

DATA WAREHOUSE

STUDENT DATA USER GROUP

FEBRUARY 3, 2021

Remote Meetings Best Practices

- Turn off your BlueJeans video function
- Please go on **Mute** unless you are speaking
- During the Q&A, please **enter your questions in the chat function**.
When your question is being answered, you can go off **Mute** to ask follow-up questions
- Please do not use the chat function for commentary

Agenda

- NGSS Project Updates
 - Production go-live dates
 - Release 1 & Release 2 Activities
 - Downstream Data Consumers
 - Financial Aid data in the warehouse
- Existing (STDTCANQ) to New Universe comparisons
- General Announcements

NGSS Project updates

- Financial Aid and Pennant Records (Courses, instructors) Release 1 scheduled for August 2021
- Financial Aid and Pennant Records Release 2 (Students, Academic History, Enrollments) scheduled for March 2022 to support Advanced Registration for Summer and Fall 2022
- Go-Live with all Banner modules is Summer 2022

Release 1 activities

- Nearing the end of Systems Integration Testing
- Preparing for Regression testing with the currently installed Accounts Receivable application base
- Subsequently, the team will initiate Performance and User Acceptance Testing

Release 2 activities

- Functional and Technical specifications currently being developed
- Technical development currently underway
- Planning for Systems & Integration, Regression, Performance, and User Acceptance testing has started – schedule TBD

Downstream Data Consumers

- Many downstream systems use the current Student Data Warehouse as a source of data
- The project team has begun outreach to key downstream integration partners with the following goals:
 - Determine the systems' data needs
 - Map the current data usage to new data models
 - Provide specifications and documentation to partners

Financial Aid Data Warehouse

Working group includes representation from:

- Institutional Research
- Financial Aid
- Enterprise Information & Analytics

Started meeting toward the end of July every two weeks with our last meeting on January 25th.

Financial Aid Data Warehouse continued

The discussion by the group has focused on the overall structure as well as making improvements based on Banner functionality.

For Example

- Additional award disbursement fields and dates (ie: paid, cancelled, memoed, etc)
- Periods tied to aid years
- Table structure and design with consideration for security purposes as well as reporting needs.

Financial Aid Data Warehouse continued

We have put the meeting with the group on pause as data warehouse tables are being built in Development environment.

Currently built – aid year and period tables, award tables, and a few validation tables

In progress – bio table, information similar to what is in the current applicant table, needs analysis, requirements, budget, etc.

After build in DEV env is complete, likely in March, meetings and testing of the tables and structure will resume.

From “Old” to “New”

Introducing new concepts: how things were done using STDTCANQ, as compared to how they will be used in the Pennant Student Records data collection.

Things covered today include *examples* of:

- Site codes
- Rate codes
- Attribute codes
- Cohort codes
- Program codes
- Activity codes

Some Examples

from SRS  where they are going in the new system

Special Programs  Site, Rate, Attribute, Cohort and/or Program codes

Honors Programs  Attribute codes

On Dissertation and/or Masters' Thesis  Attribute codes

“Joint” Degree Programs  Cohort and Program codes

Veterans  Cohort (and the veterans' info table)

Athletes  Activities (and the sports' info table)

SITE codes

in STDTCANQ:

The screenshot shows the 'Result Objects' section with the following fields: Penn Id (PERS), Name (PERS), Term (DT), Division (DT), Degree (DT), Special Program (DT), and Special Program Description (DT). The 'Query Filters' section includes an 'AND' operator and two filters: 'Term (DT) Equal to 2020A' and 'Special Program (DT) Matches pattern B%'.

in Pennant Student Records

The screenshot shows the 'Result Objects' section with the following fields: Penn ID (Stdnt), Name (Stdnt), Term (DT), Division (DT), Degree (DT), Site (DT), and Site Desc (DT). The 'Query Filters' section includes an 'AND' operator and two filters: 'Term (DT) Equal to 202010' and 'Site (DT) Matches pattern B%'.

