



STORET Web Registration Application Design

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STORET WEB REGISTRATION APPLICATION DESIGN

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1.0 INTRODUCTION

The STORET Web Registration Application is a Central Data Exchange (CDX)-like implementation which allows data to flow into a central copy of STORET from a data generator. The application makes use of a series of Web forms running on top of a central copy of STORET. This will allow the data generator to create, update, and manage (i.e., register) lists of monitoring program elements which are necessary to exist in STORET prior to any successful entry of STORET monitoring data.

1.1 Purpose

This document provides information regarding the STORET Web Registration Application functionality, technical specifications, and Oracle Application Server configuration. The section titled Installation Instructions discusses configuring the target server, customizing the application for the target server environmental parameters, and installing the application software. The technical specifications for the application are provided in Appendix A. Cascade and delete restriction rules are provided in Appendix B.

1.2 Identification

The information provided is a consolidation of the STORET Web Registration Application releases up to and including production release X2.0.1. This document is being provided to the Office of Wetlands, Oceans, and Watersheds (OWOW), Assessment and Watershed Protection Division, Monitoring Branch, STORET Task Order Project Officer (TOPO).

2.0 REFERENCES

The document, *STORET v2.0 Schema for CDX Implementation using a Web Interactive Application and XML/Flat File Data Streams*, was the basis for the development of the STORET Web Registration Application.

3.0 SUMMARY OF FUNCTIONALITY

The STORET Web Registration Application was compiled using Oracle Forms 9i. The application runs in a Web browser through the Oracle Jinitiator and accesses a central, server copy of the STORET database. This application provides a Web-based interface for users to enter registration information into a STORET database. The registration data that can be entered includes data elements pertaining to:

- C Organization.
- C Citations.
- C Stations.
- C Cooperating Organizations/Personnel.
- C Sample Preservation, Transport, and Storage.
- C Field/Lab Analytical Procedures.
- C Sample Creation/Collection Procedures and Gear.
- C Laboratories.
- C Projects.
- C Characteristic Groups and Defaults.

3.1 General Capabilities

The Main Menu Form is displayed with a list of the Organizations for which the user is authorized to access and maintain. Note that the user log-in and authentication process is not part of the software provided by this application.

Users may open forms to enter data for each of the data areas listed in section 3.0. Users may open more than one form type (i.e., data area) at a time, but may not open more than one form of the same type.

Users may move from form to form to enter data. If the user chooses to exit a form, the user will be prompted to save data if any changes to the form were made.

If the user exits the Main Menu Form while subordinate forms are open, the user will be prompted to save/exit from these forms before exiting the Main Menu Form. An online help web page, accessible from each form, is provided to aid users in using the Application.

The STORET Web Registration Application was developed to the standard EPA Web Application requirements. The design of the application has been engineered to be 508 compliant. The minimum display requirement is a 15" color monitor set at 800 by 600 pixels.

3.2 Organization

Users are provided with a display of the basic information pertaining to the Organization including mailing address and phone number.

Users are allowed to create, edit, and save all data fields except ID. The user cannot delete an Organization.

3.3 Citations

Users are provided with a display of the information pertaining to Citations.

Users are allowed to create, edit, delete, and save all data fields related to a given Organization-defined Citation. National Citations are not maintained/changeable in the application, but are available for display.

The data is presented in two tabbed areas, one for Organization-defined Citations, and one for National Citations.

The Organization ID and Name displayed at the top of the form are read-only.

3.4 Stations

Users are provided with a display of the information pertaining to Organization-defined Stations.

Users are allowed to create, edit, delete and save all data fields related to a given Station.

Selecting a Primary Station Type of Ocean, Estuary, or Great Lake allows for entry of associated Ocean, Estuary, or Great Lake data.

The Organization ID and Name displayed at the top of the form are read-only.

3.5 Cooperating Organizations/Personnel

Users are provided with a display of the information pertaining to Organization-defined Cooperating Organizations and Personnel.

The data is presented in two tabbed areas, one for Cooperating Organizations, and one for Personnel.

Users are allowed to create, edit, delete, and save all data fields related to Cooperating Organizations and Personnel.

The Organization ID and Name displayed at the top of the form are read-only.

3.6 Sample Preservation, Transport, and Storage

Users are provided with a display of the information pertaining to Organization-defined Sample Preservation, Transport, and Storage defaults.

Users are allowed to create, edit, delete and save all data fields related to Sample Preservation, Transport, and Storage information.

The Organization ID and Name displayed at the top of the form are read-only.

3.7 Field/Lab Analytical Procedures

Users are provided with a display of the information pertaining to Organization-defined Field/Lab Analytical Procedures.

Users are allowed to create, edit, delete, and save all data fields related to Organizational Field/Lab Analytical Procedures. They may also adopt National Field/Lab Analytical Procedures.

The data is presented in two tabbed areas, one for Organization Owned Analytical Procedures, and one for Adopted National Procedures.

The Organization ID and Name displayed at the top of the form are read-only.

3.8 Sample Creation/Collection Procedures and Gear

Users are provided with a display of the information pertaining to Organization-defined Sample Creation/Collection Procedures and Gear Configurations.

Users are allowed to create, edit, delete, and save all data fields related to Sample Creation/Collection Procedures and Gear Configurations.

Gear Configurations are maintained behind the scenes with the same ID and Name as the corresponding Sample Creation/Collection Procedure.

The Organization ID and Name displayed at the top of the form are read-only.

3.9 Laboratories

Users are provided with a display of the information pertaining to Laboratories.

Users are allowed to create, edit, delete, and save all data fields related to Organization-defined Laboratories.

The Organization ID and Name displayed at the top of the form are read-only.

3.10 Projects

Users are provided with a display of the information pertaining to Organization-defined Projects.

Users are allowed to create, edit, delete, and save all data fields related to Projects.

The Organization ID and Name displayed at the top of the form are read-only.

3.11 Characteristic Groups and Defaults

Users are provided with a series of forms which display information pertaining to Organization-defined Characteristic Groups and associated Defaults. All non-Biological types of sample and field measurement/observation groups are supported.

Users are allowed to create, edit, delete, and save all data fields related to Characteristic Groups and Defaults.

4.0 DEGREE OF FUNCTIONALITY BEING PROVIDED

The following issues exist with this application:

- C Using Windows 98 and Netscape will hang the application immediately or after extended use of a continuous session with the application. Pressing Ctrl+Alt+Del followed by Cancel will return focus back to the form and temporarily restore performance. The application currently uses the Oracle9i Application Server release 2 (9.0.2). Oracle's Metalink states: "Microsoft Windows 98 Customers: Oracle9i Server release 1 (9.0.1) will be the last release to be supported on Microsoft Windows 98, due to Microsoft's withdrawal of support for this platform."
- C The user is unable to use the search function associated with the edit button when positioned in the last field on the Project or Station form. The default Oracle Forms Editor was used. The default Editor forces its location to the upper left corner of the form. A new Editor form would have to be created in order to have control over the location.

5.0 INSTALLATION INSTRUCTIONS

The STORET Web Registration Application is deployed in the form of Oracle .fmb, .fmv, .pll, .plx, .mmb, .mmx files. The application .fmb, .pll, and .mmb source files are compiled using

the Oracle Forms 9i tool into .fmx, .plx, and .mmx files. These files must be loaded onto the web server for access by the user. The following steps document loading and setting up this application.

5.1 Server Configuration

Oracle Forms 9i version 9.0.2.9.0 was the target environment for development of the STORET Web Registration Application. The basic installation/configuration of the Oracle 9i Application Server (Oracle 9iAS) Release 2 Forms Services 9i is not covered in this document. This document provides the necessary configuration customization for the STORET Web Registration Application. It is assumed that the Oracle 9iAS Forms Services 9i is installed and configured on the server machine. As recommended during the Oracle Forms Server installation, run the test.fmx provided with the Oracle Forms Server installation to ensure proper server setup.

1. Transfer all application source files found in the storet\cdx directory (and all its subdirectories) in the software package to a target source directory on the server (e.g., c:\storet\cdx). Verify that the target directory/subdirectories match the list of delivered files found in Section 5.4.
2. Add/edit the following registry setting on the server for the 9iAS Oracle Home (if this is the first home, it will be Oracle\Home0):

C Add the target source directory (e.g., c:\storet\cdx) to the FORMS90_PATH.

3. Using a text editor, add/edit the following in the configuration file (formsweb.cfg) located in the %ORACLE_HOME%\forms90\server directory:

C ServerApp=STORET.

C Width=750.

C Height=420.

C Logo=no.

C SplashScreen=no.

C SeparateFrame=false.

C BaseHTML=*base.htm*. (*Base.htm* is the default file provided by the Forms Server installation.)

- C BaseHTMLJinitiator=*basejini.htm*. (*Basejini.htm* is the default file provided by the Forms Server installation.)
- C LookAndFeel=Oracle.
- C ColorScheme=teal.

The *base.htm* and *basejini.htm* file names may be different if manually constructed or renamed on the target server.

4. Change the file property so it is not read-only, and add the following entries in the registry.dat file (located in the %ORACLE_HOME%\forms90\java\oracle\forms\registry directory) to the Application Level icon section. Some default entries may already exist:

- C STORET.icons.iconpath=http://*computer_name.domain_name:port*/storet_icons/.
- C STORET.icons.iconextension=gif.

Replace the *computer_name.domain_name* and *port* with your machine and port number.

Reset the registry.dat property to read-only when finished.

5. Add the following aliases to your Hyper-Text Transfer Protocol (HTTP) Server Forms90 configuration file (forms90.conf) (located in the %ORACLE_HOME%\forms90\server directory) below any existing ones:
 - C AliasMatch ^/storet_icons/(.*) "c:\storet\cdx\gif/\$1".
 - C AliasMatch ^/storet_cdx/(.*) "c:\storet\cdx\doc/\$1".
6. Make an appropriate entry in the tnsnames.ora file to access the STORET 2.0 database.
7. Modify the fmrweb.res file located in the %ORACLE_HOME%\forms90 directory to comment out (place a “#” in front of the line) all keyboard/function keys except “Tab” and “Shift+Tab”.
8. Restart the HTTP server and Forms server service.

5.2 Web Registration Application Home Page

The c:\storet\cdx\doc folder and subdirectory in the software package includes the home page, associated gif files, and java script files designed to provide user access to the STORET Web Registration Application. The home page Uniform Resource Locator (URL) is `HTTP://computer_name.domain_name/storet_cdx/storet_web_reg.html`. The STORET image in the center of the page provides the actual link to the application. Edit the Hyper-Text Markup Language (HTML) page to point to the target URL. Open the HTML file in any editor and search for the line containing “CDX_MENU”. Modify as appropriate using the example below.

Example:

`HTTP://computer_name.domain_name:port/forms90/f90servlet?form=CDX_MENU.fmx`

Replace the *computer_name.domain_name* and *port* with your machine name and port number.

5.3 Database Script

The c:\storet\cdx\scripts folder includes two database script files (i.e., sir1349a.sql and sir1403.sql) that must be applied on the STORET v2.0 database. The sir1349a.sql ensures cascade deletes performed at the database level are executed correctly. Perform the following:

- C Edit the file to replace the connect string.
- C Open a SQL*PLUS session.
- C Grant CREATE SESSION privilege to STORET1.
- C Run the sir1349a.sql file (i.e., @sir1349a).
- C Examine the log file sir1349a.log for errors.
- C Revoke CREATE SESSION privilege from STORET1.

The sir1403.sql database script file creates a STORET.TSRWRVAR table to define the target Help URL to launch Help, and an Exit URL that is called when the application is closed. Perform the following to the sir1403.sql file to create and populate the new table:

- C Edit the file to replace the password or add the connect string.

- C The c:\storet\cdx\doc folder includes a Web_Reg_Help.html file, which is an online help web page for the STORET Web Registration Application. The help page URL is HTTP://*computer_name.domain_name*/storet_cdx/web_reg_help.html. Modify the HELP_URL Insert statement to reflect your computer name and domain name.
- C Modify the EXIT_URL Insert statement to provide the default URL to display upon exiting the Web Registration Application. The current value is "http://www.epa.gov/storet".
- C Open a SQL*PLUS session.
- C Run the sir1403.sql file (i.e., @sir1403).
- C Examine the log file sir1403.log for errors.

5.4 File List

The executable and supporting files associated with the STORET Web Registration Application are listed below.

Directory of \STORET\cdx:

- C CDX_ANPR.fmx.
- C CDX_ANPRNAT.fmx.
- C CDX_CHARDEF.fmx.
- C CDX_CHARGRP.fmx.
- C CDX_CITATION.fmx.
- C CDX_COOP.fmx.
- C CDX_LAB.fmx.
- C CDX_MENU.fmx.
- C CDX_ORG.fmx.
- C CDX_PROCGEAR.fmx.
- C CDX_PROJECT.fmx.
- C CDX_SDP.fmx.
- C CDX_STATION.fmx.
- C MENUDEFS.mmx.
- C OFGBSL.pll.
- C OFGBSL.plx.
- C OFGMES.pll.
- C OFGMES.plx.
- C OFGNAVL.pll.
- C OFGNAVL.plx.

- C OFGTAB.pll.
- C OFGTAB.plx.
- C OFGTEL.pll.
- C OFGTEL.plx.
- C STORETLIBFRM.olb.
- C STORTEMPLATE.fmb.

Directory of \STORET\cdx\doc:

- C STORET_WEB_REG.HTML.
- C WEB_REG_HELP.HTML.

Directory of \STORET\cdx\doc\STORET_Web_Registration_Home_files:

- C DATEURL.JS.
- C EPAFILES_BAN_ENDBOTTOM.GIF.
- C EPAFILES_BAN_ENDTOP.GIF.
- C EPAFILES_BAN_TOPEPA.GIF.
- C EPAFILES_BTN_EXPLORERS.GIF.
- C EPAFILES_BTN_GOSEARCH.GIF.
- C EPAFILES_EPASTYLES.CSS.
- C EPAFILES_LOGO_EPASEAL.GIF.
- C EPAFILES_MISC_DOT_DKBLUE.GIF.
- C EPAFILES_MISC_SPACE.GIF.
- C NEW_MAP.JPE.
- C STORET_SPLASH_NEW.JPG.

Directory of \STORET\cdx\gif:

- C AFLIST.GIF.
- C AFEDIT.GIF.
- C AFCLRALL.GIF.

Directory of \STORET\cdx\scripts:

- C SIR1349A.SQL.
- C SIR1403.SQL.

APPENDIX A

Technical Specifications

STORET
Web Registration Application Specification
SIR: 1333

Module Name: CDX_ORG

Module Components: ADDRESS, EADDRESS, ORGAN

Last Update: February 20, 2003

Processing Overview/Description:

This form processes information for a given Organization. The Organization ID is passed in from the CDX_MENU form. Basic organization information may be updated; mailing address and phone number may be inserted, updated, or deleted. Organization ID cannot be updated. Query of a different Organization is not allowed.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	ID		20	L	Passed in
	NAME	Name*		70	L	Data entry
	TYPE_CODE	Type*		30	L	Data entry
TSMADDR	LINE_ONE_TEXT	Line 1	Mailing Address	50	L	Data entry
	LINE_TWO_TEXT	Line 2		50	L	Data entry
	LINE_THREE_TEXT	Line 3		50	L	Data entry
	LINE_FOUR_TEXT	Line 4		50	L	Data entry
	TYPE_CODE	n/a				System generated - 'Mailing'
	COUNTRY_CODE	n/a				System generated - 'US'

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMADDR_ORG_ID	n/a				System generated from ORG_ID passed in
	TSMORGAN_IS_NUMBER	n/a				Foreign key to TSMORGAN
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORG_ID passed in
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate
TSMEADDR	ADDRESS_TEXT	Number	Phone	20	L	Data entry
	TYPE_CODE	n/a				System generated - 'Phone'

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMEADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMEADDR_ORG_ID	n/a				System generated from ORG_ID passed in
	TSMORGAN_IS_NUMBER	n/a				Foreign key to TSMORGAN
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Organization	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

None.

Trigger/Events Processing:

Module Component/Item	Trigger	Event
Module	WHEN-NEW-FORM-INSTANCE	Execute query.
	PRE-QUERY	Set up default where clause to 'rpad' the ORG ID with spaces.
	KEY-COMMIT	Set message level to '0' ; commit form; move cursor to ID.
	KEY-PRVREC	Do nothing.
	KEY-NXTREC	Do nothing.
	KEY-ENTQRY	Validate form for changes.
ORGAN	POST-CHANGE	Update organization record.
ORGAN/ ORG_ID	KEY-PREV-ITEM	Go to EADDRESS block.
ORGAN/ TYPE_CODE	KEY-NEXT-ITEM	Go to ADDRESS block.
ADDRESS	KEY-CREREC	Disallow multiple addresses.
	PRE-INSERT	Process Address record - check for duplicates.
	POST-CHANGE	Update Address record.
ADDRESS/ LINE_ONE_TEXT	KEY-PREV-ITEM	Go to ORGAN block.
ADDRESS/ LINE_FOUR_TEXT	KEY-NEXT-ITEM	Go to EADDRESS block.
EADDRESS	KEY-CREREC	Disallow multiple Eaddresses.
	PRE-INSERT	Process Eaddress record - check for duplicates.

