity to change how we make data available
  - Consolidate data from many tables into about a dozen tables
  - Facilitate development of queries

## **Reporting Table Logistics**

- Refreshed daily overnight
- Roughly three hours to load
- Table purged and reloaded for the term being processed
- Key fields aid in query building

### **Reporting Tables Schema**



## **Tables & Descriptions**

Table Name	Description
UHIR_STUDENTS	Current demographic information for students. One record per student, per institution.
UHIR_STDNT_STRM	Term-specific information for students that have been enrolled in at least one class for that term.
UHIR_STDNT_ENRL	Class enrollment data by term.
UHIR_STDNT_DEGR	Degree information.
UHIR_STDNT_TRAN	Transfer information.
UHIR_STDNT_ACTI	Combination of student attributes, extra-curricular, student activity and student group data.
UHIR_CLASS_TBL	Data related to classes offered.
UHIR_ADMISSIONS	Admission application data.
UHIR_ADM_SCORES	Admission test score information.

## Tables & Descriptions (cont'd)

Table Name	Description
UHS_STDNT_LOC	Identifies the locations of all of the classes in which a student is enrolled.
UHM_ADM_FTICPOP	Key information about admitted FTICs and where they are in the onboarding process.
UHM_FTIC_COHDAT	Tracks members of FTIC cohorts as they progress through the university.
UHM_UGRD_COHORT	Identifies new undergraduate students each semester; includes FTIC/transfer and degree-seeking status.
UHIR_HOUSING	Student data from the housing system from application to booking.

## **Source Tables for UHIR\_STUDENTS**

- 13 source tables
- 64 fields
  - 58 fields pulled
  - 6 derived fields



# **Use of Reporting Tables**

- Institutional Research
  - Survey Reporting
  - Data Requests
    - GPA, Hours information
    - Enrolled students contact information
    - Profile of admitted students: Top 10, Test Scores
- Colleges/Departments/Administrative Units
  - Class Enrollment data for students
  - International Applicants: Country/State/City
  - Veteran students, Students with FERPA flag
  - Class Locations of enrolled students

# **Query Training**

- Class Length
  - Fifteen hours
  - 5 consecutive days, 3 hours per day
- Participants
  - Signup for training
  - Users wanting access to be able to write queries in the PeopleSoft student module
- Frequency
  - 3 times a year (spring, summer, fall)
- Uses Training Database
- Partner with Campus Solutions IT

## **Query Training Outline**



# **Query Training Topics**

- Overview of Tables
  - UHIR Reporting Tables
  - Coordinating Board (CB) Report Tables
- Query Writing
  - Effective Date Logic
  - Query Methodology
  - Joins/Functions/Expressions
- Assessment Exercises

# **Query Training Assessment**

- Background
  - Goal: grant access to query production data
  - Needed to ensure that users understood how to accurately query data
- Format
  - 2 exercises; 1 beginner, 1 advanced
- Grading
  - Correct tables/fields
  - Joins, Criteria
  - Output formatting
  - Expressions, functions, aggregation, etc.
  - Expected number of records returned

## **Example Assessment Exercise**

Provide a list that displays the EMPLID and CUM\_GPA for all students enrolled at the end of the term during Fall 2009 at UH if the student had a cumulative GPA of at least 3.0. If the student belonged to the Honors (R003) activity type, provide that additional information in a column (UHIR\_ACTIVITY\_TYPE). Also add a calculated column that combines the student's current Academic Standing code with their primary plan (with a dash in between), i.e. 'E-TELSBS'; the title of the column should be "Standing and Plan". The institution should be a run-time variable that defaults to value '00730', having a lookup against master table 'INSTITUTION\_TBL' and having custom heading text that says "Enter the institution". Sort the data by activity type, then by student ID.

Tip: You should receive 18,144 rows of data.

### **UH PeopleSoft Campus Solutions Security Form**



#### University of Houston

Campus Solutions System Security Access Request Form

Email the completed form to ALL appropriate Campus Security Administrators (CSA) for access in modules. Before MyUH PeopleSoft Campus Solutions access can be granted, the user must have the following information available for the form to be completed:

1. Employee – a user, processed as an active employee thru Human Resources and has an employee ID number.

2. Non Employee or Person of Interest (POI) – a user who needs Campus Solutions access but is not an employee of the University. Sponsoring party has submitted this user as an active Person of Interest to Human Resources and has received a PeopleSoft ID number.

3. Mandatory training session required – for any access that requires pre-requisite training, the training must be indicated on the form with the date the class was taken and the class session name.

