

Overview

The goal of the Student Administration Data Warehouse (herein referred to as SADW) is to provide an easily accessible and easy to use reporting environment that can satisfy 80% of the daily reporting needs of its users. The SADW consists of an Oracle database containing a snapshot of production Student Administration data for the following areas: Academic Advisement, Admissions, Campus Community, Financial Aid, Records, and Student Financials. Once a day, a new snapshot of production data overlays the previous day's snapshot. This overlaying process keeps SADW data up to date, but also prevents the SADW from being a repository of historical data. Accessing the SADW is accomplished via a Brio client. This reference guide identifies fundamental facts and concepts about the SADW that every SADW user should be aware of.

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Obtaining an SADW User ID

You initiate the request for an SADW User ID by completing a **System Access Request Form**.

This form contains a checkbox area, which is used to identify the categories of the SADW you require access to. We suggest you check only those areas that you will be extracting data from, as your Brio **Tables** area will become cluttered when unneeded tables are assigned to you. Be aware that CC (Campus Community) is common to almost all SADW and should be **checked** on the access request form.

SADW Signon Procedure (First Time)

On your initial signon to the SADW you will need to supply your assigned user ID, password and database connect string. The standard database connect string is: **SADW10g**.

Guide to the Student Enrollment View for End-Users

We have created this view to:

- Protect data that is considered highly confidential by state statute. That data includes SSN, Date of Birth, Gender, Ethnicity and Disability.
- Simplify access to data that is most commonly needed by grouping it in three tables.

The three tables are as follows:

- **VSJ_STUDENT:** Contains personal data.
- **VSJ_STUDENT_TERM:** Contains information about the student in the term, including program and plan (major/minor) and academic load, which indicates if students are enrolled.
- **VSJ_STUDENT_ENROLLMENT:** Contains class data and can be used to find all students registered in particular classes or all classes for particular groups of students.

Data Elements in PeopleSoft

Here is some basic information about the data in PeopleSoft that will help you find your way:

- The data warehouse is designed to give you only the most current information available. You cannot use it to see a historical record of every change the student might have made. You can, however, see the most recent data for each term of attendance from Spring 1991 forward.
- **Empl ID:** The key to the data is the student's EMPLID. (This is referred to on campus as the SJSU ID.) You will see that the tables connect on this data element. Other data is arranged around this key.
- **Terms:** Terms are coded with 4 characters. The last three are the same as in SIS. The first character represents the century. For example, Fall 2003 is 2034 and Fall 1999 is 0994.

Each year only has 4 terms: Winter, Spring, Summer and Fall. Sessions are used to distinguish between Regular, Special Session and Extended Ed (non-degree credit) enrollments within a term. Regular term enrollments are in Session 1, Special Sessions are in Session 10W and Extended Ed are in Session 12W. Winter term has its own session of 3W1.

Examples:

- **Fall 2003 Regular session:** Term = 2034 Session = 1
 - **Fall 2003 Special session:** Term = 2034 Session = 10W
 - **Fall 2003 PDC session:** Term = 2034 Session = 12W
 - **Winter 2004 session:** Term = 2041 Session = 3W1
 - **Spring 2004 Regular session:** Term = 2042 Session = 1
 - **Spring 2004 Special session:** Term = 2042 Session = 10W
 - **Spring 2004 PDC session:** Term = 2042 Session = 12W
 - **Summer 2004 Regular session:** Term = 2043 Session = 1
 - **Summer 2004 Special session:** Term = 2043 Session = 10W
 - **Summer 2004 PDC session:** Term = 2043 Session = 12W
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- **Careers:** Our academic structure has four careers:
 - Undergraduate (UGRD): Seeking first baccalaureate
 - Post Baccalaureate (PBAC): Seeking additional baccalaureate
 - Graduate (GRAD): Credential or Masters
 - Extended Ed (EXED): Professional Development only (PDC)
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- **Programs:** Programs are not majors. They are classifications of students within careers. For example, in the Undergraduate Career, regular term degree seeking students are in one program (UGD), Special Session degree seeking students are in a different program (UGXD) and Open University students are in a different program (UGXT).
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- **Plans:** Majors and minors are listed as plans. Each plan designation includes the major code that you are used to from SIS, as well as the degree and a numeric code for the career.
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- **Examples:**
 - Regular term degree seeking UGRD BA in Sociology: SOCIBA-1
 - UGRD Open University student: COEDND-1X
 - Regular term degree seeking PBAC BS in Business Admin/Management: BUSGBS-2
 - Special session degree seeking GRAD MLS in Library Info and Science: LIBRMLS3X

Note: For detailed information on Careers, Programs and Plans, please see the Academic Structure diagrams.