Module Component/Item	Trigger	Event
	PRE-UPDATE	Update Eaddress record.
EADDRESS/ ADDRESS_TEXT	KEY-PREV-ITEM	Go to ADDRESS block.
	KEY-NEXT-ITEM	Go to ORGAN block.
	WHEN-VALIDATE-ITEM	Override record status if blank phone.

Business Rules:

A name and type must exist for an Organization.

Error Handling:

- Only allow one mailing address.
- Only allow one phone number.
- Organization ID cannot be updated.

Delete Rules:

None.

Disabling Rules:

None.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

None.

Called Procedures (SQL-PL/SQL):

None.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_ORG.fmb	CDX_ORG.fmx	STORETLIBFRM.olb

<u>Template</u>	<u>Menu</u>
STORTEMPLATE.fmb	MENUDEFS.mmb

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	FNTNAM	ARIAL
Module Component - ADDRESS	BLKMLF	WRAP
	BLKSBW	2
Module Component - EADDRESS	GRPMLF	2
Item Group - ADDRESS. MADDR_GROUP	GRPDEC	RECTANGLE
	GRPPTS	1
Item Group - EADDRESS.EADDR_GROUP	GRPDEC	RECTANGLE
Item Group - ORGAN.ORG_INFO	GRPPTS	1

Window Snapshots:

Organization

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx. The main content area displays the "Organization" form with the following fields and controls:

- ID:** SIMPSON
- Name*:** STORET Test
- Type*:** Volunteer (dropdown menu)
- Mailing Address:** A group box containing four lines of text input:
 - Line 1: LINE 1
 - Line 2: LINE 2
 - Line 3: LINE 3
 - Line 4: LINE 4
- Phone:** A group box containing a "Number" field with the value 999-999-9999.

At the bottom of the form, there is a status bar showing "Organization ID" and "Record: 1/1". The browser's status bar at the very bottom indicates "Applet started." and "Internet".

STORET
Web Registration Application Specification
SIR: 1334

Module Name: CDX_CITATION

Module Components: CITATION, ORGNZTN

Last Update: March 12, 2003

Processing Overview/Description:

This form processes Citations for a given Organization. The Organization ID is passed in from the CDX_MENU form. The Organization ID and Name are displayed as header information and cannot be updated. Basic Citation information may be inserted, updated, or deleted on one tab page; National Citations may be queried on another tab page. Disallow query of a different Organization from this form.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Passed in
	NAME	<null>		70	L	Look up based on ORG_ID
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID
TSRCITN	IDENTIFICATION_CD	ID*	Basic Citation Information	24	L	Data entry, query allowed
	TITLE_NAME	Title Name*		150	L	Data entry
	AUTHOR_NAME	Author Name*		150	L	Data entry
	JRNL_OR_PBLSHR_NM	Publishing Organization Name*		150	L	Data entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	PUBLICATION_YEAR	Publication Year*		20	L	Data entry
	ORG_REF_ID_NUM	Reference ID		20	L	Data entry
	VOL_AND_PG_NUM	Volume and Page No.*		20	L	Data entry
	COMMENT_TEXT	Comments		150	L	Data entry
	TSRCITN_IS_NUMBER	n/a				System generated from TSMEISN
	TSRCITN_ORG_ID	n/a				System generated - set to ORG_ID passed in
	ORG_TYPE_CODE	n/a				System generated - 'ORG'
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	TSMORGAN_IS_NUMBER	n/a				System generated - ORG_ID
TSRCITN (look up for National Citation display)	IDENTIFICATION_CD	ID		15	L	Read only
	TITLE_NAME	Title Name		95	L	Read only
	ORG_TYPE_CODE	n/a				Select 'NAT'
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMEISN_ORG_ID	n/a				System generated - set to ORG_ID passed in
	TSMEISN_NAME	n/a				System Generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Citation	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button to right of Citation ID field (aflist.gif).

Trigger/Events Processing:

Module Component/Item	Trigger	Event
CITATION	PRE-INSERT	Process citation record; check for duplicate ID or Title Name.
	PRE-UPDATE	Update citation record.
	ON-MESSAGE	Replace Text of Message - replaces default Oracle message when LOV is pressed while a record is displayed.
	WHEN-NEW-RECORD-INSTANCE	Populate Original ID and Title Name - populate parameter values. Disable ID LOV when not in Enter-Query mode (SIR 1374).
	KEY-DELREC	Check for Restrictions - check for delete restrictions.
	KEY-COMMIT	Commit form and move cursor to Citation ID.
CITATION. IDENTIFICATION_CD	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting an ID. Upon execute query, disable the ID LOV (SIR 1374). Ensure IDs with underscores are interpreted correctly.

Module Component/Item	Trigger	Event
	WHEN-VALIDATE-ITEM	Check for Duplicate ID - IDs have to be unique within the Organization. If duplicate, reset the ID to original value.
CITATION.TITLE_NAME	WHEN-VALIDATE-ITEM	Check for Duplicate Title Name - Title names have to be unique within the Organization. If duplicate, reset the name to original value.
ORGNZTN.NAME	KEY-NEXT-ITEM	Go Next Block - Go to CITATION block.
NATCITN	WHEN-NEW-BLOCK-INSTANCE	Execute query.
Module	PRE-QUERY	Set up default where clause to "rpad" the ORG ID with spaces.
	WHEN-NEW-FORM-INSTANCE	Set global variable. Execute query.
	KEY-CREREC	Check for ID or Name Change - If ID or Title Name changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	ID and Name Check - If ID or Title Name changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	ID and Name Check - If ID or Title Name changed, do duplicate checking. If found, then force save now.
	KEY-ENTQRY	Validate form for changes. Enable ID LOV (SIR 1374).

Business Rules:

- C Citation ID must be unique within the Organization.
- C Citation Title Name must be unique within the Organization.
- C Citation ID is mandatory whereas it is not mandatory in the data entry application.
- C Allow query based on Citation ID. Only show "ORG" Citations defined for the current Organization.
- C Add an LOV on Citation ID. Sort by ascending ID.

- C On the Organization-Defined Citations tab page, Citation Org_Type_Code should not be displayed and should always be set to “ORG” (no national Citations are entered here). National Citations are displayed (read-only) on the National Citations tab page.

Error Handling:

- C Duplicate checking to ensure Citation ID is unique within a given Organization.
C Error if one of the following mandatory fields is not provided: ID, Article or Book Title Name, Author Name, Publication Year, and Volume and Page Number.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- Citation ID LOV button is disabled when form is in entry/update mode; enabled when in query mode.

Delete Rules:

- When a Citation is deleted, cascade delete any Citation Project Assignments associated with it.
- Disallow delete of a Citation if Field Procedures, Analytical Procedures, Lab Sample Prep Procedures, or Characteristic Groups are tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

Ⓒ CHECK_RI_TSRCITN.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_CITATION.fmb	CDX_CITATION.fmx	STORETLIBFRM.olb

<u>Template</u>	<u>Menu</u>
STORTEMPLATE.fmb	MENUDEFS.mmb

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	PAGCWD	100
	ITMPLM	A
	GRPDEC	RECTANGLE
	LOVMHT	18
	LOVMWD	110
MC - CITATION	BLKMLF	1
	GRPHDS	0
MC - NATCITN	BLKJUS	LEFT
	ITMPLM	N

Window Snapshots:

Organization-Defined Citations

The screenshot shows a Netscape browser window titled "Oracle9iAS Forms Services - Netscape". The address bar displays the URL: "http://9610.sdc-moses.com:7778/forms90/f90servlet?form=CDX MENU.fmx&width=750&height=450". The browser's menu bar includes "File", "Edit", "View", "Go", "Communicator", and "Help". The toolbar contains various icons for file operations and navigation. The main content area displays a form titled "Citation" with a tabbed interface. The "Organization" tab is selected, showing the "Organization-Defined Citations" section. The form includes the following fields and values:

- Organization: DEMOTEST
- The Commission for a Good Clean Chesapeake Bay
- Basic Citation Information:
 - ID*: BLYTHE1
 - Title Name*: 1283_test1
 - Author Name*: sir1283
 - Publishing Organization Name*: test ed
 - Publication Year*: 2003
 - Reference ID:
 - Volume and Page No.*: test
 - Comments: test

The bottom of the form displays "Citation ID" and "Record: 1/7".

National Citations

Oracle9iAS Forms Services - Netscape

File Edit View Go Communicator Help

Bookmarks Location: 9610.sdc-moses.com:7778/forms90/190servlet?form=CDX MENU fmx&width=750&height=450 What's Related

Action Edit Query Block Record Form Window Help

Citation

Organization DEMOTEST The Commission for a Good Clean Chesapeake Bay

Organization-Defined Citations National Citations

ID	Title Name
	40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean
	40 CFR Part 141, (National Primary Drinking Water Regulations)
	40 CFR Part 141, Subpart E - Special Regulations, Including Monitoring Regulations and Prohibitions
	40 CFR Part 141, Subpart E - Special Regulations, Including Monitoring Regulations and Prohibitions
	40 CFR Part 143, (National Secondary Drinking Water Regulations)
	40 CFR Part 261, Subpart C - Characteristics of Hazardous Waste.
	40 CFR Part 261.24, (Toxicity Characteristic)
	40 CFR Part 261.31, (Hazardous Wastes from Non-Specific Sources)
	40 CFR Part 261.32, (Hazardous Wastes from Specific Sources)
	40 CFR Part 261.33, (Acute Hazardous Wastes)

National Citation ID

Record: 1/?

<OSC>

LOVs:

Citation Selection List

Citation Selection List

Find %

ID Code	Title Name
SIR1349	T
SUE 2	sue title name 2
SUE ID 1	sue title name 1
TEST1	test1

Find OK Cancel

STORET
Web Registration Application Specification
SIR: 1335

Module Name: CDX_STATION

Module Components: ORG, STATION, ALP, OCEAN, ESTUARY, GREATLAKE

Last Update: January 30, 2003

Processing Overview/Description:

This form processes the Station information for a selected Organization. The Organization ID is passed in from the CDX_MENU form. The Organization ID and Name are displayed and cannot be updated. Basic Station information may be inserted, updated, or deleted. Only station types equal to *POINT OF RECORD are allowed. Query of a different Organization is not allowed from this form.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG ID	Organization		20	L	Look Up table; disallow query
	NAME	<null>		70	L	Look Up table; disallow query
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID
TSMSTATN	IDENTIFICATION_CD	ID*	Basic Station Information	30	L	Data entry; query
	NAME	Name*		70	L	Data entry; query
	DESCRIPTION_TEXT	Description		85	L	Data entry; query

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	D_COMPLETE_FLAG	n/a				System Generated - 'Y'
	D_DELETE_FLAG	n/a				System Generated - 'N'
	TSMORGAN_IS_NUMBER	n/a				Foreign key to TSMORGAN
	TSMVSTC_IS_NUMBER	n/a				Foreign key to TSMVSTC
	TSMVSTC_ORG_ID	n/a				Foreign key to TSMVSTC
TSMVSTC	PRIMARY_TYPE_CD	Primary Type*	Basic Station Information	33	L	Data entry; query
	SECONDARY_TYPE_CD	Secondary Type*		33	L	Data entry; query
	TSMVSTC_IS_NUMBER	n/a				Look up table
	TSMVSTC_ORG_ID	n/a				
TSMALP	TSMALP_ORG_ID	n/a				System generated - based on ORG_ID passed in
	TSMALP_IS_NUMBER	n/a				System generated - based on TSMEISN.IS_NUMBER
	TYPE_CODE	n/a				System generated - '*POINT OF RECORD'
	SEQUENCE_NUMBER	n/a				System generated - 0
	ELEVATION_MSR	Measure	Elevation	11	L	Data entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	ELVTN_UNT_CD			5	L	Data entry
	ELVTN_METHOD_CD	n/a				hidden; used to lookup and display the Elevation Method description from TSMMADE.
	ELEVATION_DATUM_CD	n/a				hidden; used to lookup and display the Elevation Datum description from TSMMADE.
	LAT_DEC_DEG_MS R	Latitude*	Latitude/Longitude (Dec. Deg.)	10	R	Data entry
	LAT_DIRECTION	n/a				System generated - 'N'
	LAT_DEGREE_MSR	n/a				System generated - based on LAT_DEC_DEG_MSR
	LAT_MINUTE_MSR	n/a				System generated - based on LAT_DEC_DEG_MSR
	LAT_SECOND_MSR	n/a				System generated - based on LAT_DEC_DEG_MSR

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	GPS_LAT_DEGREE_MSR	n/a				System generated - based on LAT_DEC_DEG_MSR
	GPS_LAT_MINUTE_MSR	n/a				System generated - based on LAT_DEC_DEG_MSR
	LONG_DEC_DEG_MSR	Longitude*	Latitude/Longitude (Dec. Deg.)	11	R	Data entry
	LONG_DIRECTION	n/a				System generated - 'W'
	LONG_DEGREE_MSR	n/a				System generated - based on LONG_DEC_DEG_MSR
	LONG_MINUTE_MSR	n/a				System generated - based on LONG_DEC_DEG_MSR
	LONG_SECOND_MSR	n/a				System generated - based on LONG_DEC_DEG_MSR
	GPS_LONG_DEG_MSR	n/a				System generated - based on LONG_DEC_DEG_MSR
	GPS_LONG_MIN_MSR	n/a				System generated - based on LONG_DEC_DEG_MSR

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	GEOPSTNG_METHOD_CD	n/a				hidden; used to lookup and display the Geopositioning Method description from TSMRAD.
	GEOPSTNG_DATUM_CD	n/a				hidden; used to lookup and display the Geopositioning Datum description from TSMRAD.
	GEOPSTNG_SCALE_TXT	Scale		20	L	Data entry
	TSMSTATN0ORG_ID	n/a				Foreign key to TSMSTATN
	TSMSTATN0IS_NUMBER	n/a				Foreign key to TSMSTATN
	TSMGEOPA_ORG_ID	n/a				Foreign key to TSMGEOPA to lookup State
	TSMGEOPA_IS_NUMBER	n/a				Foreign key to TSMGEOPA to lookup State
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate
TSMGEOPA	TSMGEOPA_IS_NUMBER	n/a				Look up table
	TSMGEOPA_ORG_ID	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	COUNTY_NAME	County*	State/County	28	L	Data entry
	STATE_NAME	State*		25	L	Data entry
TSMOCNLC	TSMALP_ORG_ID	n/a				Foreign key to TSMALP
	TSMALP_IS_NUMB ER	n/a				Foreign key to TSMALP
	NAME	Ocean Name*		16	L	Data entry
	SHORE_RELATION	Shore Relation*		12	L	Data entry
	ADDTNL_LOC_NAME	Additional Location Name		42	L	Data entry
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate
TSMESTLC	TSMALP_ORG_ID	n/a				Foreign key to TSMALP
	TSMALP_IS_NUMB ER	n/a				Foreign key to TSMALP
	OTHER_ESTUARY_NAME	Other Estuary		33	L	Data entry
	TSMESTRY_ORG_ID	n/a				Foreign key to TSMESTRY
	TSMESTRY_IS_NU MBER	n/a				Foreign key to TSMESTRY
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMESTRY	NAME	Primary Estuary* / Secondary Estuary		33	L	Look up table for name of Primary/Seco ndary Estuary
	STATE_PROVINCE_ NAME	n/a				Look up table for Estuary State
	COUNTRY_CODE	n/a				Select using 'US'
	PRIMARY_INDICAT OR	n/a				hidden; used to determine primary or secondary estuary
	TSMESTRY_IS_NU MBER	n/a				Look up table
	TSMESTRY_ORG_ID	n/a				
	TSMESTRY0IS_NU MBER	n/a				Foreign key to TSMESTRY
	TSMESTRY0ORG_ID	n/a				
TSMGLL	TSMALP_ORG_ID	n/a				Foreign key to TSMALP
	TSMALP_IS_NUMB ER	n/a				Foreign key to TSMALP
	NAME	Great Lake*		17	L	Data entry
	ADDTNL_LOC_NAM E	Additional Location Name		32	L	Data entry
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORG_ID passed in
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Station	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button (aflist.gif) to the right of:

- Station ID.
- Primary Type.
- Geopositioning Method and Datum.
- Elevation Method and Datum.
- State and County.
- Estuary State.
- Primary Estuary.
- Secondary Estuary.

Trigger/Events Processing:

Module Component/Item	Trigger	Event
STATION	PRE_INSERT	Check for duplicate station ID; populate non-displayed mandatory fields.
	PRE-UPDATE	Populate date/time and user ID field.
	WHEN-NEW-RECORD-INSTANCE	Set parameter to original station ID; enable tabs logic; set update property for station type. Disable ID LOV when not in Enter-Query mode (SIR 1374).
	ON-MESSAGE	Display appropriate message for LOV.
	POST-INSERT	Insert a row into TSMFCLTY table.
	PRE-QUERY	Ensure IDs with "_" will be retrieved correctly.
	WHEN-NEW-BLOCK-INSTANCE	Obtain block name.