Once they have the form, the CSA will obtain the module business owner's signature to confirm/assign approved access

ence and nave and roring the cor		less owner s signature to com	and applied and access
**Check "Yes" below	if access requested is for a	limited time frame. Access	will be terminated on end date.**
Short	Term Access Request:	No Yes	
		Start date	End date
**Check "Y	es" below if user requestin	ig access is a Student Work	er or Graduate Assistant.**
Stude	ent worker or GA:	No Yes	
Last Name:	First Name:		Middle:
Empl ID/PeopleSoft:	Job Title:		
Empl UH Email:	Empl Campus	Phone:	Coll/Dept. Name:
Display of SSN & Date of B Set search screens to display ONE of the following for SSN and DO both SSN (last 4 digits) and DOB (Month/day)			uires written justification (use the area below). and must niversity Registrar. Send requests to <u>UHSRSEC@uh.edu</u>
SSN	Date of Birth		
🔲 None 🔲 Partial 🔲 Full	None Partial Full		
	ull" DOB Access:		
	Appro	ovals	
(Both signatures below AN	ID employee signature on	Confidentiality Statement o	on page 2 are required)
Supervisor/Manager Signature:		Print Name:	Date:
Supervisor UH Email:		Supervisor Phone:	
Coll/Dept Business Admin Signat	ure:	Print Name:	Date:

### **UH PeopleSoft Campus Solutions Security Form**

Campu	s Solutions System Security Access Request Form
Empl ID/ PeopleSoft:	Last Name: First Name:
Module Selections Continued	
for IR, CB, or Query access, email form CB/IR Report View (Staff must have acce CB TSI View Data Validation Report Distribution DORP Report Hazlewood Maintenance View	ng Board Reporting, PeopleTools Query to Susan Moreno and Vyas Krishnamurthy ss to view full SSNs for this role.) etion of SAXXQT training is required. Prerequisite: SAXVWI)
Other.	
For assistance and Institutional Research access of	contact : Security Administrator/Business Owner Authorizing
Susan Moreno <u>, semoreno@uh.ed</u> u, 713-743-0640 Keisha Lyons, <u>kdlvons@uh.edu, 7</u> 13-743-9578 Vyas Krishnamurthy, <u>ykrishn2@central.uh.edu,</u> 713-7	Signature:Date: 743-0644 Print Name: Susan Moreno, Director, IR

# **Query Tool Demonstration**



# Thank you!!

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Vyas Krishnamurthy

vkrishnamurthy@uh.edu

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	UHIR_CONTACTLIST_I	FALL09	C	Contact info for all students	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
	UHIR_CONTACT_ALL_	LANDRUM	C	Open Request- email and phone	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
	UHIR_ENROLLED_PAS	SSED_KH	a	all students	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
	UHIR_EVENINGMBAPP	ROGRAM_FALL09	iı	ncludes ethnicity field	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
	UHIR_FALL2010FTIC_F	FORSIMONBOTT	F	FTIC students enrolled Fall10	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
	UHIR_INCOMINGSTUE	ENTSFALL09_KH	L	Legal Counsel Office	Private	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References

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UHIR_STDNT_DEGR - Reporting Table-Student Degree	Add Record	Show Fields		
UHIR_STDNT_ENRL - Student Enrollment Table	Add Record	Show Fields		
UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Add Record	Show Fields		
UHIR_STDNT_TRAN - Reporting Table-Transfer Data	Add Record	Show Fields		
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UHIR_STUDENTS - Reporting Table-Student Data	Add Record	Show Fields		
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Return To Search

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#### **ISCAMPUSSOLUTIONS**

Fields for record UHIR\_STDNT\_STRM - Reporting Table-Stdnt Semester:

Fieldr	ame				
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Key	Description				
Y	EMPLID - ID				
Y	INSTITUTION - Academic Institution				
Y	ACAD_CAREER - Academic Career				
Y	STRM - Term				
Y	STDNT_CAR_NBR - Student Career Nbr				
	UHIR_ENROLL_CENSUS - Enrolled on Census Date				
	UHIR_ENROLL_CURR - Currently Enrolled Flag				
	UHIR_ENROLL_EOS - Enrolled - End of Semester				
	ACAD_LEVEL_BOT - Academic Level - Term Start				
	UHIR_ACAD_LEVEL - Acad Level Description				
	UHIR_COLLEGE - College				
	UHIR_COLLEGE_DESCR - College (Group) Description				
	UHIR_PRIMARY_ORG - Primary Plan Org Owner				

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		UHIR_ENROLL_CENSUS - Enrolled on Census Date		9
		UHIR ENROLL CURR - Currently Enrolled Flag		9
		UHIR ENROLL EOS - Enrolled - End of Semester		94
		ACAD_LEVEL_BOT - Academic Level - Term Start	Join ACAD_LEVEL_TBL - Academic Level Table	9.
		UHIR ACAD LEVEL - Acad Level Description		9.
		UHIR_COLLEGE - College	Join ACAD_GROUP_TBL - Academic Group Table	94
		UHIR_COLLEGE_DESCR - College (Group) Description		94
		UHIR_PRIMARY_ORG - Primary Plan Org Owner		9.
		PRIMARY_ORG_DESCR - Primary Org Description		9.
		UHIR_ACAD_STANDING - Current Term Academic Standing		94
		UHIR_ACAD_STNDDESC - Current Acad Standing Desc		94
		UHIR_PRE_ACAD_STD - Pror semester academic stading		94
		UHIR_P_ACAD_STDESC - Prior Term Acad Stdg Descr		94