Some Suggestions for Using the Data

If you need addresses for contacting students, we suggest using the Mailing address type.

The Academic Load field in the VSJ_ STUDENT_TERM table automatically sets a level when a student enrolls in classes. For example, by selecting a term (Term_Cd = 2034) and Acad_Load_Code not equal to N (No Units), you will be able to find all students registered for the Fall term.

If you need to find all students currently active (eligible to enroll) in a term, whether or not they have registered, select the Acad_Prog_Status equal to AC.

There are three possible academic levels for the term:

- **Acad_Level_Proj** (Projected)
- **Acad_Level_BOT** (Beginning of Term)
- **Acad_Level_EOT** (End of Term)

We recommend that you use the Acad_Level_Proj if you need to select on class level.

To select students enrolled in a specific class section in a specific term, from the VSJ_STUDENT_ENROLLMENT table, use the Class_Nbr to find the section you want, along with the term, session and Enrl_Status-Cd = E. (PeopleSoft does maintain a record of all drops, so not using the enrollment status limiter will give you an unrealistic picture of enrollment.) For example, to find students enrolled in Music 120, Section 1 for the Fall 2003 Regular Session term, you would select Term_Cd = 2034, Class_Session_Cd = 1, Class_Nbr = 44275 and Enrl_Status_Cd=E.

Be aware that you will get multiple rows back for the same student in some queries. For example, you will get two lines of data for the Fall term if the student has a major and a minor, or two majors, in the term. Brio will allow you to limit these duplicates by using **Query > Query Options > Return Unique Rows** (equivalent to SELECT DISTINCT in SQL*Plus). There is a lot of other data out there. The best way is to get familiar with it is just to run some queries selecting it as part of your request parameters. We also recommend, if you haven't already done so, to attend the introductory classes on Student Records.

This view contains no grade information. Currently, that information, if needed, should still be extracted from SIS. A SADW grade view will be available by the end of the Fall term. We realize that this view may not provide all of the information you need. We are working on additional views. Please inform us of any additional information you require, as that will help us meet your needs.

Note: Information beyond this point is generally needed only by technical users.

Connecting to the SADW

Use Brio to connect to the SADW. Brio uses Oracle's SQL*Net architecture to connect to the SADW database. Setting up the SQL*Net parameters will normally be done by whomever performs your desktop support. For almost all SADW users, the information presented here will not be needed. It is presented for those few that do.

- The method to connect to the SADW database is via the Oracle 10g Client with installation of Oracle Advanced Security Option. Please email dba@sjsu.edu for SADW database access information.

Table Owner

Oracle is designed to function as a general-purpose database that can support many users in a secure fashion. One aspect of storing and securing data is assigning each table in the database an owner. The owner controls the content in the table and decides who can and cannot view the table's contents.

As an SADW user, the owner of the SADW data has granted you permission to view the data. As a Brio user, you have little or no need to know who the owner of the data is. This is because Brio queries Oracle for the names of all tables you are permitted to view, and then displays the names of those tables in the tables icon. Knowing the table owner becomes important if you plan to access the SADW via a tool other than Brio.