Module Component/Item	Trigger	Event
	KEY-DELREC	Verify that station may be deleted; prompt user for delete confirmation. If delete confirmed, process station delete.
STATION/ IDENTIFICATION_CD	WHEN-VALIDATE-ITEM	Check for duplicate ID. Revert ID back to original if found.
	KEY-PREV-ITEM	Do nothing.
	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting an ID. Upon execute query, disable ID LOV (SIR 1374).
STATION/ DESCRIPTION_TEXT	KEY-NEXT-ITEM	Go to ALP block.
STATION/ L_VSTC_PRIMARY_TYPE_CD	WHEN-NEW-ITEM-INSTANCE	Enable tabs based on station type.
	KEY-LISTVAL	Display list of value and advance to next item.
	POST-TEXT-ITEM	Disable tabs; set property for station type.
STATION/ L_VSTC_SECONDARY_TYPE_CD	WHEN-VALIDATE-ITEM	Clear information message.
ALP	KEY-DELREC	Verify that station may be deleted; prompt user for delete confirmation. If delete confirmed, process station delete.
	PRE-INSERT	Process ALP record – verify that point of record does not already exist; validate elevation data; derive latitude/longitude fields based on entered values; update TSMEISN table; set non-displayed mandatory fields.
	PRE-UPDATE	Validate elevation data; derive latitude/longitude fields based on entered values; set date/time and userid.

Module Component/Item	Trigger	Event
	KEY-NXTBLK	Navigate to next block based on station type; if station type is not 'Ocean', 'Estuary', or 'Great Lake' then go to Station block.
ALP/ LAT_DEC_DEG_MSR	KEY-PREV-ITEM	Go to Station block.
ALP/ GEOPSTNG_METHOD_CD	POST-CHANGE	Populate Geopositioning Method display field with the description.
ALP/ GEOPSTNG_DATUM_CD	POST-CHANGE	Populate Geopositioning Datum display field with the description.
ALP/ EMETHOD	WHEN-VALIDATE-ITEM	Clear ELVTN_METHOD_CD if Elevation Method is blanked out.
ALP/ EDATUM	WHEN-VALIDATE-ITEM	Clear ELEVATION_DATUM_CD if Elevation Datum is blanked out.
ALP/ ELVTN_METHOD_CD	POST-CHANGE	Populate Elevation Method display field with the description.
ALP/ ELEVATION_DATUM_CD	POST-CHANGE	Populate Elevation Datum display field with the description.
ALP/ L_GEOP_AREA_STATE_NAME	WHEN-VALIDATE-ITEM	Set up the county LOV based on state selected.
	POST-CHANGE	Default the county to 'NOT APPLICABLE' if none is selected; populate the foreign keys.
ALP/ L_GEOP_AREA_COUNTY_NAME	POST-CHANGE	Populate the foreign keys for the state/county selected.
OCEAN	PRE-INSERT	Process ocean record.
	PRE-UPDATE	Update ocean record.
	KEY-PRVBLK	Go to Station block.
	KEY-NXTBLK	Go to Station block.
	KEY-DELREC	Verify that station may be deleted; prompt user for delete confirmation. If delete confirmed, process station delete.
	ON-ERROR	SIR 1396 - Replace default message text for ERR # 41106.

Module Component/Item	Trigger	Event
	WHEN-NEW-BLOCK-INSTANCE	Get block name.
OCEAN/ NAME	KEY-PREV-ITEM	Navigate to Addition location name field.
OCEAN/ ADDTNL_LOC_NAME	KEY-NEXT-ITEM	Navigate to name field.
ESTUARY	POST-QUERY	Populate the Estuary State display field.
	PRE-INSERT	Process Estuary record.
	PRE-UPDATE	Update Estuary record.
	KEY-PRVBLK	Go to Station block.
	KEY-NXTBLK	Go to Station block.
	KEY-DELREC	Verify that station may be deleted; prompt user for delete confirmation. If delete confirmed, process station delete.
	ON-MESSAGE	Suppress message.
	WHEN-NEW-BLOCK-INSTANCE	Get block name.
	KEY-LISTVAL	Force to enter Geopositioning information before displaying list of values.
ESTUARY/ TSMESTRY_IS_NUMBER	POST-CHANGE	Populate Estuary unbound items.
ESTUARY/ L_ESTUARY_NAME	KEY-PREV-ITEM	Override default logic.
ESTUARY/ STATE	POST-CHANGE	If in query mode, populate the other Estuary display fields.
	KEY-PREV-ITEM	Navigate to Other Estuary Name field.
ESTUARY/ OTHER_ESTUARY_NAME	KEY-NEXT-ITEM	Navigate to Estuary State field.
GREATLAKE	PRE-INSERT	Process Great Lake record.
	PRE-UPDATE	Update Great Lake record.
	KEY-PRVBLK	Go to Station block.

Module Component/Item	Trigger	Event
	KEY-NXTBLK	Go to Station block.
	KEY-DELREC	Verify that station may be deleted; prompt user for delete confirmation. If delete confirmed, process station delete.
	ON-ERROR	SIR 1396 - Replace default message text for ERR # 41106.
	WHEN-NEW-BLOCK-INSTANCE	Get block name.
GREATLAKE/ NAME	KEY-PREV-ITEM	Navigate to Addition location name field.
GREATLAKE/ ADDTNL_LOC_NAME	KEY-NEXT-ITEM	Navigate to name field.
ORG	KEY_PRVBK	Navigate to previous block based on station type.
ORG/ NAME	KEY-NEXT-ITEM	Navigate to next appropriate block.
Module	ON-MESSAGE	Set the LOV message.
	WHEN-NEW-FORM-INSTANCE	Disable Ocean, Estuary, and Great Lake tabs; Navigate to Station block and execute query.
	PRE-QUERY	Set up the default Where clause to 'rpad' the Org ID parameter that is passed in.
	KEY-PRVREC	If data changed, then force save now; else: Go to Station block; go to previous record.
	KEY-NXTREC	If data changed, then force save now; else: Go to Station block; go to next record.
	KEY-COMMIT	Set station type property and perform form commit.
	KEY-CREREC	Force to save changes.
	KEY-DUPREC	Duplicate record at master and child blocks (SIR 1397/ 1398).

Module Component/Item	Trigger	Event
	KEY-NEXT-ITEM	Navigate to next item.
	KEY-PREV_ITEM	Navigate to previous item.
	ON-ERROR	Clear error message.
	ON-MESSAGE	Clear message.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).

Business Rules:

- Only stations that have all required fields entered (“Complete”stations) can be displayed or inserted into the system.
- When a station is deleted, all dependent records are deleted. That is, deletion of a station means that basic station information and its related geographic information will be deleted.
- Station ID must be unique within the Organization.
- Allow query based on Station ID; use an LOV.
- County list should be based on the State selected.
- If any one Elevation field is entered, then all other Elevation fields must be entered.
- Geopositioning Method and Datum are mandatory fields. Display the Descriptions, but store ID_CODE in Absolute Location Point (ALP) table.
- Only POR location information may be viewed/entered/updated.
- Allow only States in the US.
- Lat/Long Degrees, Minutes, Seconds, Lat/Long Decimal Minute Degrees and Decimal Minutes must be derived from the Lat/Long Decimal Degrees entered.
- Station type of Ocean, Estuary, Great Lake, Facility, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Superfund Site, Spring and Well cannot be changed to a different station type.
- Lat/Long - Direction Defaults - N/S to North; E/W to West.
- Primary/Secondary Station types - show all in a single list, sorted in ascending alphabetic order.
- Disallow entry into Estuary, Great Lake, and/or Ocean tabs based on Station primary type.
- Scale is required if Geopositioning Method is Interpolation Map.
- Primary Estuary list should be based on the Estuary State selected; Secondary Estuary list should be based on the Primary Estuary selected.

Error Handling:

- Duplicate checking to ensure Station ID is unique within a given Organization.
- Error if any mandatory field not provided.
- Error if only partial Elevation information is provided (must enter all or none).
- Error if attempting to change Station type of Ocean, Estuary, Great Lake, Facility, CERCLA Superfund Site, Spring or Well to a different station type.
- On entry of new stations, ensure that all Basic Station Information are entered before allowing entry of applicable information on another tab page.

Delete Rules:

- When a Station is deleted, cascade delete any Reference Labels, Wells, Springs, Permanent Grids, Permanent Transects, Absolute Location Points, Facilities, Addresses, and Electronic Addresses associated with it.
- Disallow delete of a Station if a Project Station Assignment is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- Station ID LOV button is disabled when form is in entry/update mode; enabled when in query mode.
- Ocean tab should be enabled for station type of Ocean; Estuary and Great Lake tabs should be disabled. Similar types of enabling/disabling should occur for station types of Estuary and Great Lake.
- Primary/Secondary type should not be updateable if station type is Ocean, Estuary, Great Lake, Facility, CERCLA Superfund Site, Spring, or Well.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

- CONVERT_LAT_LONG.
- VALIDATE_DATA.
- DISABLE_TABS.
- WRN_TSMSTATN.
- POPULATE_ESTUARY_NAMES.
- SET_STA_TYPE_PROP.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_STATION.fmb	CDX_STATION.fmx	STORETLIBFRM.olb
<u>Template</u>	<u>Menu</u>	
STORTEMPLATE.fmb	MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	LWCFLN	UPPER
	PAGCWD	100
	ITMPLM	A
	GRPBWD	0
	GRPDEC	RECTANGLE
	GRPFTS	0
	GRPMAR	0.5
	BLKJUS	LEFT
	BLKTFB	NO

Level	Short_Name	Settings
	DVHILO	Y
	LOVVAL	Y
MC - Station	BLKDEC	NONE
	BLKHDS	0
	BLKMLF	1
	GRPFTS	0
LOV Component - State_LOV County_LOV All other LOVs	Height	15
	Height	15
	Width/Height	110 x 18

Window Snapshots:

Basic Station Information

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address http://storet-111592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx Go

Action Edit Query Block Record Form Window Help

Station

Organization SIMPSON STORET Test

Basic Station Information Ocean Estuary Great Lake

ID* SUE STATION 2

Name Station number 2

Primary Type* Estuary Secondary Type* None

Description sue description

Latitude/Longitude (Dec. Deg.)

Latitude* 3.0508333 Longitude* -3.0508333

Geopositioning

Method* GPS Carrier Phase Static Relative Position

Datum* American Samoa Datum

Scale 1

Elevation

Method Precise Leveling-Bench mark

Datum Elevation From Mean Sea-Level

Measure 222 ft

State/County

State* ARKANSAS County* NOT APPLICABLE

Station ID

Record: 5/? <OSC>

Applet started. Internet

Note: The layout of this form MUST be fine-tuned using Developer and saved as a .fmb file. All functional changes are to be done in Designer. After code changes, generate the form using “Preserve Layout” option and use the saved .fmb file as the layout source file.

Ocean

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Station

Organization SIMPSON STORET Test

Insert Record

Basic Station Information Ocean Estuary Great Lakes

Ocean Name* Pacific Ocean Shore Relation Near Shore

Additional Location Name

Insert Record

Record: 1/1

Applet started. Internet

Estuary

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: `http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains icons for Back, Forward, Home, Search, Favorites, Media, and other standard browser functions.

The main content area displays a web form titled "Station". The form has a header section with "Organization" set to "SIMPSON" and "STORET Test". Below this, there are tabs for "Basic Station Information", "Ocean", "Estuary", and "Great Lakes". The "Estuary" tab is currently selected.

The "Estuary" tab contains the following fields:

- State*: Delaware
- Primary Estuary*: Delaware Bay
- Secondary Estuary: Delaware River
- Other Estuary: Delaware streams

Each of these fields has a dropdown arrow icon to its right. Below the form fields, there is a status bar that reads "Estuary State" and "Record: 1/1". To the right of the status bar, there are buttons for "... List of Valu..." and "<OSC>".

The bottom of the browser window shows a status bar with the text "Applet started." and an "Internet" icon.

Great Lake

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W Go

Address http://storet-111592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Station

Organization SIMPSON STORET Test

Basic Station Information Ocean Estuary Great Lake

Great Lake* Lake Superior

Additional Location Name other

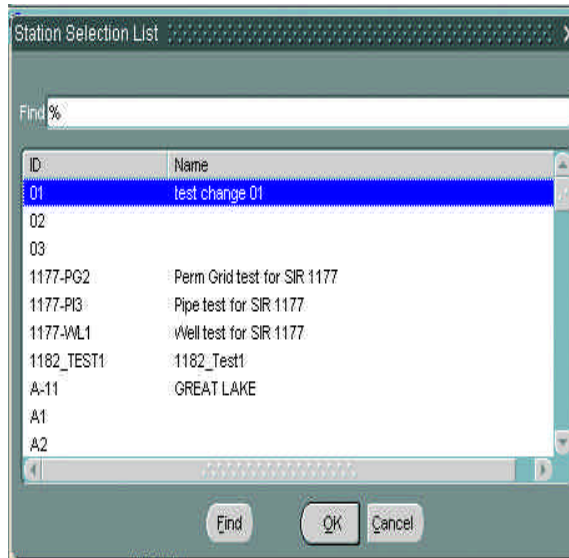
Great Lake Name

Record: 1/1

Applet started. Internet

LOVs:

Station Selection List



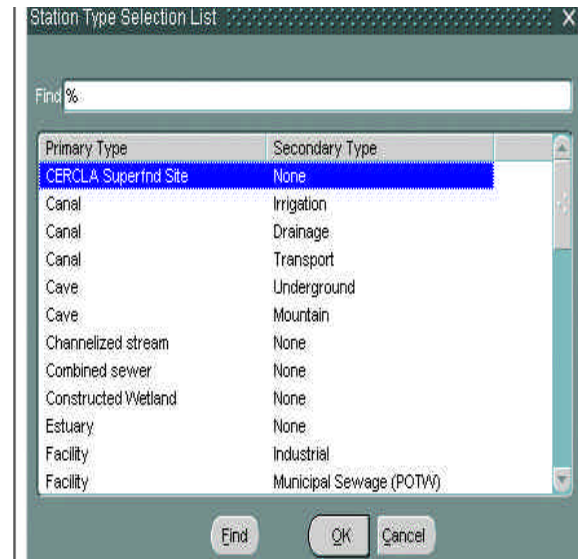
Station Selection List

Find %

ID	Name
01	test change 01
02	
03	
1177-PG2	Perm Grid test for SIR 1177
1177-PI3	Pipe test for SIR 1177
1177-WL1	Well test for SIR 1177
1182_TEST1	1182_Test1
A-11	GREAT LAKE
A1	
A2	

Find OK Cancel

Station Type Selection List



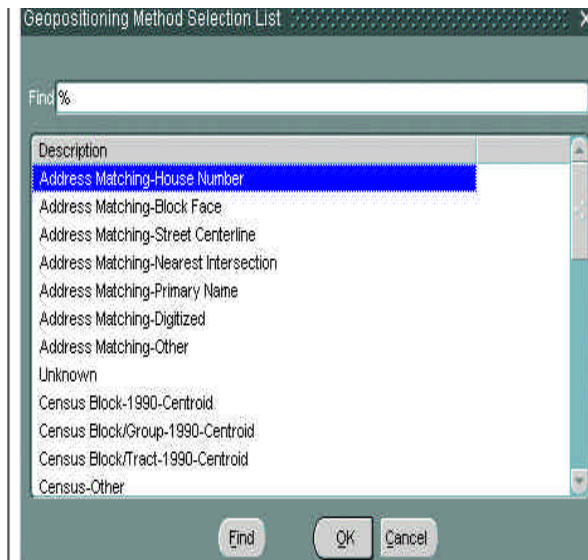
Station Type Selection List

Find %

Primary Type	Secondary Type
CERCLA Superfund Site	None
Canal	Irrigation
Canal	Drainage
Canal	Transport
Cave	Underground
Cave	Mountain
Channelized stream	None
Combined sewer	None
Constructed Wetland	None
Estuary	None
Facility	Industrial
Facility	Municipal Sewage (POTW)

Find OK Cancel

Geopositioning Method Selection List



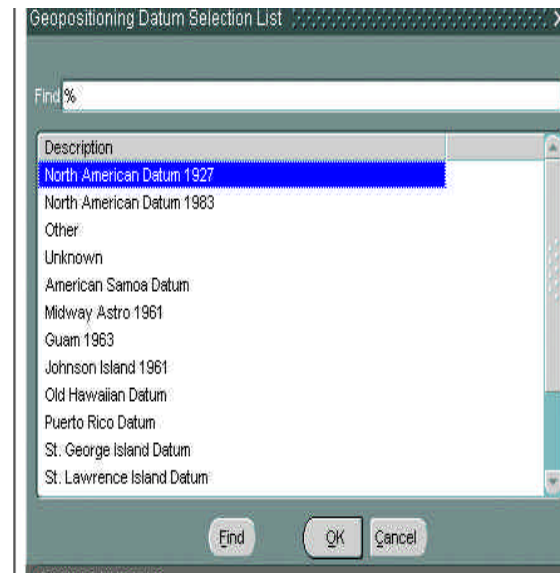
Geopositioning Method Selection List

Find %

Description
Address Matching-House Number
Address Matching-Block Face
Address Matching-Street Centerline
Address Matching-Nearest Intersection
Address Matching-Primary Name
Address Matching-Digitized
Address Matching-Other
Unknown
Census Block-1990-Centroid
Census Block/Group-1990-Centroid
Census Block/Tract-1990-Centroid
Census-Other