SRS Special Program
Study Abroad codes
will convert into Site codes.

In the warehouse, Site
codes and descriptions will
be in the ST_DEGREE_TERM
table.

Validation table is V_SITE.

Note: there is also a RATE code for Study Abroad: 'STDYB'

SITE codes - continued

results from Pennant Student Records universe (note: this is test data, as of January 2021):

Penn ID (Std)	Name (Stdnt)	Term (DT)	Division (DT)	Degree (DT)	Site (DT)	Site Desc (DT)
23269455	HALIM,ARTHUR	202010	AU	BA	BCH	SAB in Santiago, Chile
24823271	REN,ISABEL T	202010	EM	MSE	BHS	Study Abroad Hkust-Engineering
37459964	WOLFF,ISABELLE S	202010	WU	BS	BTA	Study Abroad at Tel Aviv Univ
44925702	SILVERSTEIN,ANDREW L	202010	AU	BA	BMI	Study Abroad in Milan, Italy
44925702	SILVERSTEIN,ANDREW L	202010	WU	BS	BMI	Study Abroad in Milan, Italy
45802546	CHEN,YU MENG	202010	WU	BS	BWH	Study Abroad Cuhk-Wharton
46196435	WANG,JINGXIN	202010	AU	BA	BBN	Study Abroad in Berlin-Bcgs
46196435	WANG,JINGXIN	202010	WU	BS	BBN	Study Abroad in Berlin-Bcgs
67826505	Ra,Angela Yoonji	202010	AU	BA	BML	Study Abroad at Melbourne Univ

Here is a very simple example of what a report using SITE codes might look like.

Note that some things, like the Term and Division codes, are different from SRS code values. The Site Codes that were converted from SRS use the SRS Study Abroad code values.

(Also note: in this query, the division and degree come from ST_DEGREE_TERM and there was no filter on Degree Order, so people in multiple programs have more than one row.)

SITE codes, continued

More examples of things that will be available via SITEs :

- Students on reciprocal programs with partner universities
- Students on the Washington Semester
- Students typically on the Philadelphia campus who are temporarily at San Francisco campus, and visa-versa

Sites indicate the location where the student is studying for **ALL** their courses in a specific term.

Please note that the above is not an exhaustive list.

RATE codes

in STDTCANQ:

The screenshot shows the 'Result Objects' section with the following fields: Penn Id (PERS), Name (PERS), Term (DT), Division (DT), Degree (DT), Special Program (DT), and Special Program Description (DT). The 'Query Filters' section contains two filters: 'Term (DT) Equal to 2020C' and 'Special Program (DT) Equal to ETA', connected by an 'AND' operator.

SRS Special Programs
Grad School of Educ codes
(in this example, “Teach for America” code ETA) will convert into Rate codes.

In the warehouse, Billing Rate Codes will be in the ST_TERM table.

Validation table is V_RATE.

in Pennant Student Records:

The screenshot shows the 'Result Objects' section with the following fields: Penn ID (Stdnt), Name (Stdnt), Term (DT), Division (DT), Degree (DT), Billing Rate (ST), and Rate Desc (V_Rt). The 'Query Filters' section contains two filters: 'Term (DT) Equal to 202030' and 'Billing Rate (ST) Equal to GMETA', connected by an 'AND' operator.

RATE codes, continued

More examples of things that will be available via RATEs :

- Students in Graduate School of Education programs that have specific billing rules
- PhD students billed at the “high” rate, and those billed at the “low” rate
- Part-time billing for students in full time schools
- No tuition/no fees

Rate codes are used by Pennant Accounts.

Please note that the above is not an exhaustive list.