- **Owner:** All production SADW tables are owned by User ID: RDSPRD

Your Oracle User ID

The user ID assigned to you is an Oracle database user ID. The following facts may be of assistance in understanding why things work the way they do:

- Oracle allows you to view and alter the contents of tables owned by you.
- You do not have access to table data owned by another user; unless that user has granted you access.
- Your user ID does not have permission to create tables.
- Oracle user IDs can be assigned roles.
- The SA Data Warehouse has one role for each of the SA areas (Academic Advisement, Admissions, Campus Community, Financial Aid, Records, and Student Financials). Each role grants you read access to the data tables within that area.
- Your user ID was assigned one or more roles. Your user ID was also assigned a profile. The profile places the following constraints on you:
 - Maximum connect time: 120 minutes.
 - Idle time: 30 minutes. (For example, you will be disconnected after 30 minutes of idle time.)
 - After five consecutive invalid signon attempts, your user ID will be locked.
 - A locked user ID stays locked for 2 days.
- Password history is set to two. Password length should be at least 8 characters long and should contain both letters and numbers.

SADW Keys

Keys are typically used for locating a record and for joining records. There are many different types of keys, but for the SADW we will confine our definition to how keys are used in the SADW.

- **Record Key:** The first column in most, if not all, SADW tables is the record key. The key is used internally by the SADW as the database is populated and provides the SADW a means for establishing parent to child relationships. Users of the SADW will not typically use this key. At most the record key provides the user with a unique key to each record in the table.
- **SID:** SID is an acronym for Surrogate Identifier. This is a very important key for the SADW user. The SID is used for joining tables. As the SADW was being designed, relationships between tables were also designed. These relationships between tables were coded into the SID keys. As an SADW user you can be assured that when you join a SID in one table to a matching SID in another table that the correct relationship needed for joining the two tables was done correctly.

Note: Use the SID to join tables and set other filtering methods to limit your results to meet your reporting needs.

How do you identify a SID? The SADW naming convention places the suffix `_SID` onto each SID field. Normally, but not necessarily always, the SID keys appear near the top of each table definition.

How do you know how to join a SID in one table to a matching SID in another table? If you are accessing the SADW via Brio, you need do nothing, as Brio will automatically join on SID. If you are not using Brio, the SADW field naming convention will help you. You already know that `_SID` is the suffix of each SID. The naming convention for the SID also mandates that a SID will only contain a prefix and a suffix. The prefix will always be the SID parent table prefix. Therefore, the matching SID of two, or more, tables will always have the exact same spelling. Confused? It really is simple; here's an example:

Here are the first few fields in the FA_STDNT_TERM_BUDGET_DIM table:

- BDGT_REC_KEY
- STAID_SID
- BDGT_SID
- BDGT_EMPLID

Note that all but one field name begins with BDGT_ (BDGT is the table's field name prefix). Also, the one field that does not start with BDGT is STAID_SID. Did you also see BDGT_SID? So far we know that this table has two SID keys and that this table is both a parent and a child table. We can find child tables by looking for other tables that contain BDGT_SID fields. STAID_SID tells us where to look for our parent table (the table containing field name prefix of STAID_). Also, we can find sibling tables by looking for other tables containing STAID_SID.

Example of a table that is a child of FA_STDNT_TERM_BUDGET_DIM:

- FA_STDNT_BUDGET_IT_DIM
- BGIT_REC_KEY
- BDGT_SID
- BGIT_EMPLID
- BGIT_INSTITUTION
- BGIT_AID_YEAR
- BGIT_ACAD_CAREER
- BGIT_STRM

Example of a table that is a sibling of FA_STDNT_TERM_BUDGET_DIM

Table: FA_STDNT_BDGT_SUMM_DIM

Name

- BDGTS_REC_KEY
- STAID_SID
- BDGTS_EMPLID
- BDGTS_INSTITUTION
- BDGTS_AID_YEAR
- BDGTS_ACAD_CAREER
- BDGTS_STRM

Note: Did you notice that both tables listed above contain the fields ...ACAD_CAREER and ...STRM fields? If you were using these tables in a query it is possible that you would need to include these fields in the join to ensure that the correct data is being extracted.

- **Parent Child Relationship:** Now that you are familiar with how the SADW uses SID's to make parent child relationships you should also be aware of how child tables can affect your reports – they have a very big affect on your reports. Keep this rule in mind whenever you are dealing with a child table: Every child uses the same SID as its parent plus one more key. If you do not place a filter on the one more key you will most likely return more rows than expected, and your report will be incorrect. Finding that one more key can be a

challenge. Understanding your data is the best way of knowing. Another is the data flows that were delivered with SADW; the key fields are highlighted. A final suggestion is querying the record key. By looking at the key value, you may be able to ascertain the key field name.