Find OK Cancel

Geopositioning Datum Selection List



Geopositioning Datum Selection List

Find %

Description
North American Datum 1927
North American Datum 1983
Other
Unknown
American Samoa Datum
Midway Astro 1961
Guam 1963
Johnson Island 1961
Old Hawaiian Datum
Puerto Rico Datum
St. George Island Datum
St. Lawrence Island Datum

Find OK Cancel

Elevation Method Selection List

Elevation Method Selection List

Find %

Description
Topographic Map Interpolation
GPS Code (Pseudo Range) Precise Position
Classical Surveying Techniques
GPS Code (Pseudo Range) Differential
Photogrammetric
Altimetry
GPS Carrier Phase Kinematic Relative Position
GPS Carrier Phase Static Relative Position
GPS Code (Pseudo Range) Standard Position (SA Off)
GPS Code (Pseudo Range) Standard Position (SA On)
Leveling-Non Bench Mark Control Points
Other

Find OK Cancel

Elevation Datum Selection List

Elevation Datum Selection List

Find %

Description
National Geodetic Vertical Datum of 1929
North American Vertical Datum of 1988
Local Tidal Datum
Elevation From Mean Sea-Level
Other
Unknown

Find OK Cancel

County Selection List

County Selection List

Find %

County
NOT APPLICABLE
ALEUTIAN ISLANDS
ALEUTIANS EAST (B)
ALEUTIANS WEST (C)
ANCHORAGE (B)
BETHEL (C)
BRISTOL BAY (B)
DENALI (B)
DILLINGHAM (C)
FAIRBANKS-NORTH STA...
HAINES (B)
JUNEAU (B)

Find OK Cancel

State Selection List

State Selection List

Find %

State
ALABAMA
ALASKA
AMERICAN SAMOA
ARIZONA
ARKANSAS
BAKER ISLAND
CALIFORNIA
COLORADO
CONNECTICUT
DELAWARE
DISTRICT OF COLUMBIA
FLORIDA

Find OK Cancel

Estuary State Selection List

Estuary State Selection List

Find %

State
Alabama
Alaska
Alaska-Kodiak Is.
California
Connecticut
Delaware
Florida
Georgia
Guam
Hawaii-Hawaii
Hawaii-Kauai
Hawaii-Lanai

Find OK Cancel

Primary Estuary Selection List

Primary Estuary Selection List

Find %

Primary Estuary
Atchafalaya Bay
Barataria Bay
Bastian Bay
Big Constance Lake
Breton Sound
Calcasieu Lake
Caminada Bay
Chandeleur Sound
Flat Lake
Grand Bay
Grand Lake
Gulf of Mexico

Find OK Cancel

Secondary Estuary Selection List

Secondary Estuary Selection List

Find %

Secondary Estuary
Bay Crabe
Black Bay
California Bay
Eloi Bay
Quarantine Bay

Find OK Cancel

STORET
Web Registration Application Specification
SIR: 1336

Module Name: CDX_COOP

Module Components: COOPORG, ADDRESS, EADDRESS, ORG, PERSONNEL,
EADDRESS_PERSON

Last Update: January 28, 2003

Processing Overview/Description:

This form processes information for the Cooperating Organizations and Personnel associated with a given Organization. The Organization ID is passed in from the CDX_MENU form. Basic cooperating organization, personnel, mailing address and phone number information may be inserted, updated, or deleted. Organization ID and Name are displayed as header information and cannot be updated. Query of a different Organization is not allowed.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	NAME	<null>		70	L	Look Up table; block modification
	ORG_ID	Organization		20	L	Look Up table; block modification
	TSMORGAN_IS_NUMBER	n/a				Look Up table; block modification

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMCPORG	NAME	Name*	Basic Cooperating Organization Information	90	L	Data entry
	POC_NAME	Point of Contact		50	L	Data entry
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	D_USERID_CODE	n/a				System generated - logon ID
	TSMCPORG_IS_NUMBER	n/a				System generated from TSMEISN
	TSMCPORG_ORG_ID	n/a				System generated from ORG_ID
	TSMORGAN_IS_NUMBER	n/a				FK to TSMORGAN
TSMADDR	LINE_ONE_TEXT	Line 1	Mailing Address	50	L	Data entry
	LINE_TWO_TEXT	Line 2		50	L	Data entry
	LINE_THREE_TEXT	Line 3		50	L	Data entry
	LINE_FOUR_TEXT	Line 4		50	L	Data entry
	TYPE_CODE	n/a				System generated - 'Mailing'
	COUNTRY_CODE	n/a				System generated - - 'US'
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	D_USERID_CODE	n/a				System generated - logon ID

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMADDR_ORG_ID	n/a				FK to TSMCPORG
	TSMCPORG_IS_NUMBER	n/a				FK to TSMCPORG
	TSMCPORG_ORG_ID	n/a				
TSMEADDR	ADDRESS_TEXT	Number	Phone	15	L	Data entry
	TYPE_CODE	n/a				System generated - 'Phone'
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	D_USERID_CODE	n/a				System generated - logon ID
	TSMCPORG_ORG_ID	n/a				FK to TSMCPORG
	TSMEADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMEADDR_ORG_ID	n/a				FK to TSMORGAN or FK to TSMPERSON
	TSMORGAN_IS_NUMBER	n/a				FK to TSMORGAN
	TSMPERSON_IS_NUMBER	n/a				FK to TSMPERSON
	TSMPERSON_ORG_ID	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMPERSON	FIRST_NAME	First Name*	Basic Personnel Information	62	L	Data entry
	LAST_NAME	Last Name*		82	L	Data entry
	AFFILIATION_TEXT	Affiliation		60	L	Data entry
	ACTIVE_INDICATR_CD	n/a				System generated - 'Y'
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	D_USERID_CODE	n/a				System generated - logon ID
	TSMORGAN_IS_NUMBER	n/a				FK to TSMORGAN
	TSMPERSON_IS_NUMBER	n/a				System generated from TSMEISN
	TSMPERSON_ORG_ID	n/a				System generated from ORG_ID
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORGAN.ORG_ID
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Cooperating Org/Personnel	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button to the right of Cooperating Organization Name and Personnel Last Name (aflist.gif).

Trigger/Events Processing:

Module Component/Item	Trigger	Event
Module	KEY-COMMIT	Commit form. Go the first accessible field on the calling tab.
	KEY-DUPREC	Duplicate record.
	KEY-ENTQRY	Validate record for changes. If changes, prompt user to commit Enable Cooperating Organization Name and Personnel Last Name LOVs (SIR 1374).
	KEY-EXEQRY	Disable LOV.
	PRE-QUERY	Set up default where clause to 'rpad' the ORG ID with spaces.
	WHEN-WINDOW-ACTIVATED	Block messages. Disable record lock.
	WHEN-NEW-FORM-INSTANCE	Execute Query; Go to COOPORG block. Disable Cooperating Organization Name and Personnel Last Name LOVs when not in Enter-Query mode (SIR 1374).
	KEY-EXIT	Validate form before exit (SIR 1397).
ADDRESS	PRE-INSERT	Process Address record - check for duplicates.
	PRE-UPDATE	Update Address Audit.
	KEY-CREREC	Block the creation of multiple addresses for a single cooperating organization.
	KEY-NXTREC	Have records scroll at the cooperating organization level instead of at the address level.
	KEY-PRVREC	Have records scroll at the cooperating organization level instead of at the address level.
ADDRESS.LINE_FOUR_TEXT	KEY-NEXT-ITEM	Move cursor to end of the EADDRESS block.

Module Component/Item	Trigger	Event
ADDRESS.LINE_ONE_TEXT	KEY-PREV-ITEM	Move cursor to end of the COOPORG block.
COOPORG	PRE-INSERT	Process COOPORG record.
	PRE_UPDATE	Update COOPORG record.
	ON-MESSAGE	Replace Text of Message - replaces default Oracle message when LOV is pressed while a record is displayed.
	WHEN-NEW-RECORD-INSTANCE	Populate Original Name - populate parameter value; Disable Cooperating Organization Name LOV when not in Enter-Query mode (SIR 1374).
	KEY-CREREC	Check for Name Change - If Name changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Check for Name Change - If Name changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	Check for Name Change - If Name changed, do duplicate checking. If found, then force save now.
	WHEN-NEW-BLOCK-INSTANCE	Get block name.
COOPORG.POC_NAME	KEY-NEXT-ITEM	Move cursor to start of the ADDRESS block.
COOPORG.NAME	KEY-PREV-ITEM	Move cursor to end of the EADDRESS block.
	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting a Cooperating Organization Name. Upon execute query, disable Name LOV (SIR 1374).
	WHEN-VALIDATE-ITEM	Check for duplicate name - Cooperating Organization Name must be unique within an organization. Revert to original Name if duplicate.

Module Component/Item	Trigger	Event
EADDRESS	PRE-INSERT	Process Eaddress record for a COOPORG.
	PRE-UPDATE	Update Eaddress record for a COOPORG.
	KEY-CREREC	Block the creation of multiple addresses for a single cooperating organization.
	KEY-NXTREC	Have records scroll at the cooperating organization level instead of at the address level.
	KEY-PRVREC	Have records scroll at the cooperating organization level instead of at the address level.
EADDRESS.ADDRESS_TEXT	KEY-NEXT-ITEM	Move cursor to start of the COOPORG block.
	KEY-PREV-ITEM	Move cursor to end of the ADDRESS block.
	WHEN-VALIDATE-ITEM	Override record status if Address_text is blank (SIR 1397).
EADDRESS_PERSON	PRE-INSERT	Process Eaddress record for a Person.
	PRE-UPDATE	Update Eaddress record for a Person.
	KEY-CREREC	Block the creation of multiple addresses for a single cooperating organization.
	KEY-NXTREC	Have records scroll at the personnel level instead of at the address level.
	KEY-PRVREC	Have records scroll at the personnel level instead of at the address level.
EADDRESS_PERSON.ADDRESS_TEXT	KEY-NEXT-ITEM	Move cursor to start of the PERSONNEL block.
	KEY-PREV-ITEM	Move cursor to end of the PERSONNEL block.
	WHEN-VALIDATE-ITEM	Override record status if Address_text is blank (SIR 1397).

Module Component/Item	Trigger	Event
PERSONNEL	PRE-INSERT	Process Personnel record.
	PRE-UPDATE	Update Personnel record.
	ON-MESSAGE	Replace Text of Message - replaces default Oracle message when LOV is pressed while a record is displayed.
	WHEN-NEW-RECORD-INSTANCE	Populate Original First and Last Name - populate parameter values. Disable Personnel Last Name LOV when not in Enter-Query mode (SIR 1374).
	KEY-CREREC	Check for Name Change - If First Name and/or Last Name changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Check for Name Change - If First Name and/or Last Name changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	Check for Name Change - If First Name and/or Last Name changed, do duplicate checking. If found, then force save now.
	WHEN-NEW-BLOCK-INSTANCE	Get block name.
	KEY-DELREC	Check for Delete referential integrity.
	PRE-DELETE	Check business rules and delete child records.
PERSONNEL.AFFILIATION_TEXT	KEY-NEXT-ITEM	Move cursor to start of the EADDRESS_PERSON block.
PERSONNEL.LAST_NAME	KEY-PREV-ITEM	Move cursor to end of the EADDRESS_PERSON block.
	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting a Last Name. Upon execute query, disable Last Name LOV (SIR 1374).

Module Component/Item	Trigger	Event
	WHEN-VALIDATE-ITEM	Check for duplicate name - The combination of First Name and Last Name must be unique within an organization; if duplicate found, then revert First Name/Last Name to back to original values.
PERSONNEL.FIRST_NAME	WHEN-VALIDATE-ITEM	Check for duplicate name - The combination of First Name and Last Name must be unique within an organization.
ORG.NAME	KEY-NEXT-ITEM	Navigate to next block based on the displaying tab (cooperating organization or personnel tab).

Business Rules:

- Name is mandatory for a Cooperating Organization.
- The combination of First Name and Last Name are mandatory for a person.
- Cooperating Organization Name must be unique within the Organization.
- Person First Name and Last Name must be unique within the Organization.
- Only allow one mailing address per Cooperating Organization.
- Only allow one phone number per Cooperating Organization.
- Only allow one phone number per Person.
- Organization Name and ID cannot be updated.

Error Handling:

- Duplicate checking to ensure Cooperating Organization Name and the combination of Person First and Last Name are unique within a given Organization.
- Error if one of the following mandatory fields are not provided: Cooperating Organization Name, Person First Name, and Person Last Name.

Delete Rules:

- When a Person is deleted, cascade delete any Electronic Addresses and Person Role Assignments associated with it.

- When a Cooperating Organization is deleted, cascade delete any Addresses, Electronic Addresses, Field Activity Cooperating Organization Assignments, and Project Cooperating Organization Assignments associated with it.
- Disallow delete of Person if a Field Activity Person Assignment, Field QC Sample Person Assignment, or Person Project Assignment is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- LOV buttons for Cooperating Organization Name and Personnel Last Name are disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

Ⓒ CHECK_RI_TSMPEPSON.

Configurable Item(s):

<u>Source</u> CDX_COOP.fmb	<u>Executable</u> CDX_COOP.fmx	<u>Library</u> STORETLIBFRM.olb
<u>Template</u> STORTEMPLATE.fmb	<u>Menu</u> MENUMDEFs.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Item Groups - ADDRESS.ADDRESS EADDRESS.EADDRESS EADDRESS_PERSON.EADD RESS_PERSON COOPORG.COOPORG PERSONNEL.PERSONNEL	GRPDEC	INSET RECTANGLE
	GRPFTS	0.5
	GRPHDS	0.5
	GRPTLJ	CENTER
Module Component - COOPORG	DELWRN	NEVER
Module	BLKHDS	1

Window Snapshots:

Cooperating Organization

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Cooperating Organization/Personnel

Organization SIMPSON STORET Test

Cooperating Organization Personnel

Basic Cooperating Organization Information

Name* sue

Point of Contact sue

Mailing Address

Line 1 line 1

Line 2 line 2

Line 3 line 3

Line 4 line 4

Phone Number (999) 999-9998

Coop Org Name

Record: 2/?

Applet started.

Internet

Personnel

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W... X

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx Go

Action Edit Query Block Record Form Window Help

Cooperating Organization/Personnel

Organization

Cooperating Organization Personnel

Basic Personnel Information

Last Name* [v]

First Name*

Affiliation

Phone Number

Person Last Name

Record: 1/? ... <OSC>

Applet started. Internet

LOVs:

Cooperating Organization List

The screenshot shows a dialog box titled "Cooperating Organization List". At the top is a search bar labeled "Find %". Below it is a list box with a header "Name". The list contains the following items: "K4" (highlighted in blue), "Maryland Department of Natural Resources", "Mission Oriented Systems Engineering Support", "Virginia Department of Environmental Quality", and "k11". At the bottom of the dialog are three buttons: "Find", "OK", and "Cancel".

Name
K4
Maryland Department of Natural Resources
Mission Oriented Systems Engineering Support
Virginia Department of Environmental Quality
k11

Personnel List

The screenshot shows a dialog box titled "Personnel List". At the top is a search bar labeled "Find %". Below it is a list box with two columns: "Last Name" and "First Name". The list contains the following items:

Last Name	First Name
12345	test
Boyd	Joyce
Brady	Don
Chimaladinne	Anjan
Craig	Dora
DeWald	Thomas
Dressing	Steve
Falkner	Dr. Chris
Frederick	Rod

At the bottom of the dialog are three buttons: "Find", "OK", and "Cancel".

