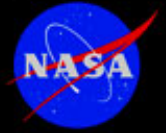


Office of Education



*National Council of Space Grant
Directors Meeting
Presentation to Coordinators*

*Cocoa Beach, Florida
October 26-29, 2005*

Susan Stewart
Sr. Program Analyst
NASA Research & Education Support Services

National Space Grant
College and Fellowship
Program





List of Discussion Topics

- 2004 CMIS Data Reporting and Status
- Participant Numbers
- Changes to 2005 CMIS Screens
- Data Entry Guidelines
- Using the SQL (User Defined) Report Tool in CMIS



2004 CMIS Reporting and Status

- CMIS 2004 Data Entry still open. Edits still need to be made.
- 2005 Budgets in CMIS 2004 will need to be completed by 52 consortia ASAP. Budget screens will be open first week in November for '05 budget data entry in '04 CMIS.
- Conducted an in-depth of review of 2004 Participant numbers.
 - Review surfaced issues requiring discussion with certain consortia (e.g. projects with money and no participants, etc....)
 - Edits may need to be made for certain projects
 - Notification will be given to each consortia by each program area as to needed edits. Do not edit numbers until notified.



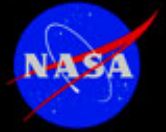
2005 CMIS – Participant Numbers

- Participant numbers will be entered based upon Direct or Indirect designation. There will be a new field to enter Indirect participants in 2005 CMIS.
 - Direct participants can be identified by name, school or organization, and there is direct interaction between the participant and the instructor/leader. Race and gender are usually known.
 - Indirect participants cannot be identified by the criteria for a direct participant. An example of participants who are indirect are those participating in education conferences, conventions, museums, listening to radio or TV shows or visiting booths.



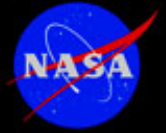
2005 CMIS – Participant Numbers Cont.

- Do not enter participants for programs that are reported in other NASA Education data applications, e.g., NEEIS.
- Do not include as participants those on a subscription or distribution list.
- Enter SG staff, principal investigators, and support people as participants, if working on the project. They are direct participants.
- Enter participants if supported through match/leveraged funds.
- All projects with funding should have participant numbers.



Participant Numbers Cont. 2

- Participant numbers should be accurate and reasonable.
 - “More is not necessarily better.”
 - Addition of “Indirect” designation should help.
- Projects with funding in a prior year, but no participants because program was not completed, will have participant numbers in the following year. It is possible that there will be no funding sources in this next year. Put a memo in the field directly following the funding stating that participants will be entered in the following year.



Changes in 2005 CMIS

- Participants will be entered as Direct or Indirect. Both are possible for a project.
- The Minimum Match report
 - will display the SG Funding Received as the Base SG funding and the SG Augmentation.
 - The F/S funding will come from a table based on the maximum F/S SG amount.
 - A new column has been added to indicate total F/S SG funding assigned to F/S projects.
 - If there is a negative difference there will be a note stating this at the bottom of the report.



Changes in 2005 CMIS Cont.

- Projects with no source of funding will not be counted in the total number of projects in a Program area in some Specialized Reports.
- Grant Type will show on some Specialized reports by year.

Data Entry Guidelines

- If a project is the result of a winning proposal to a source outside NASA Education, count as funding only that portion of the grant by year directly attributable to the Space Grant project. Count the entire winning proposal amount in the Proposal section of CMIS.
- *Encumbered Funds, Director's Discretionary Funds, Staff or Slush Funds* are not to be entered as projects. These funds should be entered for a specific project or in management.



Data Entry Guidelines Cont.

- For EPSCoR or other Federal Agency funded projects, enter only the SG funding and participants supported by this SG funding.
- If your consortium is participating in a multi-consortia project, count only your consortium's contribution and participants.



What is SQL?

- SQL (pronounced “ess-que-el”) stands for Structured Query Language.
- SQL is used to communicate with a database.
- SQL language conditional selections available in CMIS are: =, \neq , >, \geq , \leq , in, not in, any, some, between, like, not like, null, not null.
- SQL tool is limited in the CMIS application and is used in a report screen format.



Reasons for Using SQL Reports

- The SQL (“User Defined”) Report tool gives the ability to display information stored in CMIS not available via the Specialized Report Tool.
- Reports are run to display quantities of data filtered and sorted in a specific way. It is possible to display a single selection or multiple selections.
- Reports can be used to check accuracy of data fields as well as other uses, e.g. mailing labels



Using SQL (“User Defined”) in CMIS

- To display the option “User Defined Reports by Year”, select “Report Tools”, found on the “Go To” bar on any “Choose Operation” screen
- This option displays a report tool to use SQL to generate a report for a specific year.
- The “Choose Table Columns” section displays 8-10 selection boxes, each displaying a drop list of field names from the data entry screens.
- Select field names in each of the field name boxes to display data in the subsequent report. Fields will be displayed in the order selected. Not all field name boxes need selections for a successful report.