Appendix A - Table Names

AA_RELATIONSHIPS_DIM	CC_RELATIONSHIPS_DIM
ADM_ACAD_INTEREST_DIM	CC_RELATION_AFFIL_DIM
ADM_APPL_DATA_DIM	CC_RESIDENCY_DIM
ADM_APPL_EVAL_DIM	CC_SERVICE_INDICATOR_DIM
ADM_APPL_FUNNEL_DIM	CC_VISA_PERMIT_DIM
ADM_APPL_PLAN_DIM	FA_PELL_DISBURSEMENT_ACTN_DIM
ADM_APPL_PROG_DIM	FA_PELL_DISBURSEMENT_DIM
ADM_APPL_RCTER_DIM	FA_PELL_ESOA_DIM
ADM_APPL_RECRUIT_CAT_DIM	FA_PELL_STDNT_RPRT_DIM
ADM_APPL_STDNT_RESPONSE_DIM	FA_STDNT_AGGR_ALL_DIM
ADM_BASIS_ADMIT_DIM	FA_STDNT_AGGR_LIFE_DIM
ADM_EARLY_FA_OFFER_DIM	FA_STDNT_AWARDS_DIM
ADM_EXTRACUR_ACTIVITY_DIM	FA_STDNT_AWD_PR_VW_DIM
ADM_GENERAL_MATERIALS_DIM	FA_STDNT_AWRD_ACTV_DIM
ADM_PROSPECT_DIM	FA_STDNT_AWRD_DISB_DIM
ADM_PROSPECT_PROGRAM_DIM	FA_ISIR_REJECT_REASON_DIM
ADM_PROSPECT_RECRUITER_DIM	FA_ITEM_TYPE_FA_DIM
ADM_RECRUITER_CATEGORY_DIM	FA_LOAN_CASHDISB_DETAIL_DIM
ADM_RECRUITER_CENTER_DIM	FA_LOAN_CASH_DETAIL_DIM
ADM_RECRUITER_DIM	FA_LOAN_CASH_SUMM_DIM
ADM_RECRUITER_PROG_PLAN_DIM	FA_LOAN_CL_PNOTE_ACTN_DIM
ADM_RECRUITER_REGION_ORGS_DIM	FA_LOAN_CL_PNOTE_DIM
ADM_RECRUITER_ROLES_DIM	FA_LOAN_DISBURSEMENT_ACTN_DIM
ADM_TEST_DIM	FA_LOAN_DISBURSEMENT_DIM
ADM_WORK_EXPERIENCE_DIM	FA_LOAN_EDIT_ERROR_DIM
CC_ADDRESSES_DIM	FA_LOAN_MPN_ACTION_DIM
CC_CAMPUS_EVENT_DIM	FA_LOAN_MPN_DIM
CC_CHECKLIST_DIM	FA_LOAN_PNOTE_ACTION_DIM
CC_CHKLIST_ITEM_DIM	FA_LOAN_PNOTE_DIM
CC_CITIZENSHIP_DIM	FA_NSLDS_DATA_DIM
CC_COMMENT_DIM	FA_PELL_DISBURSEMENT_ACTN_DIM
CC_COMMITTEES_DIM	FA_PELL_DISBURSEMENT_DIM
CC_ETHNICITY_DIM	FA_PELL_ESOA_DIM
CC_EVENT_ATTENDEES_DIM	FA_PELL_STDNT_RPRT_DIM
CC_EVENT_MEETING_DIM	FA_STDNT_AGGR_ALL_DIM
CC_EXTERNAL_ACAD_SUBJ_DIM	FA_STDNT_AGGR_LIFE_DIM
CC_EXTERNAL_ACAD_SUMMARY_DIM	FA_STDNT_AWARDS_DIM
CC_EXTERNAL_DATA_DIM	FA_STDNT_AWD_PR_VW_DIM
CC_EXTERNAL_DEGREE_DIM	FA_STDNT_AWRD_ACTV_DIM
CC_EXTERNAL_ORG_DIM	FA_STDNT_AWRD_DISB_DIM
CC_HONOR_AWARD_DIM	FA_INST_DATA_DIM
CC_PERSONAL_DIM	FA_INST_FAMILY_DIM
CC_PERS_INST_REL_DIM	FA_ISIR_COMMENTS_DIM