STORET
Web Registration Application Specification
SIR: 1337

Module Name: CDX_SDP

Module Components: ORG, SDP

Last Update: January 15, 2003

Processing Overview/Description:

The Sample Preservation, Transport & Storage form is brought up with the current organization information passed from the CDX_MENU form. Basic Sample Default Profile information including ID, Name, Container Type, Container Size, Container Size Unit, Color, Temperature Preservation Type, and Chemical Preservation and Storage Procedure may be inserted, updated, or deleted.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Passed in
	NAME	<null>		70	L	Look up based on ORG_ID
	TSMORGAN_IS_NU MBER	n/a				Look up based on ORG_ID
TSRSDP	ID_CODE	ID*	Basic Information	20	L	Data entry; query allowed
	NAME	Name*		40	L	Data entry; query allowed
	D_USERID_CODE	n/a				System generated - logon ID

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSRSDP_IS_NUMBE R	n/a				System generated from TSMEISN
	TSRSDP_ORG_ID	n/a				FK to TSMORGAN
	D_LAST_UPDATE_T S	n/a				System generated - sysdate
	TSMORGAN_IS_NU MBER	n/a				FK to TSMORGAN
	TSMPRMVL_IS_NU MBER	n/a				FK to TSMPRMVL for Container Type
	TSMPRMVL_ORG_I D	n/a				
	TSMPRMVL0IS_NU MBER	n/a				FK to TSMPRMVL for Container Color
	TSMPRMVL0ORG_I D	n/a				
	TSMPRMVL1IS_NU MBER	n/a				FK to TSMPRMVL for Temp Pres Type
	TSMPRMVL1ORG_I D	n/a				
TSMPRMVL	FIELD_VALUE	Container Type	Handling and Storage	40	L	Lookup table; query allowed
	TABLE_NAME	n/a				'TSRSMPL'
	FIELD_NAME	n/a				'CONTAINER TYPE'
	TSMPRMVL_IS_NU MBER	n/a				Primary keys for TSMPRMVL
	TSMPRMVL_ORG_I D	n/a				
TSRSDP	CONTAINER_SIZE_ MSR	Container Size	Handling and Storage	6	L	Data entry; query allowed

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMPRMVL	CONTAINER_SIZE_UN	Container Size Unit	Handling and Storage	7	L	Data entry; query allowed
	FIELD_VALUE	Container Color		40	L	Lookup table; query allowed
	FIELD_NAME	n/a				'CONTAINER COLOR'
	TABLE_NAME	n/a				'TSRSMPL'
	TSMPRMVL_IS_NUMBER	n/a				Primary keys for TSMPRMVL
	TSMPRMVL_ORG_ID	n/a				
	FIELD_VALUE	Temperature Preservation Type	Handling and Storage	40	L	Lookup table; query allowed
	FIELD_NAME	n/a				'TEMP_PRESERVN_TYPE'
	TABLE_NAME	n/a				'TSRSMPL'
	TSMPRMVL_IS_NUMBER	n/a				Primary keys for TSMPRMVL
	TSMPRMVL_ORG_ID	n/a				
TSRSDP	PRESRV_STRGE_PROCEDURE	Chemical Preservation and Storage Procedure	Handling and Storage	75	L	Data entry; query allowed
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORGAN.ORG_ID

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Sample Preservation, Transport & Storage	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button (aflist.gif) to the right of:

- Sample Default Profile ID.
- Container Type.
- Color.
- Temperature Preservation Type.

Trigger/Events Processing:

Module Component/Item	Trigger	Event
ORG.NAME	KEY-NEXT-ITEM	Tab through to the first item of next block.
SDP	PRE-INSERT	Increment IS_NUM, check duplicates and mandatory fields.
	PRE-UPDATE	Update the user ID and date.
	ON-MESSAGE	Display duplicated record message.
	WHEN-NEW-RECORD-INSTANCE	Assign ID code to input parameter. Disable ID LOV when not in Enter-Query mode (SIR 1374).
SDP.ID_CODE	WHEN-VALIDATE-ITEM	Check for Duplicate ID - IDs have to be unique within the Organization. If duplicate, reset the ID to original value.
	KEY-LISTVAL	Display list of value. Upon execute query, disable ID LOV (SIR 1374). Added logic to check for an ID with an underscore.
SDP.PRESRV_STRGE_PRCDR	KEY-NEXT-ITEM	Navigate to ID code field.
Module	KEY-CREREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.

Module Component/Item	Trigger	Event
	KEY-PRVREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-EXIT	Exit form.
	PRE-QUERY	Setup default WHERE clause.
	WHEN-NEW-FORM-INSTANCE	Execute Query. Navigate to ID code field in SDP block.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).
	KEY-COMMIT	Commit form. Navigate to ID code field.

Business Rules:

- Sample Default Profile ID is mandatory.
- Sample Default Profile Name is mandatory.
- Organization Name and ID cannot be updated.

Error Handling:

- Duplicate checking to ensure Sample Default Profile ID is unique within a given Organization.
- Error if ID or Name is not provided.
- Error if container size is provided without a container unit and vice versa.

Delete Rules:

None.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.

- LOV button for Sample Default Profile ID is disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

Ⓒ CHK_UNIT_VALUE.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_SDP.fmb	CDX_SDP.fmx	STORETLIBFRM.olb

<u>Template</u>	<u>Menu</u>
STORTEMPLATE.fmb	MENUDEFS.mmb

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	LOVVAL	Y
	BLKFTS	1
	BLKHDS	1
	PAGCWD	80
Module Component - ORG	BLKJUS	LEFT
	BLKFTS	0

Level	Short_Name	Settings
Module Component -SDP	BLKJUS	LEFT
	BLKMAR	1
	BLKTLM	1
Item Group - ORG.ORG	GRPFTS	0
	GRPMLF	2
Item Group - SDP.ALL	GRPDEC	RECTANGLE
Item Group - SDP.SDP_GRP	GRPHDS	0.5
	GRPTLJ	LEFT
Item Group - SIZ_GRP	GRPFTS	0.1
	GRPMAR	0
Item - SDP.ID_CODE	LOVVAL	N
Item - SDP.PRESRV_STRGE_PRC D R	ITMFPS	>

Window Snapshots:

Sample Preservation, Transport & Storage

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx. The main content area displays the "Sample Preservation, Transport & Storage" form. The form has a menu bar with "Action", "Edit", "Query", "Block", "Record", "Form", "Window", and "Help". Below the menu bar is a toolbar with various icons. The form itself has a title bar "Sample Preservation, Transport & Storage" and a main area with a light orange background. At the top of the form, there are two text boxes: "Organization" with the value "SIMPSON" and "STORET Test". Below these is a "Basic Information" section with two fields: "ID*" with the value "PROFILE1" and a dropdown arrow, and "Name*" with the value "Profile1". Below this is a "Handling and Storage" section with several fields: "Container Type" with the value "Cubitainer" and a dropdown arrow, "Container Size" with the value "8" and a unit dropdown set to "oz.", "Color" with the value "Black" and a dropdown arrow, "Temperature Preservation Type" with the value "Refrigerated/Cooled" and a dropdown arrow, and "Chemical Preservation and Storage Procedure" with the value "test". At the bottom of the form, there is a "Sample Default Profile ID" section with a "Record: 1/?" label and a "<08C>" button. The status bar at the bottom of the browser window shows "Applet started." and "Internet".

Organization: SIMPSON STORET Test

Basic Information

ID*: PROFILE1

Name*: Profile1

Handling and Storage

Container Type: Cubitainer

Container Size: 8 oz.

Color: Black

Temperature Preservation Type: Refrigerated/Cooled

Chemical Preservation and Storage Procedure: test

Sample Default Profile ID

Record: 1/? <08C>

LOVs:

Container Type Selection List

Container Type Selection List

Find %

Type
Aluminum Dish
Aluminum Foil Wrap
BOD Bottle
Cubitainer
Glass Bottle
Glass Vial
HDPE Bottle
HDPE Vial
Nalgene Bottle
Nalgene Vial
Plastic Bag
Plastic Bottle
Plastic Syringe

Find OK Cancel

Sample Transport and Storage Selection List

Sample Transport and Storage Selection List

Find %

ID	Name
SIR1245_1	SIR1245 Test
SIR1245_2	SIR1245_2
STS-001	Metals/water
STS-002	Macroinvertebrates
STS-003	Fish Tissue
STS-004	Pesticides/water
STS-005	Inorganic, general, water
STS-006	Bacteria/water
STS-007	Metals Low Level/water
STS-008	Nutrients/water
STS-009	Fish
STS-010	Organics general/water
STS-011	Radiological Tests

Find OK Cancel

Container Color Selection List

Container Color Selection List

Find %

Color
Amber
Clear
Green
Black
Translucent
Opaque

Find OK Cancel

Temperature Preservation Selection List

Temp Preservation Selection List

Find %

Temp Preservation
None
On Ice
Frozen/Dry Ice
Refrigerated/Cooled
Frozen/Refrigerated
Freeze Dried

Find OK Cancel

STORET
Web Registration Application Specification
SIR: 1338

Module Name: CDX_ANPR, CDX_ANPRNAT

Module Components: CDX_ANPR --- ANPR, ORG, OAPA, NATLIST;
CDX_ANPRNAT --- ORG, UNADONAT

Last Update: January 15, 2003

Processing Overview/Description:

The Field/Lab Analytical Procedures form is displayed with the current organization information passed from the CDX_MENU form. The form consists of two tab pages. The first tab page has Basic Organization-Owned Analytical Procedures information which include ID, Name, and Description, Citation information and Comparable National Procedure information. Information on the first tab page may be inserted, updated, or deleted except for the Source, Citation ID, National Procedure Source and Name fields. The second tab page lists all the National Analytical Procedures that have been adopted by this Organization. Clicking on the “Add More Nat’l” button will lead you to the “National Procedure Adoption Selection List” form, which shows all the available National Procedures excluding the adopted ones.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Read only - argument passed in
	NAME	<null>		60	L	Read only - populated based on ORG_ID
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID; pass to CDX_ANPR NAT

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSRANLPR	PROCEDURE_ID	ID*	Basic Procedure Information	30	L	Data entry
	NAME	Name*		90	L	Data entry
	DESCRIPTION_TEXT	Description		108	L	Data entry
	SOURCE_ACR	Source		16	L	Read only
	TSRANLPR_IS_NUMBER	n/a				System Generated; primary key to TSRANLPR
	TSRANLPR_ORG_ID	n/a				
	OWNER_TYPE_CODE	n/a				System Generated - set to 'ORG'
	SUSPEND_INDICATOR	n/a				System Generated - set to 'N'
	D_USERID_CODE	n/a				System Generated - user's Oracle logon ID
	D_LAST_UPDATE_TIMESTAMP	n/a				System Generated - set to system date/time
	TSRCITN_NUMBER	n/a				Foreign keys to TSRCITN
	TSRCITN_ORG_ID	n/a				
TSRANLPR	SOURCE_ACR	Source	Comparable National Procedure	16	L	Read only - populated from look up
	PROCEDURE_ID	ID		30	L	Read only - populated from look up
	NAME	Name		95	L	Read only - populated from look up

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSRANLPROIS_NUM BER	n/a				Foreign keys to TSRANLPR
	TSRANLPR0ORG_ID	n/a				
TSRCITN	IDENTIFICATION_C D	Citation ID	Citation	30	L	Read only - populated from look up
	TITLE_NAME	Citation Title*		150	L	Read only - populated from look up
	TSRCITN_NUMBER	n/a				Primary keys for TSRCITN
	TSRCITN_ORG_ID	n/a				
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUM BER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORGAN.OR G_ID
	TSMEISN_NAME	n/a				System Generated - set to table for which new row is created
	D_USERID_CODE	n/a				System Generated - user's Oracle logon ID
	D_LAST_UPDT_TS	n/a				System Generated - system date/time
TSROAPA	TSMORGAN_IS_NU MBER	n/a				Foreign key to TSMORGAN
TSROAPA	TSRANLPR_IS_NUM BER	n/a				Foreign key to TSRANLPR

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSRANLPR_ORG_ID	n/a				
	TYPE_CODE	n/a				Look up Org-owned procedures using 'OW', adopted procedures using 'AD'
	SUSPEND_INDICATOR	n/a				Look up using 'N'
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TIMESTAMP	n/a				System Generated - system date/time

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Field/Lab Analytical Procedures	ORG	MENU.ORG_ID

Links To:

(From module CDX_ANPR)

Module	Button/Text	Argument Passed	Value
CDX_ANPRNAT	Add More Nat'l	ISNUM	ORG.TSMORGAN_IS_NUMBER

Navigation between Modules:

From Module Component	Button/Text	To Module Component
CDX_ANPR.NATLIST	Add More Nat'l	CDX_ANPRNAT.UNADONAT
CDX_ANPR.NATLIST	Unadopt	CDX_ANPR.NATLIST
CDX_ANPRNAT.UNADONAT	Select	CDX_ANPR.NATLIST
CDX_ANPRNAT.UNADONAT	Cancel	CDX_ANPR.NATLIST

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button (aflist.gif) to the right of:

- Procedure ID.
- Citation Title.
- Comparable National Procedure ID.

Trigger/Events Processing:

Module: CDX_ANPR

Module Component/Item	Trigger	Event
ORG.NAME	KEY-NEXT-ITEM	Go to next block.

Module Component/Item	Trigger	Event
ANPR	KEY-DELREC	Check referential integrity for deletion.
	KEY-EXIT	Exit with confirmation.
	ON-MESSAGE	Display duplicated ID message.
	POST-QUERY	Query foreign key value/query lookup data.
	WHEN-VALIDATE-RECORD	Assign global variable.
	PRE-INSERT	Increment IS_NUM, check duplicates and mandatory fields.
	PRE-UPDATE	Update the user ID and date.
	WHEN-NEW-BLOCK-INSTANCE	Query the block.
	WHEN-NEW-RECORD-INSTANCE	Return the correct foreign key items. Disable ID LOV when not in Enter-Query mode (SIR 1374).
ANPR. PROCEDURE_ID	KEY-LISTVAL	Display list of value. Upon execute query, disable ID LOV (SIR 1374). Check for underscore in ID.
	WHEN-VALIDATE-ITEM	Check for Duplicate ID - IDs have to be unique within the Organization. If duplicate, reset the ID to original value.
ANPR.LK_NATANPR_PROCEDURE_ID	WHEN-VALIDATE-ITEM	Check National Procedure ID cannot be blanked out.
ANPR.UNA (button)	WHEN-BUTTON-PRESSED	Unassign Comparable National procedure.
NATLIST	WHEN-NEW-BLOCK-INSTANCE	Query the block and navigate to other field.
	ON-MESSAGE	Suppress error message.
NATLIST (Action Item) - ADO	WHEN-BUTTON-PRESSED	Call CDX_ANPRNAT form.
NATLIST (Action Item) UNADO	WHEN-BUTTON-PRESSED	Unadopted National Procedures.

Module Component/Item	Trigger	Event
CDX_ANPR	KEY-CREREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).
	PRE-FORM	Set up global variables.
	PRE-QUERY	Set up default WHERE clause.
	WHEN-NEW-FORM-INSTANCE	Execute query; Navigate to different location.
	KEY-EXIT	Commit and exit form.

Module: CDX_ANPRNAT

Module Component/Item	Trigger	Event
CDX_ANPRNAT	ON-MESSAGE	Suppress error message.
UNADONAT	KEY-COMMIT	Display message.
	WHEN-NEW-BLOCK-INSTANCE	Execute query.
UNADONAT - SELECT (Action item)	WHEN-BUTTON-PRESSED	Create a new OAPA record.
UNADONAT - CANCEL (Action item)	WHEN-BUTTON-PRESSED	Deleted an existing OAPA record without popping message box.

Business Rules:

- Procedure ID is mandatory and must be unique within a given Organization.
- Procedure Name and Citation Title are mandatory fields.
- No Suspend function is provided.

Error Handling:

- Duplicate checking to ensure Procedure ID is unique within a given Organization.
- Error if any of the mandatory fields is not provided.

Delete Rules:

- When an Analytical Procedure is deleted, cascade delete any Organization Analytical Procedure Assignments associated with it.
- Disallow delete of an Analytical Procedure if a Result is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- Procedure ID LOV button is disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

- CHECK_RI_TSRANLPR.
- POP_CIT.
- POP_NATANPR.
- QRY_ANPR_CITN_FK.
- QRY_ANPR_NATANPR_FK.

Configurable Item(s):

<u>Source</u> CDX_ANPR.fmb	<u>Executable</u> CDX_ANPR.fmx	<u>Library</u> STORETLIBFRM.olb
<u>Template</u> STORTEMPLATE.fmb	<u>Menu</u> MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module - CDX_ANPR	PAGCWD	100
	GRPFTS	0
	GRPMAR	0
Module - CDX_ANPRNAT	BLKJUS	LEFT
	BLKMAR	0
	LOVVAL	Y
	PAGCWD	80
MC - NATLIST	CURREC	MULTI
	BLKJUS	LEFT
Item Groups - ANPR.GRP1 ANPR.GRP2	GRPDEC	RECTANGLE
	GRPFTS	0
Item Group - ANPR.TEMP1	GRPDEC	RECTANGLE
Item Group - ANPR.NATGRP	GRPDEC	0
	GRPFTS	0
	GRPTLM	0
	GRPTLS	0
Unbound Item - ANPR.UNA	ITMTIP	N
Bound Item - ANPR.PROCEDURE_ID ANPR.LK_NATANPR_PROC EDURE_ID	LOVVAL	Y

Window Snapshots:

Organization-Owned Analytical Procedures

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: `http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains standard navigation and utility icons.

The main content area displays the "Field/Lab Analytical Procedures" form. At the top, there are tabs for "Organization" (selected) and "STORET Test". Below the tabs, the form is divided into two main sections: "Organization-Owned Analytical Procedures" and "Adopted National Procedures".

