Guide to the Shortcut Tables

The shortcut tables were set up with the following purposes in mind:

First, the shortcut tables simplify the query process for the end-users. None of the tables are effective-dated, since the programs that load these tables pull the most current effective-dated rows from the various PeopleSoft tables. The only shortcut tables with an effective date in them are the DU_SC_STDNT_ACA and DU_SC_STDNT_ADM tables (and their corresponding historical counterparts). The ACA table contains ‘academic’ data about the student, and the effective date is simply included to document the most current effective date of the student’s status. The ADM table contains ‘admissions’ data about a student, and again the effective date is simply documentation of the when the stored status was in effect. In addition, the only field needed to join the various tables in most cases is EMPLID. In some situations, additional fields such as ACAD_CAREER and STRM may be used when looking at term-related data.

Secondly, the shortcut tables provide a central location for the majority of data required for reporting needs, whether via query or SQR. In this manner, end-users and programmers alike can get most of the data needed by looking at a minimal number of tables, rather than having to be familiar with a large number of tables in PeopleSoft. In addition, the logic to identify the ‘current’ students can now be run once a day when the shortcut tables are rebuilt rather than in each extract or reporting program.

Thirdly, the shortcut tables provide a way of ensuring a consistency in the data gathered by the end-users and the programmers. Since the shortcut tables are the result of one program, the selection criteria is controlled and maintained more easily. Changes to PeopleSoft tables need only be reflected in the table rebuild programs and the effects trickle down to all user queries and SQR programs that utilize the shortcut tables.

Finally, one of the main goals of the shortcut tables was to eliminate the problem of getting multiple lines of data when joining against tables that contained multiple lines per student, such as the student’s enrollment data. While the shortcut tables have not completely eliminated that problem, they do consolidate the data so the number of multiple lines is significantly less than can be achieved without them. Unfortunately, the main obstacle in addressing this situation was not a database restriction but a PeopleSoft Query restriction on the number of fields that can be retrieved within a query.

The accompanying spreadsheet contains the layouts of these shortcut tables. These tables contain information on those students considered ‘active’ during the current term, as well as any students in non-active statuses where those statuses were effective during the current term. For example, if a student is dismissed during the current term, he/she would appear in the shortcut table during the current term and then would ‘disappear’ next term.

What’s in the shortcut tables?

The tables in the shortcut arsenal are:

The DU_SC_SEARCH shortcut table contains various fields used to group people. These include Gender, ethnicity, citizenship, visa type, marital status, athletic participation, group membership (e.g. pre-med, student government, or resident advisor), etc. The primary purpose of this table is to provide a way of getting a quick list of people requiring a minimal amount of returned data, or to get counts of people within certain categories.

The DU_SC_STDNT_ACA table contains ‘academic’ data about the student. It is the first of the shortcut tables loaded and serves as the “driver” table for loading all the other shortcut tables (with the exception of the BIO table; see DU_SC_STDNT_BIO below). The load process for this table determines who is ‘active’ in the current term (or non-active with an effective date within the current term), and the
other shortcut tables will contain data only for students identified in that group. There will be multiple records for people who are currently active in multiple careers and in a few other similar cases. The ‘academic’ data for a student includes such fields as the career, program, plan(s), status, expected graduation term, degree objective, gpa(s), and rank in class, to name a few.

The DU_SC_STDNT_ADM table is the main shortcut table for students who have been admitted for a future term. This table reflects the most current effective-dated status for the admitted student. It also contains such information as the last school attended, external GPA, rank in class, and evaluation and rating data. It will have a record for each admissions application for which a student has been admitted. For example, if a student has applied to both Fuqua and Law and has been admitted to both in some future term(s), there will be a record for each. This table and the APP table will both hold data for the current and upcoming admit term, so queries should include admit term criteria.

The DU_SC_STDNT_APP table is much like the ADM table, but it contains all the applicants for that time period, with the last action that occurred on their applicant record.

The DU_SC_STDNT_BIO table is the bio/demographic shortcut table. This table contains the most current effective dated row from the NAMES and ADDRESSES tables, basic data such as gender, ethnicity, Duke Unique ID, SSN, and FERPA designations, and other items like recruiter and advisor ids and names, and next-of-kin information. It is built using the DU_SC_STDNT_ACA, the DU_SC_STDNT_APP, and the DU_SC_STDNT_ADM tables to ensure that there is ONE and only one record in this table for each student (both ‘current’ and ‘future’).

The DU_SC_STDNT_CRS shortcut table contains the course data for a student. This includes past term(s) course history and current and future term enrollment. The records in this table are term-specific, and there may be more than one record per term. Some of the information that can be found here for each course includes course id and class number, subject, catalog #, and class section, grade and grading basis, requirement designation, and whether the course is included in the gpa calculation.

The DU_SC_STDNT_TST contains the highest scores in a given test, by component. This means that a student who took the GRE 3 times might show a verbal score from one date, quantitative from another, etc. This was designed to save users from having to make complicated calculations.

The DU_SC_CLASSES table data on the individual courses, but includes instructor and cross-list data. A nice feature of this table is that it has both course id and class nbr as well as subject, catalog nbr and section, so it's easy to get everything you need in one table, or to join to other tables.

The DU_SC_CLASSATTR table lists the attributes assigned to the individual courses. Attributes include curriculum codes, registration considerations (ex., first-years only), and composition (seminar, topics course, etc.).

The historical shortcut tables are mirrors of the ‘current’ / ‘future’ shortcut tables. They contain the same information as their DU_SC_* counterparts except for all students in the PeopleSoft tables, regardless of whether they are still at Duke or not. To date, there are the following historical tables:

DU_HI_SEARCH
DU_HI_FA_SEARCH
DU_HI_STDNT_ACA
DU_HI_STDNT_ADM
DU_HI_STDNT_APP
DU_HI_STDNT_BIO
DU_HI_STDNT_CRS
DU_HI_STDNT_FA
The two HI exceptions to the "mirror" rule are the DU_HI_FA_SEARCH and DU_HI_STDNT_FA tables. It was determined that the most useful construction of Financial Aid shortcuts would include current and historical data together, but "flattened" to make them easier to report against than the Peoplesoft FA tables.

The DU_HI_FA_SEARCH table has a series of Y/N field values to indicate, by aid year, whether the student submitted a Profile and/or FAFSA, and whether those forms show an estimated family contribution that is less than the cost of attendance. There is also a field for indicating whether the student received more than $1 in aid. This is a great table to join with others when you don't want specific financial aid details but want to report on something like "GPAs for students who have received aid" versus those who haven't.

The DU_HI_STDNT_FA table provides information on family, parent and student contributions as calculated under federal and institutional aid methodologies, parent incomes, cost of attendance, federal and institutional need, and award data. Awards are categorized by a field called FA_CATEGORY (values for this field must be in CAPS). These categories differentiate between different types of grant, e.g. institutional, federal, state, merit, Outside, ROTC and DUAA. Loans are broken down between loans awarded as part of a student's SELF HELP package (usually Perkins and Stafford loans). Other loan categories are Parent loans, Student Alternative Loans, Institutional Loans, etc. The categories also distinguish between academic year aid and summer aid. Awards are denormalized by category, decreasing the total number of records per student in the query results. The table is by aid year and career.