ATTRIBUTE codes

in **STDTCANQ**:

Buttons: Penn Id (PERS), Name (PERS), Term (ST), Division (DT), Degree (DT), Honors Program (ST)

Query Filters

AND

- Term (ST) Equal to 2020C
- Honors Program (ST) In List B;U;X;C;F;N;R;S;W;Y;Z
- Term (DT) Equal to Term (ST)
- Degree Order (DT) Equal to 1

in **Pennant Student Records**:

Buttons: Penn ID (Stdnt), Name (Stdnt), Term (ST), Primary Division (ST), Primary Degree (ST), Attribute (SAtt), Attribute Desc (V_StAt)

Query Filters

ID

- Term (DT) Equal to 202030
- Attribute (SAtt) Matches pattern HN%
- Attribute Code (V_StAt) Equal to Attribute (SAtt)
- Term (SAdv) Equal to Term (DT)

SRS Honors Programs
will convert into Attribute
Codes.

In the warehouse, Attributes
are in the ST_ATTRIBUTE
table.

Validation table is
V_STDNT_ATTR

ATTRIBUTE codes, continued

In **STDTCANQ**:

◆ Penn Id (PERS) ◆ Name (PERS) ◆ Term (ST) ◆ Division (DT) ◆ Degree (DT) ◆ Special Program (DT)

◆ Query Filters

AND

◆ Term (DT) Equal to 2020C

◆ Degree Order (DT) Equal to 1

◆ Special Program (DT) Equal to CEP

in **Pennant Student Records**:

◆ Penn ID (Stdnt) ◆ Name (Stdnt) ◆ Term (ST) ◆ Primary Division (ST) ◆ Primary Degree (ST) ◆ Attribute (SAtt) ◆ Attribute Desc

◆ Query Filters

AND

◆ Term (DT) Equal to 202030

◆ Attribute (SAtt) Equal to PVAD

◆ Primary Division (ST) Equal to AL

◆ Primary Degree (ST) Equal to MES

◆ Attribute Code (V_SAtt) Equal to Attribute (SAtt)

Some specific SRS Special Program designations, such as this example of a **Provisional Admit Program**, will convert into Attributes, that can be used in combination with Division and Degree filters.

(Note the primary curriculum fields that will be in ST_TERM.)

ATTRIBUTE codes, continued

More examples of things that will be available via ATTRIBUTES :

- Penn-classification
- Year in program for Law, Dental, Med, Vet
- Students on Dissertation and/or Masters' Thesis
- PhD year (1 – 10, and “over 10”)
- Clinical fee attributes

Attributes are things that categorize students and can change from term-to-term.

Please note that the above is not an exhaustive list.

COHORT codes

in **STDTCANQ**:

◆ Penn Id (PERS) ◆ Name (PERS) ◆ Term (DT) ◆ Division (DT) ◆ Degree (DT) ◆ Special Program (DT)

Query Filters

AND

◆ Term (DT) Equal to 2020C

◆ Special Program (DT) In List WWE;WWO

Some **Special Program** codes in this example WEMBA east and west, will convert into Cohort codes.

In the warehouse, Cohorts are in ST_COHORT.
Validation table is V_COHORT

in Pennant Student Records:

◆ Penn ID (Stdnt) ◆ Name (Stdnt) ◆ Term (ST) ◆ Primary Division (ST) ◆ Primary Degree (ST) ◆ Cohort (Chrt) ◆ Cohort Desc (Chrt)

Query Filters

AND

◆ Cohort (Chrt) In List WEMBAODD;WEMBAEVEN

◆ Term (Chrt) Equal to 202030

◆ Term (ST) Equal to 202030

COHORT codes, continued

in STDTCANQ:

The screenshot shows the STDTCANQ query interface. At the top, there is a row of filter buttons: Penn Id (PERS), Name (PERS), Term (DT), Division (DT), Degree (DT), and Joint Degree Flag (DT). Below this is a 'Query Filters' section. On the left, there is an 'AND' button. The first filter is 'Term (DT) Equal to 2020C'. The second filter is 'Joint Degree Flag (DT) Equal to M'.