The "Organization-Owned Analytical Procedures" section contains the following fields and controls:

- Basic Procedure Information:**
 - ID*: `SUE ID 2` (with a dropdown arrow)
 - Name*: `name 2`
 - Description: `descstest 1.1.1.2` (with a scrollable text area)
 - Source: `SIMPSON`
- Citation:**
 - Citation ID: `SUE 2`
 - Citation Title*: `sue title name 2` (with a dropdown arrow)
- Comparable National Procedure:**
 - Source: `APHA`
 - ID: `5210-B` (with a dropdown arrow and an "Unassign" button)
 - Name: `5-Day Biochemical Oxygen Demand`

At the bottom of the form, there is a "Procedure ID" field and a "Record: 1/?" indicator. The status bar at the very bottom of the browser window shows "Applet started." and "Internet".

Adopted National Procedures

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Field/Lab Analytical Procedures

Organization SIMPSON STORET Test

Organization-Owned Analytical Procedures Adopted National Procedures

Source	Procedure ID	Procedure Name
AOAC	920.195	Silica in Water
AOAC	920.197(B)	Iron in Water
AOAC	920.202	Mn, I, Br, As and Boric Acid in Water
AOAC	920.204	Bromide and Iodide in Water
AOAC	960.14(B)	Quaternary Ammonium Compounds
AOAC	969.48	Tritium in Water
AOAC	970.52	Organo Pesticide Residues - Multiresidue
AOAC	972.29	Thiram Pesticide Residues
AOAC	973.39	Ethylan Pesticide Residues - GC
AOAC	973.67	Iodine-131, Ba-140 and Cs-137 in Milk

Add More Nat'l Unadopt

Procedure Source

Record: 1/?

Applet started. Internet

National Procedure Adoption Selection List

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W X Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

National Procedure Adoption Selection List

Source	Procedure ID	Procedure Name
AOAC	911.03	Strontium in Water
AOAC	920.13	Inorganic and Organometallic Pesticides
AOAC	920.193(A)	Total Solids in Water
AOAC	920.193(B)	Solids in Solution in Water
AOAC	920.193(C)	Solids in Water by Ignition
AOAC	920.194	Carbonate and Bicarbonate in Water
AOAC	920.196	Aluminum and Iron in Water
AOAC	920.197(A)	Iron in Water
AOAC	920.198	Aluminum in Water
AOAC	920.199	Calcium in Water

Select Cancel

Procedure Source
Record: 1/? ... <OSC>

Applet started. Internet

LOVs:

Analytical Procedure List

ID	Name
AAATEST	aaatest
DO-001	Field Method for Determination of Dissolved Oxygen, Probe
FISH MEASURES	Field Determination of Whole Fish Physical Characteristics
KK1	kk1
PESTICIDIES	Herbicides and Insecticides in Water
RBP-FIELD	Field RBP Procedures
SEDIMENT	Field Sediment Analysis
STATION OBS	Field Station Visit Physical Direct Measurements and Obs
TEMP-001	Field Determination of Water Temperature, Probe
WEATHER-001	Field Station Visit Weather Observations

Citation Selection List

The image shows a software dialog box titled "Citation Selection List". At the top, there is a search bar labeled "Find %". Below the search bar is a list box containing the following citations:

- 40 CFR Part 143, (National Secondary Drinking Water Regulations)
- 40 CFR Part 261, Subpart C - Characteristics of Hazardous Waste.
- 40 CFR Part 261.24, (Toxicity Characteristic)
- 40 CFR Part 261.31, (Hazardous Wastes from Non-Specific Sources)
- 40 CFR Part 261.32, (Hazardous Wastes from Specific Sources)
- 40 CFR Part 261.33, (Acute Hazardous Wastes)
- 40 CFR Part 261.33, (Toxic Wastes)
- 40 CFR Part 268.48, (Universal Treatment Standards)
- 40 CFR Part 401.15, (Toxic Pollutants)
- 40 CFR Part 401.16, (Conventional Pollutants)
- 40 CFR Part 413.02, (Total Toxic Organics)
- 40 CFR Part 60, Appendix B

At the bottom of the dialog box, there are three buttons: "Find", "OK", and "Cancel".

Comparable National Procedure List

Comparable National Procedure List

Find %

ID	Source	Name
911.03	AOAC	Strontium in Water
920.13	AOAC	Inorganic and Organometallic Pesticides
920.193(A)	AOAC	Total Solids in Water
920.193(B)	AOAC	Solids in Solution in Water
920.193(C)	AOAC	Solids in Water by Ignition
920.194	AOAC	Carbonate and Bicarbonate in Water
920.195	AOAC	Silica in Water
920.196	AOAC	Aluminum and Iron in Water
920.197(A)	AOAC	Iron in Water
920.197(B)	AOAC	Iron in Water
920.198	AOAC	Aluminum in Water
920.199	AOAC	Calcium in Water

Find OK Cancel

STORET
Web Registration Application Specification
SIR: 1339

Module Name: CDX_PROCGEAR

Module Components: ORG, PROCEDURE

Last Update: January 15, 2003

Processing Overview/Description:

This form processes Sample Collection Procedures and Gear Configurations for a given Organization. The Organization ID is passed in from the CDX_MENU form. The Organization ID and Name are displayed as header information and cannot be updated. Basic Field Procedure information may be inserted, updated, or deleted. Gear Configuration inserts, updates, and deletes are all handled behind the scenes as a result of inserts, updates, and deletes of the “parent” procedure. Disallow query of a different Organization from this form. Allow query from Procedure ID to include a List of Values (LOV).

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG ID	Organization		20	L	Passed in
	NAME	<null>		70	L	Look up based on ORG_ID
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID
TSRFLDPR	ID_CODE	ID*	Basic Sample Collection/Creation Procedure Information	22	L	Data Entry (insert only), Query allowed
	NAME	Name*		54	L	Data Entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	FLD_GEAR_TYPE_NAME	Gear*		25	L	Read only - populated from look up
	DESCRIPTION_TEXT	Description*		114	L	Data Entry
	TSRFLDPR_IS_NUMBER	n/a				System generated from TSMEISN
	TSRFLDPR_ORG_ID	n/a				System generated from ORG_ID passed in
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TIMESTAMP	n/a				System generated - sysdate
	TSMORGAN_IS_NUMBER	n/a				FK to TSMORGAN
	TSRCITN_ORG_ID	n/a				Derived from Citation selection
	TSRCITN_IS_NUMBER	n/a				Derived from Citation selection
TSRCITN	TSRCITN_ORG_ID	n/a				Primary keys for TSRCITN
	TSRCITN_IS_NUMBER	n/a				
	IDENTIFICATION_CODE	Citation ID	Basic Sample Collection/Creation Procedure Information	24	L	Read only - populated from look up
	TITLE_NAME	Citation Title		96	L	Read only - populated from look up

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSRGRCFG	ID_CODE	n/a				Derived - set to Procedure ID
	NAME	n/a				Derived - set to Procedure Name
	TSRGRCFG_IS_NUMBER	n/a				Derived
	TSRCRCFG_ORG_ID	n/a				Derived
	TSMORGAN_IS_NUMBER	n/a				Derived
	TSRFLDGR_IS_NUMBER	n/a				Derived
	TSRFLDGR_ORG_ID	n/a				Derived
TSRFLDGR	TYPE_NAME	Gear Type		25	L	Selection list - sort ascending
	NAME	Name		60	L	Selection list
	TSRFLDGR_IS_NUMBER	n/a				hidden
	TSRFLDGR_ORG_ID	n/a				hidden
Unbound Item (Procedure.Gear_Name1)		<null>		60	L	Determined by TSRGRCFG foreign key assignment to TSRFLDGR
Unbound Item (Procedure.Gear_isnum)		n/a				Not displayed; populated to keep track of gear configuration
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMEISN_ORG_ID	n/a				System generated - ORG_ID passed in
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Sample Collection/Creation Procedures & Gear	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button to right of Procedure ID, Citation, and Gear fields (aflist.gif).

Trigger/Events Processing:

Module Component / Item	Trigger	Event
PROCEDURE	PRE-INSERT	Create new procedure and gear configuration records - calls stored procedures.
	WHEN-NEW-RECORD-INSTANCE	Populate original procedure id; populate unbound gear name; read for current Gear Configuration and populate unbound Gear IS Number. Disable ID LOV when not in Enter-Query mode (SIR 1374).
	PRE-UPDATE	Update procedure and gear configuration.
	ON-MESSAGE	Change Default Message Wording - replaces default Oracle message when LOV is pressed while a record is displayed.
	POST-QUERY	Populate Citation.
	PRE-QUERY	Customized query.
	KEY-DELREC	Check for deletion restrictions.
	ON-ERROR	Replace text for FRM-40212 message.
PROCEDURE. UNASSIGN	WHEN-BUTTON-PRESSED	Unassign Citation - Unassign the Citation from the current Procedure.
PROCEDURE. ID_CODE	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting an ID. Upon execute query, disable ID LOV (SIR 1374). Check for underscore in ID.

Module Component / Item	Trigger	Event
	WHEN-VALIDATE-ITEM	Check for Duplicate ID - IDs have to be unique within the Organization. If duplicate, reset ID to original value.
PROCEDURE.L_CITATION_TITLE_NAME	WHEN-VALIDATE-ITEM	Override all existing events under this that would be triggered.
ORG.NAME	KEY-NEXT-ITEM	Navigate to PROCEDURE block.
Module	KEY-NXTREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).
	KEY-EXEQRY	Disable ID LOV - this is required on cases when the user types in a search criteria in the ID field (e.g., LOV%) that returns row(s) that have an underscore in it (a workaround).
	KEY-CREREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	PRE-QUERY	Set up default where clause to 'rpad' the ORG ID with spaces; ensure IDs with underscores are interpreted correctly.
	PRE-DELETE	Delete associated gear configuration behind the scenes when a procedure is deleted.
	WHEN-NEW-FORM-INSTANCE	Execute query and Position cursor at Procedure ID.
	KEY-COMMIT	Commit form. Move cursor to ID field.

Business Rules:

- C Procedure ID must be unique within the Organization.
- C Keep “associated” Gear Configuration ID and Name the same as the Procedure ID and Name.
- C If a Procedure is inserted, so is a Gear Configuration (ID and Name).
- C If a Procedure is updated, so is the Gear Configuration (Name only).
- C If a Procedure is deleted, so is the Gear Configuration (based on ID).
- C Citation selection is optional.
- C The list of gear names will be all gear types and gear names within the TSRFLDGR table.
- C Allow query based on Procedure ID.
- C Have LOV lists for Procedure ID, Gear, and Citation.
- C Sort Gear List by Field Gear type name.
- C If an existing procedure does not have a gear configuration with the same ID/Name, the system will not automatically create one.

Error Handling:

- C Duplicate checking to ensure Procedure ID is unique within a given Organization.
- C Duplicate checking to ensure Gear Configuration ID is unique within a given Organization.
- C Error if one of the following mandatory fields is not provided: ID, Name, Gear Group Name, and Description Text.

Delete Rules:

- When a Gear Configuration is deleted, cascade delete any Generic Text associated with it.
- Disallow delete of a Field Procedure if a Field Activity is tied to it.
- Disallow delete of a Gear Configuration if a Field Activity is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- Procedure ID LOV button is disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

“Organization” prompt followed by current TSMORGAN Org_ID and TSMORGAN Name (all on the same line).

Called Procedures (SQL-PL/SQL):

- CREATE_COLLECTION_PROCEDURE.
- CREATE_GEAR_CONFIGURATION.
- CHECK_RI_TSRFLDPR.
- CHECK_RI_TSRGRCFG.
- CD_PROCGEAR_GLOBALS.
- QRY_PROC_FLDPR_CITN_FK.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_PROCGEAR.fmb	CDX_PROCGEAR.fmx	STORETLIBFRM.olb
<u>Template</u>	<u>Menu</u>	
STORTEMPLATE.fmb	MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	PAGCWD	100
Item Group - PROCEDURE.PROCEDURE	GRPDEC	RECTANGLE
	GRPHDS	0.5
	GRPMLF	1
Item Groups - PROCEDURE.GEAR_GROUP PROCEDURE.CITATION	GRPFTS	0
	GRPTLP	NONE
Item Group - PROCEDURE.BUTTON AREA	GRPFTS	0
	GRPMAR	0
	GRPTLP	NONE
Items - PROCEDURE.FLD_GEAR_T YPE_NAME PROCEDURE.ID_CODE PROCEDURE.L_CITATION_ TITLE_NAME	LOVVAL	Y

Window Snapshots:

Sample Collection/Creation Procedures & Gear

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Sample Collection/Creation Procedures & Gear

Organization SIMPSON STORET-Test

Basic Sample Collection/Creation Procedure Information

ID* b4

Name* b4 a b c

Gear* Benthic Corer Drilled sampler

Description* test

Citation ID SUE ID 4

Citation Title sue Unassign

Procedure ID

Record: 1/? <QSC>

Applet started. Internet

LOVs:

Sample Collection/Creation Procedure List

ID	Name
PORTABLE	portable procedure
SP-001	Water Grab Sampling
SP-002	Sediment Sampling
SP-003	Fish Tissue Extraction
SP-004	Electroshock Fish Survey Procedure
SP-005	Compositing of Water Samples for Low Level Organics
SP-006	Compositing of Fish Tissue for Pesticides Analysis
SP-007	Netting Fish for Tissue Samples
SP-008	Macroinvertebrate Sampling
SP-009	Otter Trawl Operation and Collection
SP-010	Plankton Collection, open water
SP-011	Test Soil Procedure
TEST1	test1

Gear Names Selection List

Gear Type	Name
Benthic Corer	Hydroplastic (PVC) corer
Benthic Corer	Kullenberg gravity corer
Benthic Corer	Other
Benthic Corer	Pamatmat multiple quartz corer
Benthic Corer	Phleger corer (gravity)
Benthic Corer	Piston corer (generic)
Benthic Corer	Vibrating corer
Benthic Dredge	Anchor box dredge
Benthic Dredge	Bod dredge
Benthic Dredge	Brail
Benthic Dredge	Burrell epibenthic sled
Benthic Dredge	Chain dredge
Benthic Dredge	Experimental Brail

Citation Selection List

The image shows a software dialog box titled "Citation Selection List". At the top, there is a search bar labeled "Find:" followed by a text input field containing the character "%". Below the search bar is a list box with a scroll bar on the right. The list box contains the following text:

- Citation
- 40 CFR Part 401.15, (Toxic Pollutants)
- 40 CFR Part 401.16, (Conventional Pollutants)
- 40 CFR Part 413.02, (Total Toxic Organics)
- 40 CFR Part 60, Appendix B,
- 40 CFR Part 61, (Test Methods for Air)
- 40 CFR Parts 53 to 59, (Air program)
- ASTM Standards. General Products, Chemical Specialties & End Use Products; Soap; etc.
- ASTM Standards. Paints, Related Coatings & Aromatics; Paint Pigments etc.
- ASTM Standards. Petroleum Products, Lubricants & Fossil Fuels (I)
- ASTM Standards. Petroleum Products, Lubricants & Fossil Fuels: Gaseous Fuels; Coal & Coke
- ASTM Standards. Petroleum Products, Lubricants & Fossil Fuels (II)
- ASTM Standards. Soil and Rock (I)

At the bottom of the dialog box, there are three buttons: "Find", "OK", and "Cancel".

STORET
Web Registration Application Specification
SIR: 1340

Module Name: CDX_LAB

Module Components: ORGNZTN, LAB, ADDRESS, EADDRESS

Last Update: January 28, 2003

Processing Overview/Description:

The Laboratory form is brought up with the current organization information passed from CDX_MENU window. Basic lab info, and/or mailing address and phone number may be inserted, updated, or deleted.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Passed in
	NAME	<null>		70	L	Look up based on ORG_ID
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID
TSRLAB	ID_CODE	ID*	Basic Lab Information	20	L	Data entry
	NAME	Name*		60	L	Data entry
	TSRLAB_IS_NUMBER	n/a				System generated from TSMEISN
	TSRLAB_ORG_ID	n/a				System generated from ORG_ID passed in

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMORGAN_IS_NUMBER	n/a				FK to TSMORGAN
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TIMESTAMP	n/a				System generated - sysdate
TSMADDR	LINE_ONE_TEXT	Line 1	Mailing Address	50	L	Data entry
	LINE_TWO_TEXT	Line 2		50	L	Data entry
	LINE_THREE_TEXT	Line 3		50	L	Data entry
	LINE_FOUR_TEXT	Line 4		50	L	Data entry
	COUNTRY_CODE	n/a				System generated - 'US'
	TYPE_CODE	n/a				System generated - 'Mailing'
	D_LAST_UPDATE_TIMESTAMP	n/a				System generated - sysdate
	D_USERID_CODE	n/a				System generated - logon ID
	TSMADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMADDR_ORG_ID	n/a				System generated from ORG_ID
	TSRLAB_IS_NUMBER	n/a				FK to TSRLAB
	TSRLAB_ORG_ID	n/a				
TSMEADDR	ADDRESS_TEXT	Number	Phone	30	L	Data entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TYPE_CODE	n/a				System generated 'Phone'
	TSMEADDR_IS_NUMBER	n/a				System generated from TSMEISN
	TSMEADDR_ORG_ID	n/a				System generated from ORG_ID passed in
	TSMORGAN_IS_NUMBER	n/a				Foreign key to TSMORGAN
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDATE_TS	n/a				System generated - sysdate
	TSRLAB_IS_NUMBER	n/a				FK to TSRLAB
	TSRLAB_ORG_ID	n/a				
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORG_ID passed in
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Laboratories	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument Name	Value
STARTUP_MODE	AUTO QUERY
ORG	MENU.ORG_ID

Output Parameters:

None.