FA_ISIR_DATA2_DIM
FA_ISIR_DATA_DIM
FA_ISIR_FLD_REVIEW_DIM
FA_STDNT_BDGT_SUMM_DIM
FA_STDNT_BUDGET_IT_DIM
FA_STDNT_DISB_MSG_DIM
FA_STDNT_FA_MESSAGES_DIM
FA_STDNT_FA_TERM_DIM
FA_STDNT_PKG_VAR_DIM
FA_STDNT_RETURN_TIV_DIM
FA_STDNT_RSTRCT_AID_DIM
FA_STDNT_TERM_BUDGET_DIM
FA_STUDENT_AID_DIM
FA_SUSP_CONTROL_DIM
REC_ENROLL_MSG_LOG_DIM
REC_ENROLL_REQUEST_DIM
REC_EXT_TRNSFR_DIM
REC_EXT_TRNSFR_FROM_DIM
REC_EXT_TRNSFR_TO_DIM
REC_INSTRUCTOR_TERM_DIM
REC_INSTR_ADVISOR_DIM
REC_INSTR_CRSE_DIM
REC_INSTR_TERM_DTL_DIM
REC_MILESTONES_DIM
REC_STDNT_ADVISOR_DIM
REC_STDNT_ATTR_DTL_DIM
REC_STDNT_ENRL_APPT_DIM
REC_STDNT_GROUPS_DIM
REC_STDNT_TEST_DIM
REC_STUDENT_TERM_DIM
REC_STUDENT_TERM_FACT
REC_TRNS_CRSE_DIM
REC_TRNS_CRSE_DTL_DIM
REC_TRNS_OTHR_DIM
REC_TRNS_OTHR_DTL_DIM
REC_TRNS_TEST_DIM
REC_TRNS_TEST_DTL_DIM
REC_TST_CREDIT_CRSE_DIM
REC_TST_CREDIT_DIM

REC_ACAD_DEGREE_DIM
REC_ACAD_DEGREE_HONORS_DIM
REC_ACAD_DEGREE_PLAN_DIM
REC_ACAD_STRUCTURE_DIM
REC_ATHLETIC_PARTIC_DIM
REC_CLASS_ASSOC_DIM
REC_CLASS_ATTRIBUTES_DIM
REC_CLASS_DIM
REC_CLASS_GL_DIM
REC_CRSE_CATALOG_DIM
REC_CRSE_COMPONENT_DIM
REC_CRSE_OFFER_DIM
REC_CRSE_TOPICS_DIM
REC_ENROLLMENT_FACT
SF_ACCOUNT_FACT
SF_ANTICIPATED_AID_DIM
SF_BILLING_DIM
SF_CREDIT_HISTORY_DIM
SF_CSH_CASHIER_DIM
SF_CSH_RECEIPT_DIM
SF_CSH_RECEIPT_TARGET_FACT
SF_CSH_RECEIPT_TENDER_FACT
SF_CSH_REGISTER_DIM
SF_GL_ACCOUNTING_LINE_DIM
SF_GL_INTERFACE_DIM
SF_GL_INTERFACE_DT_DIM
SF_ITEM_FACT_DIM
SF_ITEM_LINE_FACT
SF_ITEM_XREF_DIM
SF_PAYMENT_DIM
SF_REFUND_DIM
SF_REFUND_FACT
SF_REFUND_VENDOR_SF_DIM
SF_TP_CHARGES_DIM
SF_TP_CONTRACT_DIM
SF_TP_DATE_DIM
SF_TP_STUDENT_DATE_DIM
SF_TP_STUDENT_DIM
SF_TP_STU_CHARGE_DI