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Record

	1-14 of 14 🗸	View All
Recname	Join Record	Show Fields
UHIR_ADMISSIONS - Custom IR Admissions Rpt Table	Join Record	Show Fields
UHIR_ADM_SCORES - Custom IR Admissions Rpt Table	Join Record	Show Fields
UHIR_AUD1_DATA - Audit Data	Join Record	Show Fields
UHIR_CLASS_TBL - Course Catalog Offerings	Join Record	Show Fields
UHIR_CRSE_ATTR - Course Attribute Tbl	Join Record	Show Fields
UHIR_HOUSING - Housing Database Rptg Table	Join Record	Show Fields
UHIR_PNAME_VW - Primary Name View	Join Record	Show Fields
UHIR_STDNT_ACTI - Reporting Table-Stdnt Semester	Join Record	Show Fields
UHIR_STDNT_DEGR - Reporting Table-Student Degree	Join Record	Show Fields
UHIR_STDNT_ENRL - Student Enrollment Table	Join Record	Show Fields
UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Join Record	Show Fields
UHIR_STDNT_TRAN - Reporting Table-Transfer Data	Join Record	Show Fields
UHIR_STGR_UPDLS - UHIR_STGR_UPDLS	Join Record	Show Fields
UHIR_STUDENTS - Reporting Table-Student Data	Join Record	Show Fields

#### Select join type and then record to join with UHIR\_STUDENTS - Reporting Table-Student Data.



#### Auto Join Criteria

Query has detected the join conditions shown below.

Use the checkboxes to unselect the criteria that you do not want to add to the query and click add criteria when done. The criteria added can always be modified later using the criteria tab.

A.EMPLID - ID = B.EMPLID - Empl ID	A.EMPLID - ID = B.EMPLID - Empl
A.INSTITUTION - Academic Institution = B.INSTITUTION - Academic Institution	A.INSTITUTION - Academic Institut
Add Criteria Cancel	Add Criteria

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		- Social Security #							8	
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		MAIL_ADDRESS1							8	
		MAIL_ADDRESS2							2	
		_MAIL_ADDRESS3							8	



#### **Edit Field Properties**

B.EMPLID - Empl ID

Field Name

ading	Aggregate
○ No Heading ● RFT Shor ○ Text ○ RFT Long	○ Sum
⊖ Text ORFT Long leading Text D	⊖ Count ⊖ Min
Unique Field Name	○ Max ○ Average
B.EMPLID	
OK Cancel	

#### **Edit Field Properties**

Field Name B.EMPLID - Empl ID

Heading		Aggregate
O No Heading Text Heading Text TOTAL STUDEN *Unique Field Na B.EMPLID		<ul> <li>None</li> <li>Sum</li> <li>Count</li> <li>Min</li> <li>Max</li> <li>Average</li> <li>Count Distinct</li> </ul>
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#### **Edit Field Ordering**

Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number. Change the order by number by entering numbers on the right. To remove an order by number, leave the field blank or enter a 0.

#### Edit Field Ordering

₽ Q		I.€	•	-2 of 2 🗸 🕨	View All
New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	B.UHIR_MAIL_CITY - Mail City	2		2
	2	B.EMPLID - Empl ID	1		1

OK Cancel



Publish as Feed

Publish as Pivot Grid

New Union

Records	Query	Expressions	Prompts	Fields	Criteria	Having	Transformations	View SQL	Run
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#### Enter a name to save this query:

*Query	SAIR_DEMO	
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Folder		]
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*Owner	Private 🗸	
Query Definition		
ОК	Cancel	

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Records	Query	Expressions	Prompts	Fields	Criteria	Having	Transformations	View SQL	Run

View All | Rerun Query | Download to Excel | Download to XML

First 🕚 1-100 of 1286 🕑 Last

Row	Mail City	TOTAL STUDENTS				
1	Houston	20954				
2	Katy	3016				
3	Sugar Land	2698				
4	Richmond	1932				
5	Spring	1543				
6	Pearland	1374				
7	Cypress	1284				
8	Missouri City	1175				
9	Humble	748				
10	Pasadena	542				
11	League City					
12	Tomball	4				
13	Friendswood					
14	Kingwood	369				
15	Conroe	349				
16	Baytown	325				
17	San Antonio					
18	Rosenberg	287				
19	The Woodlands	280				