Images:

List of Values (LOV) button to the right of Lab ID (aflist.gif).

Trigger/Events Processing:

Module Component/Item	Trigger	Event
ORGNZTN.NAME	KEY-NEXT_ITEM	Tab through to the first item of next block.
LAB	PRE-INSERT	Increment IS NUM, check duplicates and mandatory fields.
	PRE-UPDATE	Update the user ID and Date.
	KEY-DELREC	Check referential integrity for deletion.
	ON-MESSAGE	Display duplicated ID message.
	WHEN-NEW-RECORD-INSTANCE	Assign lab ID to parameter. Disable ID LOV when not in enter-query mode (sir 1374).
LAB.ID_CODE	KEY-LISTVAL	Display list of value. Upon execute query, disable ID LOV (sir 1374). Added underscore in ID check logic.
	WHEN-VALIDATE-ITEM	Check for duplicate ID - IDs have to be unique within the organization. If duplicate, reset the ID to original value.
	KEY-PREV-ITEM	Go to EADDRESS block.
LAB.NAME	KEY-NEXT_ITEM	Tab through to the first item of next (ADDRESS) block.
ADDRESS	PRE-INSERT	Increment is_number, check duplicates and mandatory fields; lab has to be created first.
	POST-CHANGE	Update the user ID and Date.
	KEY-CREREC	Ensure only one mailing address can exist for each lab.
	KEY-NXTREC	Go to next block (lab) and display next record.
	KEY-PRVREC	Go to next (lab) block and display previous record.
ADDRESS. LINE_ONE_TEXT	KEY-PREV-ITEM	Go to previous item.

Module Component/Item	Trigger	Event
ADDRESS. LINE_FOUR_TEXT	KEY-NEXT-ITEM	Go to EADDRESS block.
EADDRESS	PRE-INSERT	Increment is_number, check duplicates and mandatory fields; lab has to be created first.
	PRE-UPDATE	Update the user ID and Date.
	KEY-CREREC	Ensure only one mailing address can exist for each Lab.
	KEY-NXTREC	Go to next block (LAB) and display next record.
	KEY-PRVREC	Go to next (LAB) block and display previous record.
EADDRESS. ADDRESS_TEXT	KEY-NEXT-ITEM	Go to Lab ID field.
	KEY-PREV-ITEM	Go to Address Line 4 field.
	WHEN-VALIDATE-ITEM	Delete phone when it is null (SIR 1397).
CDX_LAB (Module)	KEY-CREREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-PRVREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).
	PRE-QUERY	Define default WHERE clause.
	WHEN-NEW-FORM_INSTANCE	Execute Query; Go to Lab ID field.
	KEY-EXIT	Validate form before exit (SIR 1397).

Business Rules:

- Lab ID and Name are mandatory fields.
- Lab ID must be unique within a given Organization.
- Only one mailing address and one phone number are allowed for each lab.

Error Handling:

- Duplicate checking to ensure Lab ID is unique within a given Organization.
- Error if one of the mandatory fields are not provided.

Delete Rules:

- When a Laboratory is deleted, cascade delete any Addresses and Electronic Addresses associated with it.
- Disallow delete of a Laboratory if a Result is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- LOV button for Lab ID is disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

Ⓒ CHECK_RI_TSRLAB.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_LAB.fmb	CDX_LAB.fmx	STORETLIBFRM.olb

<u>Template</u>	<u>Menu</u>
STORTEMPLATE.fmb	MENUDEFS.mmb

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	BLKHDS	1
	LOVVAL	Y
Module Component - ADDRESS	BLKFTS	1
	BLKMAR	3
Module Component - EADDRESS	GRPMLF	2
Module Component -LAB	GRPDEC	RECTANGLE
	GRPMAR	1
Item Group - ADDRESS.ADDGRP	GRPDEC	RECTANGLE
	GRPFTS	1.5
	GRPHDS	0.5
	GRPTLJ	CENTER
Item Group - EADDRESS.EADDGRP	GRPDEC	RECTANGLE
	GRPFTS	1
	GRPHDS	0.5
	GRPTLJ	CENTER
Item - LAB.ID_CODE	LOVVAL	N

Window Snapshots:

Laboratory

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: `http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains buttons for Back, Forward, Home, Search, Favorites, Media, and other standard browser functions.

The main content area displays a form titled "Laboratory". The form has a menu bar with Action, Edit, Query, Block, Record, Form, Window, and Help. Below the menu bar is a toolbar with various icons for form navigation and editing.

The form fields are organized as follows:

- Organization:** Two text boxes containing "SIMPSON" and "STORET Test".
- Basic Lab Information:**
 - ID*:** A text box containing "SUE LAB1" with a dropdown arrow.
 - Name*:** A text box containing "sue lab 1".
- Mailing Address:** A group box containing four text boxes labeled "Line 1", "Line 2", "Line 3", and "Line 4", with values "1", "sue2", "3", and "4" respectively.
- Phone:** A text box labeled "Number" containing "1111111".

At the bottom of the form, there is a status bar with the text "Lab ID: Record: 1/7." and a button labeled "<OSC>".

The browser's status bar at the bottom shows "Applet started." and "Internet".

LOVs:

Laboratory Selection List

Lab ID	Name
DD-001	Dewberry & Davis Environmental Laboratory
ED-001	Environmental Dynametrics
ER-001	Environmental Reference Laboratory

STORET
Web Registration Application Specification
SIR: 1341

Module Name: CDX_PROJECT

Module Components: ORG, PROJECT, PURPOSE, STUDY, DESIGN, WORKPLAN,
QAPPSUM, MSRMNTQL

Last Update: January 28, 2003

Processing Overview/Description:

This form processes Projects for a given Organization. The Organization ID is passed in from the CDX_MENU form. The Organization ID and Name are displayed as header information and cannot be updated. Project description information may be inserted, updated, or deleted. Query of a different Organization is not allowed.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Passed in
	NAME	<null>		70	L	Look up based on ORG_ID
	TSMORGAN_IS_NUM BER	n/a				Look up based on ORG_ID
TSMPROJ	TSMPROJ_ORG_ID	n/a				Foreign key to TSMORGAN
	TSMPROJ_IS_NUMB ER	n/a				Foreign key to TSMORGAN
	IDENTIFICATION_CD	ID*	Basic Project Information	20	L	Data Entry; Query allowed

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	NAME	Name*		90	L	Data Entry; Query Allowed
	START_DATE	Start Date* (MM-DD-YYYY)		10	L	Data Entry
	PLANNED_DURATION	Planned Duration*		17	L	Data Entry
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate
	TSMORGAN_IS_NUMBER					Foreign key to TSMORGAN
TSMGNTXT	TSMGNTXT_ORG_ID	n/a				System generated based on ORG_ID passed in
	TSMGNTXT_IS_NUMBER	n/a				System generated based on TSMEISN
	TABLE_NAME	n/a				System generated - set to 'TSMPROJ'
	DESCRIPTION_NAME	n/a				System generated - set to 'PURPOSE'
	DESCRIPTION_TEXT	Project Purpose*	Basic Project Information	255	L	Data Entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	DESCRIPTION_NAME	n/a				System generated - set to 'AREADESC'
	DESCRIPTION_TEXT	Project Study Area		255	L	Data Entry
	DESCRIPTION_NAME	n/a				System generated - set to 'DSGNDESC'
	DESCRIPTION_TEXT	Project Design and Sampling Frequency	Basic Project Information	255	L	Data Entry
	DESCRIPTION_NAME	n/a				System generated - set to 'WORKPLAN'
	DESCRIPTION_TEXT	How/Where to Obtain Complete Plan	Basic Project Information	255	L	Data Entry
	DESCRIPTION_NAME	n/a				System generated - set to 'QAPPSUMM'
	DESCRIPTION_TEXT	Quality Assurance Project Plan Summary		255	L	Data Entry
	DESCRIPTION_TEXT	Measurement Specific Quality Objectives		255	L	Data Entry

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	DESCRIPTION_NAME	n/a				System generated - set to 'MSRMNTQ L'
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate
	TSMPROJ_ORG_ID	n/a				Foreign keys to TSMPROJ
	TSMPROJ_IS_NUMBER	n/a				
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUMBER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORG_ID passed in
	TSMEISN_NAME	n/a				System generated - set to table for which new row is created
	D_USERID_CODE	n/a				System generated - logon ID
	D_LAST_UPDT_TS	n/a				System generated - sysdate

* - mandatory

Links From:

Module	Button/Text	Argument Passed	Value
CDX_MENU	Projects	ORG	MENU.ORG_ID

Links To:

None.

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button to right of Project ID field (aflist.gif).

Trigger/Events Processing:

Module Component/Item	Trigger	Event
PROJECT	ON-MESSAGE	Display custom error message for Project ID LOV.
	PRE-INSERT	Process PROJECT record.
	PRE-UPDATE	Update PROJECT record.
	KEY-CREREC	Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.

Module Component/Item	Trigger	Event
	WHEN-NEW-RECORD-INSTANCE	Populate original project ID. Disable ID LOV when not in Enter-Query mode (SIR 1374).
	KEY-DELREC	Check referential integrity for deletion.
	PRE-QUERY	Ensure IDs with "_" will be retrieved correctly.
PROJECT/ IDENTIFICATION_CD	KEY-LISTVAL	Autoquery based on project selected from LOV. Upon execute query, disable ID LOV (SIR 1374).
	WHEN-VALIDATE-ITEM	Check for duplicate IDs. Revert ID back to original if found.
	KEY-PREV-ITEM	Go to MSRMNTQL block.
PROJECT/ NAME	KEY-NEXT-ITEM	Call navigate_to_next_item procedure.
PURPOSE	PRE-UPDATE	Update PURPOSE record.
	PRE-INSERT	Process PURPOSE record.
	KEY-DELREC	Disallow deletion of purpose description.
PURPOSE/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to PROJECT block.
	KEY-NEXT-ITEM	Go to STUDY block.
STUDY	PRE-UPDATE	Set userid and date/time.
	PRE-INSERT	Process STUDY record.
STUDY/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to PURPOSE block.
	KEY-NEXT-ITEM	Go to DESIGN block.
	WHEN-VALIDATE-ITEM	Override record status if description_text is blank (SIR 1397).
DESIGN	PRE-UPDATE	Set user ID and date/time.
	PRE-INSERT	Process DESIGN record.
DESIGN/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to STUDY block.
	KEY-NEXT-ITEM	Go to WORKPLAN block.

Module Component/Item	Trigger	Event
	WHEN-VALIDATE-ITEM	Override record status if description_text is blank.
WORKPLAN	PRE-UPDATE	Set user ID and date/time.
	PRE-INSERT	Process WORKPLAN record.
WORKPLAN/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to DESIGN block.
	KEY-NEXT-ITEM	Go to QAPPSUM block.
	WHEN-VALIDATE-ITEM	Override record status if description_text is blank (SIR 1397).
QAPPSUM	PRE-UPDATE	Set userid and date/time.
	PRE-INSERT	Process QAPPSUM record.
QAPPSUM/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to WORKPLAN block.
	KEY-NEXT-ITEM	Go to MSRMNTQL block.
	WHEN-VALIDATE-ITEM	Override record status if description_text is blank (SIR 1397).
MSRMNTQL	PRE-UPDATE	Set userid and date/time.
	PRE-INSERT	Process MSRMNTQL record.
MSRMNTQL/ DESCRIPTION_TEXT	KEY-PREV-ITEM	Go to QAPPSUM block.
	KEY-NEXT-ITEM	Go to PROJECT block.
	WHEN-VALIDATE-ITEM	Override record status if description_text is blank (SIR 1397).
ORG / NAME	KEY-NEXT-ITEM	Go to PROJECT block.
Module	WHEN-NEW-FORM-INSTANCE	Execute query; go to project ID.
	PRE-QUERY	Set up default where clause to 'rpad' the ORG ID with spaces.
	KEY-ENTQRY	Enable ID LOV (SIR 1374).
	KEY-COMMIT	Set message level to '0'; commit form; move cursor to ID (SIR 1404).
	KEY-EXEQRY	Disable ID LOV.

Module Component/Item	Trigger	Event
	KEY-PRVREC	Go to previous project record. Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-NXTREC	Go to next PROJECT record. Check for ID Change - If ID changed, do duplicate checking. If found, then force save now.
	KEY-EXIT	Validate form before exit (SIR 1397).
	KEY-CREREC	Force save of changes; create record at main block level.
	KEY-DUPREC	Duplicate PROJECT and DETAIL blocks (SIR 1397/ 1398).
	KEY-DELREC	Delete PROJECT and child blocks.

Business Rules:

- C Project ID must be unique within the Organization.
- C Allow query based on Project ID. Only show "ORG" Projects defined for the current Organization.

Error Handling:

- C Duplicate checking to ensure Project ID is unique within a given Organization.
- C Error if one of the following mandatory fields is not provided: ID, Start Date, Planned Duration, Name, and Purpose.

Delete Rules:

- When a Project is deleted, cascade delete any Voucher Specimen Collections, Project Person Assignments, Project Person Role Assignments, Project Cooperating Organization Assignments, Citation Project Assignments, and Generic Texts associated with it.
- Disallow delete of a Project if a Project Station Assignment is tied to it.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

- Don't allow query or update of Organization ID or Name.
- LOV button for Project ID is disabled when form is in entry/update mode; enabled when in query mode.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

- ORG_ID - TSMORGAN Org_ID.
- Name - TSMORGAN Name.

Called Procedures (SQL-PL/SQL):

- CHECK_RI_TSMPROJ.
- NAVIGATE_TO_NEXT_ITEM.
- NAVIGATE_TO_PREVIOUS_ITEM.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_PROJECT.fmb	CDX_PROJECT.fmx	STORETLIBFRM.olb
<u>Template</u>	<u>Menu</u>	
STORTEMPLATE.fmb	MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module	LOVVAL	Y
Module Component - ORG	BLKFTS	1
	BLKJUS	LEFT
Module Component - PROJECT	BLKDEC	LINE TOP
	BLKJUS	LEFT
	BLKTLP	ON DECORATION
	GRPMAR	0
Item Group - ORG.ORG_GROUP	GRPFTS	0
	GRPMAR	0
Item Group - PROJECT.PROJ_ID	GRPDEC	NONE
	GRPHIS	5
	GRPMAR	0
	GRPVIS	0
Item Group - PROJECT.NAME_GRP	GRPFTS	0

Window Snapshots:

Project

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx. The main content area displays the "Project" form, which is organized into several sections:

- Organization:** SIMPSON
- STORET Test:**
- Basic Project Information:**
 - ID*: SUETEST
 - Start Date*: 01-01-2003 (MM-DD-YYYY)
 - Planned Duration*: 0
 - Name*: sue TEST
 - Project Purpose*: TEST
 - Project Study Area:
 - Project Design and Sampling Frequency:
 - How/Where to Obtain Complete Plan:
 - Quality Assurance Project Plan Summary:
 - Measurement Specific Quality Objectives:

The form is displayed within a window titled "Project". The bottom of the window shows the "Project ID" and "Record: 1/?".

Note: The layout of this form MUST be fine-tuned using Developer and saved as a .fmb file. All functional changes are to be done in Designer. After code changes, generate the form using "Preserve Layout" option and use the saved .fmb file as the layout source file.

LOVs:

Project Selection List

ID	Name
33	hjkbbjh
CHRIS1	chris test
CHRIS2	dfdf
CHRIS3	33333333333333
CHRIS4	dfdf
CHRIS5	five
CHRIS6	six
CHRIS7	dfdfdf
KATY001	dsdsdsd
KATY002	sdsdf
KATY003	erqer
KATY004	werwer
KATY005	qweqwe
KATY006	ERWER
KATY010	qweqweqweqwe
KATY011	fasdfasdf
KATY012	werwerwer
KATY013	wertyhcggh
KATY015	ERWERWER
TEST	TEST
TEST2	TEST2
TEST3	TEST3
TEST7	test
test4	test4
test5	test5
test6	3434

Choices in list: 26
Record: 1/1 Enter-Query List of Values

STORET
Web Registration Application Specification
SIR: 1342

Module Name: CDX_CHARGRP, CDX_CHARDEF

Module Components:

CDX_CHARGRP: CHAR, CHARASSOC, CHARGRP, ORG, USERCHAR
GRP_HEADER

CDX_CHARDEF: CHARASSC, DEFCHEM, DEFTEXTVP, DUMCHAR

Last Update: February 25, 2003

Processing Overview/Description:

The Characteristic Groups & Defaults Maintenance form is brought up with the current organization information passed from the CDX_MENU form. The Organization ID and Name are displayed as header information and cannot be updated. Basic Characteristic Group information may be inserted, updated, or deleted. Query of a different Organization is not allowed from this form. Clicking on the Characteristics button will bring up the Characteristic Group Characteristics List Maintenance form or the Habitat Classification Scheme Characteristic Maintenance form depending on the characteristic group type. These two forms will allow the characteristics to be inserted into or deleted from the characteristic group. The Characteristic Group Characteristics List Maintenance form has a Defaults button; depending on the type of the characteristic selected, the button will bring up either the Physical Characteristic Default form, the Chemical Characteristic Default form, or the Characteristic Default form for Text or Permitted Value.