Using SQL (“User Defined”) in CMIS, Cont.

- The “Sort By Columns” section is used to sort the report by up to two selected field names. The selection of a field name from the first drop list box will be the primary sort and the second selection will be the secondary sort.
- Selection of one or two sort field names is optional



Using SQL (“User Defined”) in CMIS, Cont. 2

- The “Choose Selection Criteria” section is used to select the field name, the condition, and the SQL command for the selected field.
- A commands requires a pair of single quotation marks around the entered value.
- Use the % sign as a wild card. The statement last_name like ‘%s’ will display all last names that end in s.
- Only one value per command line can be entered.
- Entered values must match database entries, e.g., VT not vt. Note: case sensitive.
- Data Dictionary is useful in determining database entries.



Examples of SQL Data Entry Values

- Race is indicated as 1-7. Numbers generally correspond with display order on the data entry form, with 1 indicating Native American and 5=Caucasian.
- Gender is also designated by number. 1=male and 2=female.
- An X in a Check Box is indicated by 'T' in the database.
- If unsure of the meaning of a numeric result, compare number/data result to actual data entry field in the corresponding data entry form.



Creating SQL Multiple Column Reports

- Save each 8 to 10 column report in a separate Text file.
- Be sure to have the same 1-2 field names in each User Defined report to facilitate matching rows in Excel.
- Copy each file into an Excel spreadsheet, matching like field names in duplicate columns for each copied file.
- Eliminate duplicate columns.
- Use subsequent Excel Spreadsheet to create mailing labels, mail merges, reports, graphs, etc.



Accessing the SQL (User Defined) Report Tool

The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "Operation and Project - Microsoft Internet Explorer". The address bar contains the URL: `http://ehb2.gsfc.nasa.gov/cgi-bin/cmis/main_reports?application=sgcontact&dbms=oracle&dbms_table_name=xx&primary_key_name=xx&title_key_name=xx&output_temp`. The page content includes a main heading "Research Infrastructure - Choose Operation and Project" and a sub-heading "Choose an Operation: (If selecting ADD operation, do not choose a project!)". Below this, a list of operations is provided: ADD - A New Project, UPDATE - A Project, DELETE - A Project, MOVE - A Project to another Affiliate Institution, and PRINT PREVIEW - A Project. A second section, "Choose a Project:", lists several projects with their respective institutions and dates, such as "AK University of Alaska, Fairbanks - 'HEX 2-Plasma' 2004 28-Apr-2005". A button labeled "Click Here to Get Data Entry Form" is located at the bottom of the project list. The Windows taskbar at the bottom shows the Start button and several open applications, including "SusanS1088's Buddy List...", "Inbox - Microsoft Outlook", "Microsoft PowerPoint - [2...]", and "Operation and Project...". The system clock shows 1:44 PM.

Research Infrastructure - Choose Operation and Project

[Go To: \[Help\]](#) [\[Report Tools\]](#) [\[SG Main Menu\]](#)

Choose an Operation: (If selecting ADD operation, do not choose a project!)

- ADD - A New Project
- UPDATE - A Project
- DELETE - A Project
- MOVE - A Project to another Affiliate Institution
- PRINT PREVIEW - A Project

Choose a Project:

- AK University of Alaska, Fairbanks - "HEX 2-Plasma" 2004 28-Apr-2005
- AL Alabama A&M University - "Joint University Industry Research Program" 2004 24-May-2005
- AL Auburn University - "Augmentation to CubeSat High Altitude Satellite project" 2004 23-May-2005
- AL Auburn University - "Joint University/Industry Research Program" 2004 01-Apr-2005
- AL Auburn University - "WORKFORCE DEVELOPMENT: MIMIC Student Summer Resea" 2004 16-May-2005

[Click Here to Get Data Entry Form](#)



Accessing the SQL (User Defined) Report Tool, 2

The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "Report Tools - Microsoft Internet Explorer". The address bar contains the URL "http://ehb2.gsfc.nasa.gov/edcats/cmris/research/report_tools/index.html". The page content is titled "CMIS Research Infrastructure Report Tools" and includes a navigation menu with links for "[Help]", "[SG Main Menu]", and "[Operation/Research Infrastructure Listing]". Below this, there is a list of links for "1997 Research Infrastructure Listing - Print Preview Only" through "2004 Research Infrastructure Listing - Print Preview Only". Further down, there are sections for "Pre-defined Reports" and "User Defined Reports" for the years 1997, 1998, 1999, and 2000. The Windows taskbar at the bottom shows the Start button, several open applications including "SusanS1088's Buddy List...", "Inbox - Microsoft Outlook", and "Microsoft PowerPoint - [2...]", and the system tray with the time "1:47 PM".