SRS “**joint degree**”
(Coordinated
Multiple Degree) codes
will convert into
Cohorts.

All Cohort codes starting
with ‘ZMDC’ are coordinated
dual degree codes.

in Pennant Student Records:

The screenshot shows the Pennant Student Records query interface. At the top, there is a row of filter buttons: Penn ID (Stdnt), Name (Stdnt), Term (ST), Primary Division (ST), Primary Degree (ST), Cohort (Chrt), and Cohort Desc (Chrt). Below this is a 'Query Filters' section. On the left, there is an 'AND' button. The first filter is 'Cohort (Chrt) In List ZMDC-MANDT'. The second filter is 'Term (Chrt) Equal to 202030'. The third filter is 'Term (ST) Equal to 202030'.

COHORT codes, continued

More examples of things that will be available via COHORTs :

- The class year a student was admitted into (“Class of ____”)
- For veterans, the specific branch of the military
- PENNCAP and PFP
- Transfer admit classification
- Wharton cohorts

Cohorts are things that categorize students that typically do **not** change from term-to-term.

Please note that the above is not an exhaustive list.

ACTIVITY codes

in **STDTCANQ:**

Penn Id (ATH) Term (ATH) Athletic Sport (ATH) Sport Desc (ATH) Athletic Roster (ATH)

Query Filters

AND Term (ATH) Equal to 2019A

Sport Desc (ATH) In List BASKETBALL - WOMEN

Some things will be in more than one place. For example, **Athetic** codes will convert into Activity codes, in ST_ACTIVITY, and can also be found in the ST_SPORT table.

Validation tables:
V_ACTIVITY,
V_ATHLETIC_ELIG and
V_SPORT_STATUS

in **Pennant Student Records:**

Penn Id (Sprt) Term (Sprt) Sport Code (Sprt) Sport Desc (Sprt) Official Elig Code (Sprt) Sport Eligibility Code (Sprt)

Query Filters

AND Term (Sprt) Equal to 201910

Sport Code (Sprt) In List NCAA_WBB

ACTIVITY codes, continued

More examples of things that will be available via Activities :

- Greek Life
- ROTC
- Potentially other things that are not currently in SRS...

Activities are things in which students participate. Activities are stored by term and may or may not change from term-to-term.

Please note that the above is not an exhaustive list.

PROGRAM codes

in STDTCANQ:

Penn Id (PERS) Name (PERS) Term (DT) Division (DT) Degree (DT)

Query Filters

AND

Term (DT) Equal to 2019C

Division (DT) Matches pattern NUR

Degree (DT) Equal to BSN

Special Program (DT) Equal to NAP

Program codes tell us a great deal about the student's curriculum. In this example, it can be used to find students in the Nursing Accelerated program.

Program code standard format:
Division_Degree [*other program info*]

Programs are found in ST_TERM, ST_DEGREE_TERM, ST_DEGREE_PURSUAL, ST_DEGREE_OUTCOME
Validation table: V_PROGRAM

in Pennant Student Records:

Penn ID (Stdnt) Name (Stdnt) Term (DT) Division (DT) Degree (DT) Program (DT) Program Desc (DT)