Accessing the SQL (User Defined) Report Tool, 3

CMIS User Defined Table Reports

2004

[Go To: \[Help\]](#) [\[Field Name Dictionary\]](#) [\[SG Main Menu\]](#) [\[Operation/Research Infrastructure Listing\]](#) [\[Report Tools\]](#)

Choose Output Type:

Format:

Choose Table Columns:

Column 1 :	Pick Column ID CONSORT_ID	Column 2 :	Pick Column ID CONSORT_ID
Column 3 :	Pick Column ID CONSORT_ID	Column 4 :	Pick Column ID CONSORT_ID
Column 5 :	Pick Column ID CONSORT_ID	Column 6 :	Pick Column ID CONSORT_ID
	Pick Column ID		Pick Column ID

Done Internet

Start | SusanS1088's Buddy List ... | Inbox - Microsoft Outlook | Microsoft PowerPoint - [2... | User Defined Table Re... | 2:06 PM



Selections for Demo SQL (User Defined) Report

User Defined Table Reports - Microsoft Internet Explorer

Address: http://ehb2.gsfc.nasa.gov/cgi-bin/cmisis/main_reports?application=sgcontact&dbms=oracle&dbms_table_name=xx&primary_key_name=xx&title_key_name=xx&output_temp

Column 1:	CONSORT_ID PROGRAM INSTITUTE	Column 2:	FIRST_NAME MIDDLE LAST_NAME
Column 3:	LAST_NAME STUDENT_NO UG_LEVEL	Column 4:	UNIVERSITY AWARDEE DECLINED_AWARD
Column 5:	RACE GENDER DISABLED	Column 6:	GENDER DISABLED PRIMARY1
Column 7:	DISABLED PRIMARY1 PRIM1_MEMO	Column 8:	AMOUNT AWARD_DATE COMPLDATE

Choose Sort By Order:

Sort 1st: CONSORT_ID
PROGRAM
INSTITUTE

Sort 2st: LAST_NAME
STUDENT_NO
UG_LEVEL

Choose Selection Criteria:

LAST_NAME
STUDENT_NO
UG_LEVEL

Op: like Value: '%ang%' (Put Value in a single quote)

And/Or: and

Done

Start | Sus... | Inb... | Us... | Vix... | Ho... | We... | Sus... | De... | Mic... | C:\... | 11:49 AM



Example of SQL (User Defined) Report

C:\Documents and Settings\sstewart\Desktop\FL 05 SQL Sample.htm - Microsoft Internet Explorer

File Edit View Favorites Tools Help

← Back → Search Favorites Media

Address C:\Documents and Settings\sstewart\Desktop\FL 05 SQL Sample.htm

Links Customize Links Deltek Time & Expense - Login Global Science & Technology DB Consulting Group 630 WMAL Free AOL with Spam Blocker

Applicants/Awardees Ad-Hoc Report 2004

CONSORT_ID	FIRST_NAME	LAST_NAME	UNIVERSITY	RACE	GENDER	DISABLED	AMOUNT
AZ	Sujoy	Ganguly	University of Arizona	7	1		0
AZ	Margaret	Langham	Arizona State University	5	2		0
CA	Pauline	Chang	University of California, San Diego	7	1		0
CA	Dave	Hoang	University of California, San Diego	7	1		0
CA	Ivan	Wang	University of California, San Diego	7	1		3603
CA	Alan	Yang	University of California, Santa Cruz	2	1		400
DE	Stephanie	Frangakis	University of Delaware	5	2		0
HI	Heather	Chang	University of Hawaii at Hilo	6	2		3000
IA	Ngoc	Dang	Drake University	7	2		670
IA	Tram	Hoang	Drake University	2	2		960
ID	Susan	Langford	Boise State University	5	2		1000
IL	Steven	Langel	Illinois Institute of Technology	5	1		3000
KS	Cher-Chiang	Yang	University of Kansas	6	1		7500
MD	Candice	Phang	Morgan State University	3	2		1000
ME	Baobao	Jiang	University of Maine	7	2		500
NE	Kasturi	Dange	University of Nebraska, Omaha	6	2		0
NH	Narissa	Chang	Dartmouth College	7	2		822
NH	Narissa	Chang	Dartmouth College	7	2		4019
NV	Warren	Dang	University of Nevada, Reno	7	1		2500

Done My Computer

Start Sus... Inb... htt... Vix... Ho... We... Sus... De... Mic... C:\... Micros... 11:42 AM