Query Filters

AND

Term (DT) Equal to 201910

Program (DT) Equal to NU_BSN_NAP

PROGRAM codes, continued

Penn ID (DP)	Division Desc (DP)	Division (DP)	Degree Pu	Program (DP)	Program Desc (DP)
10000142	College of Arts & Sciences	AU	BA	AU_BA	AS Bachelor of Arts
10000269	College of Arts & Sciences	AU	BA	AU_BA_CMPC	College Computer and Cog Sci
10000269	Graduate Arts & Sciences	AP	PHD	AP_PHD	AS Doctor of Philosophy
10000269	LPS UG Traditional	AL	NONDEG	AL_NONDG_CAL	Penn Alumni Program
10000269	SEAS Undergraduate	EU	BSE	EU_BSE	SEAS BS in Engineering
10000318	College of Arts & Sciences	AU	BA	AU_BA	AS Bachelor of Arts
10000318	Social Policy&Pract Doctorate	SD	DSW	SD_DSW_ONL	Social Policy & Practice DSW
10000318	Social Policy & Practice	SM	MSW	SM_MSW	Master of Social Work
10001696	LPS Continuing Prof Education	AC	SA	AC_SA	LPS Senior Associates
10001721	Education Masters/Doctorate	GM	MSED	GM_MSED	GSE Master of Sci in Education
10001721	Education Masters/Doctorate	GM	NONDEG	GM_NONDEG_PR	GSE Non Degree Professional
10001961	SEAS Masters	EM	MSE	EM_MSE	SEAS Master of Sci in Engr
10002196	Medical School Prof Masters	MM	CERT	MM_CERT_ONL	PSOM Certificate
10002494	Summer Sessions	AS	NONDEG	AS_NONDEG_UG	AS Non Degree Undergraduate
10002563	Biomedical PhD	MP	MS	MP_MS	PSOM Master of Science
10002563	Education Masters/Doctorate	GM	MSED	GM_MSED	GSE Master of Sci in Education
10002563	LPS Prof Masters	AM	NONDEG	AM_NONDEG_PR	LPS Non Degree Professional
10002666	Law	LR	NONDEG	LR_NONDEG_LW	LAW Non Degree Professional

Here is a very simple example showing a variety of Program codes, alongside the related division and degrees.

When there is something in the Program code beyond the division and degree, that provides information that distinguishes people in those programs from the “traditional” programs identified by just division and degree.

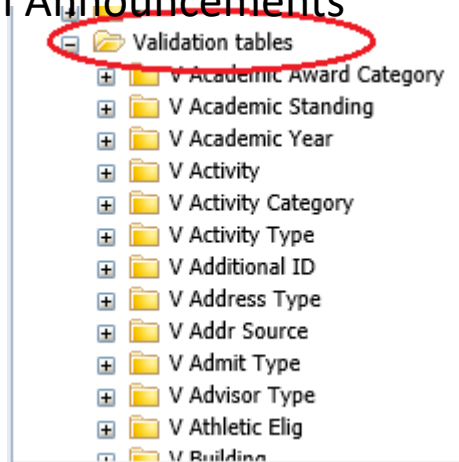
Some of the old SRS Special Programs code are reflected in the Pennant Program Codes, for example the Penn Alumni Program in LPS, and Senior Associates.

Lookup, or LOV (List of Values) tables in the warehouse

In many cases, the table containing the student data will also provide a decoded value for you. For example, ST_DEGREE_TERM has the division code and the division description. But even if the decoded value you need is not automatically provided, you can always do the lookup yourself to the relevant LOV tables, by joining on the code to get the description.

All of the LOV tables will be in the DWNGSS schema. They all start with 'V_'

In the Pennant Student Records universe, they are grouped together at the end of the folders list in a folder called "Validation tables".



General Announcements

- **RX entry action** The OUR recently deployed a new Entry Action code in SRS = 'RX' - Return to Study. The new code will function in very much the same way as 'RL' – Return from Leave. The only difference is in the way SRS will handle what prints on the transcript. Entry actions that relate to Returns from Leave are found in the Student_APS and Leave tables.
- **KnowledgeLink Tutorial Temporarily Unavailable**
 - Using the Student Data Collection in the Data Warehouse
 - Training for the *current* data collection
- **Business Objects Upgrade in late-Spring**
 - Support patch – no visible differences, backend Oracle DB upgrades to 19C

Wrap-up

- Questions/comments
- Feedback/ Suggestions for future meetings?
- Follow-up questions/comments: da-staff@isc.upenn.edu
- Discussions about student data: student-wh@lists.upenn.edu