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG_ID	Organization		20	L	Look Up table; disallow query
	NAME	<null>		70	L	Look Up table; disallow query

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSMORGAN_IS_NUMBER	n/a				Look up based on ORG_ID
TSRCHGRP	ID_CODE	ID*	Basic Characteristic Group Information	20	L	Data Entry; query
	NAME	Name*		40	L	Data Entry; query
	MEDIUM_TYPE_NAME	Medium*		15	L	Data Entry; query; select from 'Air', 'Sediment', 'Water', 'Soil', or 'Other'
	HABITAT_ASSESS_IND	Habitat Assessment?		22	L	System generated based on value of CHAR_DEFINED_IND. Default to 'N'
	DESCRIPTION_TEXT	Description		110	L	Data Entry; query
	TSRCITN_ORG_ID	n/a				Foreign keys to TSRCITN
	TSRCITN_IS_NUMBER	n/a				
	D_USERID_CODE	n/a				System generated - set to user's Oracle logon ID
	D_LAST_UPDT_TS	n/a				System generated - set to system date/time

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	CHAR_DEFINED_IN D			20	L	Data entry; query. Default to null. If 'U', display 'User-Defined'; if 'S' display 'System-Defined'
	FLD_ACT_TYPE_N M	Field Activity*		15	L	Data entry; query
	TSRCHGRP_IS_NUM BER	n/a				System generated; primary key
	TSRCHGRP_ORG_ID	n/a				
	TSMORGAN_IS_NU MBER	n/a				System generated
TSRCITN	IDENTIFICATION_C D	Citation ID		24	L	Look up based on Citation Title selected
	TITLE_NAME	Citation Title		92	L	Selection list
	TSRCITN_NUMBER	n/a				Primary keys for TSRCITN
	TSRCITN_ORG_ID	n/a				
TSRCCGA	TSRCCGA_ORG_ID	n/a				Look up existing characteristic defaults for characteristic group. On inserts, system generated.
	TSRCCGA_IS_NUM BER	n/a				
	SEQUENCE_NUMBE R	n/a				System generated
	TSRCHAR_ORG_ID	n/a				Foreign keys to TSRCHAR
	TSRCHAR_IS_NUM BER	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSRCHGRP_ORG_ID	n/a		8		Foreign keys to TSRCHGRP
	TSRCHGRP_IS_NUMBER	n/a		12		
	D_USERID_CODE	n/a				System generated - set to user's Oracle logon ID
	D_LAST_UPDATE_TS	n/a				System generated - set to system date/time
TSRCHAR	DISPLAY_NAME	Characteristic		70	L	Data entry via LOV
	CHAR_TYPE_CODE	n/a				Select <> 'R'
	D_SCR_TYPE_CD	n/a				Select <> 'TAXA'
	TSRCHAR_IS_NUMBER	n/a				Primary keys for TSRCHAR
	TSRCHAR_ORG_ID	n/a				
TSRHCSC	ROW_ID	Row ID		20	L	Data entry; query
	CHARACTERSTC_NAME	Habitat Characteristic Name		30	L	
	DESCRIPTION_TEXT	Description		1999	L	
	TSRHCSC_ORG_ID	n/a				System generated; primary keys
	TSRHCSC_IS_NUMBER	n/a				
	TSRCHGRP_ORG_ID	n/a				Foreign keys to TSRCHGRP
	TSRCHGRP_IS_NUMBER	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	D_USERID_CODE	n/a				System generated - set to user's Oracle logon ID
	D_LAST_UPDATE_TS	n/a				System generated - set to system date/time
TSRCALT	TYPE_NAME	Alias Type	Add Characteristics	30	L	Selection list
	TYPE_CATEGORY	n/a				Criterion for selection list.
	TSRCALT_ORG_ID	n/a				Primary keys for TSRCALT
	TSRCALT_IS_NUMBER	n/a				
TSRCTCA	TSRCHTYP_CATEGORY	n/a				Criterion for selection list
	TSRCHTYP_SUBCATEGORY	n/a				Criterion for selection list
	TSRCHAR_ORG_ID	n/a				Foreign key to TSRCHAR
	TSRCHAR_IS_NUMBER	n/a				
TSRCHALS	NAME	Alias Name		255	L	Data entry via LOV
	TSRCHAR_IS_NUMBER	n/a				Foreign keys to TSRCHAR
	TSRCHAR_ORG_ID	n/a				
	TSRCALT_IS_NUMBER	n/a				Foreign keys to TSRCALT
	TSRCALT_ORG_ID	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSRCHDEF	SMPL_FRAC_TYPE_NM	Sample Fraction	Basic Char Default Info	50	L	Data entry; query
	UOM_NAME	Value Unit		15	L	
	VALUE_TYPE_NAME	Value Type		12	L	Default to 'Actual'
	STATISTIC_TYPE_NAME	Statistic Type		25	L	Data entry; query
	TEMP_BASIS_LVL_NM	Temperature	Basis	15	L	
	DUR_BASIS_TYPE_NM	Duration		15	L	
	WT_BASIS_TYPE_NAME	Weight		12	L	
	UPPER_RANGE_VALUE	Upper	Acceptable Result Range	15	L	
	LOWER_RANGE_VALUE	Lower		15	L	
	UOM_NAME	Units		15	L	Read only; set to Value Unit
	ROW_ID	Row ID*	Basic Char Default Info	25	L	Data entry; query
	PARTICLE_SIZE_BASIS	Particle Size	Basis	60	L	Data entry; query (for Phys)
	TSMPRMVL_ORG_ID	n/a				Foreign keys to TSMPRMVL
	TSMPRMVL_IS_NUMBER	n/a				
	TSRCHDEF_ORG_ID	n/a				Foreign keys to TSRCHDEF
	TSRCHDEF_IS_NUMBER	n/a				

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	TSRLSPP_ORG_ID	n/a				Foreign keys to TSRLSPP
	TSRLSPP_IS_NUMB ER	n/a				
	TSRANLPR_ORG_ID	n/a				Foreign keys to TSRANLPR
	TSRANLPR_IS_NUM BER	n/a				
	D_USERID_CODE	n/a				System generated
	D_LAST_UPDATE_T S	n/a				System generated
	COMP_IND_CD	n/a				Set to 'N'
	TSMPRMVL0ORG_I D	n/a				Foreign keys to TSMPRMVL
TSRANLPR	SOURCE_ACR	Source	Assigned Field/Lab Analytical Procedures	15	L	Read only. Look up based on ID selected
	PROCEDURE_ID	ID		15	L	Data entry; query
	NAME	Name		60	L	Read only. Look up based on ID selected
	TSRANLPR_IS_NUM BER	n/a				Primary keys for TSRANLPR
	TSRANLPR_ORG_ID	n/a				
TSRLSPP	SOURCE_ACR	Source	Current Lab Sample Prep Procedures	15	L	Read only. Look up based on ID selected
	PREPARATION_ID	ID		15	L	Data entry; query

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
	NAME	Name		60	L	Read only. Look up based on ID selected
	TSRLSPP_IS_NUMB ER	n/a				Primary keys for TSRLSPP
	TSRLSPP_ORG_ID	n/a				
TSMEISN	IS_NUMBER	n/a				System generated - max(IS_NUM BER) +1
	TSMEISN_ORG_ID	n/a				System generated - ORGAN.ORG ID
	TSMEISN_NAME	n/a				System Generated - set to table for which new row is created
	D_USERID_CODE	n/a				System Generated - user's Oracle logon ID
	D_LAST_UPDT_TS	n/a				System Generated - system date/time

* - mandatory

Links From:

Module Component	Button/Text	Argument Passed	Values
CDX_MENU	Characteristic Groups	ORG	ORG.ORG_ID

Links To:

(From CDX_CHARGRP)

Module Component	Button/Text	Argument Passed	Values
CDX_CHARDEF	Defaults	CCGA_IS_NUM CCGA_ORG_ID GRP_IS_NUM GRP_ORG_ID CHAR_IS_NUM D_TYPE	TSRCGGA_IS_NUMBER TSRCCGA_ORG_ID TSRCHGRP_IS_NUMBE R TSRCHGRP_ORG_ID TSRCHAR_IS_NUMBER D_SCR_TYPE_CD

Input Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Output Parameters:

None.

Images:

List of Values (LOV) button to right of all applicable fields (e.g., Char Group ID field) (aflist.gif).

Trigger/Events Processing:

CDX_CHARGRP

Module Component/Item	Trigger	Event
CHAR	KEY-CREREC	Prompt user to select type of search for characteristics.
CHAR / SEARCH_BY_CHAR	KEY-PREV-ITEM	Go to CHARASSOC block.

Module Component/Item	Trigger	Event
	WHEN-BUTTON-PRESSED	Show Characteristic LOV or DL_Char LOV if Characteristic Group is Data Logger. Assign Characteristic.
CHAR / SEARCH_BY_ALIAS	WHEN-BUTTON-PRESSED	Show Alias LOV or error message if Characteristic Group is Data Logger. Assign Characteristic.
CHAR / DEFAULTS	KEY-NEXT-ITEM	Go to Charassoc block.
	WHEN-BUTTON-PRESSED	Call CHARDEF form.
CHARASSOC	KEY-DELREC	Override Designer code for validation of delete.
	ON-MESSAGE	Suppress message if FRM-40350.
	POST-QUERY	Populate unbound display columns.
	PRE-BLOCK	Hide first spreadtable column.
	WHEN-MOUSE-DOUBLECLICK	Call CHARDEF form.
	WHEN-NEW-BLOCK-INSTANCE	Reset characteristic added flag; execute query. Set property of Defaults button.
	KEY-DELREC	Override events: Reason for record deletion entered by user and validate deletion according to referential integrity rules.
CHARASSOC/ ROW_ID	KEY-CREREC	Prompt for type of search.
	POST-CHANGE	Process Characteristic Default Row ID.
	KEY-PREV-ITEM	Go to Defaults button (if enabled) or Search by Characteristic Alias button.
CHARASSOC/ ANLPR	KEY-NEXT-ITEM	Go to Search by Characteristic Name button.
CHARGRP	KEY-COMMIT	Commit form; reset global variable.
	KEY-CREREC	Force save if medium changed.
	KEY-DELREC	Check for delete restrictions; delete record.

Module Component/Item	Trigger	Event
	KEY-NEXT-ITEM	Go to next enabled item.
	KEY-NXTREC	Force save if medium changed.
	KEY-PREV-ITEM	Go to previous enabled item.
	KEY-PRVREC	Force save if medium changed.
	KEY-ENTQRY	Set property for medium type field; go into enter query mode.
	POST-BLOCK	Populate header information.
	POST-INSERT	Enable Characteristics button.
	POST-QUERY	Override Designer code for Query associated lookup item and replace with customized code (rtrim the ORG_ID).
	PRE_INSERT	Process insert of characteristic group record.
	PRE-UPDATE	Update characteristic group record.
	ON-MESSAGE	Replace Text of Message - replaces default Oracle message when LOV is pressed while a record is displayed.
	WHEN-NEW-RECORD-INSTANCE	Hide Syschar_win and Userchar_win windows. Populate Original ID - populate parameter value. Set property of Characteristics button and data entry fields (Modified per SIR 1411 and 1424). Ensure ID LOV button is disabled when not in Enter-Query mode (SIR 1374).
CHARGRP / ID_CODE	KEY-LISTVAL	Display List and Populate Fields - auto populate rest of fields on return from selecting an ID. Upon executing the query, disable the LOV button (SIR 1374). Check for underscore in ID.
	WHEN-VALIDATE-ITEM	Check for Duplicate ID - IDs have to be unique within the Organization.

Module Component/Item	Trigger	Event
CHARGRP / HABITAT_ASSESSMENT_IN D	WHEN-CHECKBOX-CHANGED	Set Field Act Type (Modified per SIR 1424).
CHARGRP/ MEDIUM_TYPE_NAME	WHEN-LIST-CHANGED	Set Characteristics button. Validate Medium Type.
CHARGRP/ L_CITATION_TITLE_NAME	WHEN-VALIDATE-ITEM	Override Designer-generated code.
CHARGRP / CHAR_BUT (Action item)	WHEN-BUTTON-PRESSED	Go to appropriate Characteristic assign screen.
USERCHAR	KEY-COMMIT	Commit then re-query.
	KEY-DELREC	Check for delete restrictions; delete record.
	ON-MESSAGE	Override default message.
	PRE-INSERT	Process insert of Habitat Characteristic records.
	PRE-UPDATE	Update Habitat Characteristic records.
ORG/ NAME	KEY_NEXT_ITEM	Go Next Block - Go to CHARGRP block.
Module	ON-ERROR	Nullify unnecessary messages.
	PRE_QUERY	Set up default where clause to 'rpad' the ORG ID with spaces.
	WHEN-NEW-FORM-INSTANCE	Query and go to characteristic group ID - place cursor on characteristic group ID. Remove Biological from Medium type drop-down. Set global variable to flag Medium change.
	KEY-ENTQRY	Enable the ID LOV button (SIR 1374).
	KEY-EXIT	If Chargrp block, exit form; otherwise, validate form and return to Chargrp block.
SYS_GRP_HEAD	KEY-NEXT-ITEM	Go to SYSCHAR.Row_ID.
USER_GRP_HEAD	KEY-NEXT-ITEM	Go to USERCHAR.Row_ID.

CDX_CHARDEF

Module Component/Item	Trigger	Event
CDX_CHARDEF	WHEN-NEW-FORM-INSTANCE	Go to relevant default window based on Characteristic Type passed in from CDX_CHARGRP.
	PRE-QUERY	Get parameter values from CHAR.
	ON-MESSAGE	Suppress Message.
CHARASSC / LK_CJAR_DISP_NAME	KEY-CLRREC	Call No_act_on_char.
	KEY-CREREC	Call No_act_on_char.
	KEY-DELREC	Call No_act_on_char.
	KEY-ENTQRY	Call No_act_on_char.
	KEY-NXTREC	Call No_act_on_char.
	KEY-NEXT-ITEM	Go to DEFCHEM block Row_id field.
DEFCHEM	KEY-COMMIT	Commit form.
	KEY-CREREC	Block multiple defaults.
	KEY-NXTREC	Block multiple defaults.
	POST_QUERY	Populate the Sample Fraction Type from TSMPRMVL table.
	PRE_UPDATE	Update TSRCHDEF; Update/insert the Link of SFT; Check Upper >= Lower; No duplicate Row ID; Check Unit of Measure(UOM) if either Upper or Lower values or both are entered.
	KEY-CREREC	Call No_multi_def procedure to ensure that only one Characteristic Default can exist for each Characteristic.
	KEY-NXTREC	Call No_multi_def procedure to ensure that only one Characteristic Default can exist for each Characteristic.
	WHEN-NEW-RECORD-INSTANCE	Call Pop_sft_stat; Call Pop_anpr_lspp.

Module Component/Item	Trigger	Event
	WHEN-VALIDATE-RECORD	Call Val_unbound_sft_stat; Call Add_update_anpr; Call Add_update_lspp.
	PRE_INSERT	Create a row of TSRCHDEF; Link SFT; Check Upper >= Lower; No duplicate Row ID; Check UOM If either Upper or Lower values or both are entered.
DEFCHEM / LOWER_RANGE_VALUE	WHEN-VALIDATE-ITEM	Ensure that Lower Range Value for this Characteristic cannot be negative.
DEFCHEM / UPPER_RANGE_VALUE	WHEN-VALIDATE-ITEM	Ensure that Upper Range Value for this Characteristic cannot be negative.
DEFCHEM / UNANPR (button)	WHEN-BUTTON-PRESSED	Unassign Field/lab Analytical Procedure.
DEFCHEM / UNLSPP (button)	WHEN-BUTTON-PRESSED	Unassign Lab Sample Prep Procedure.
DUMCHAR	PRE_UPDATE	Update TSRCHDEF; Update/insert the Link of SFT; Check Upper >= Lower; No duplicate Row ID; Check UOM If either Upper or Lower values or both are entered.
	PRE_INSERT	Create a Row of TSRCHDEF; Check Upper >= Lower; No duplicate Row ID; Check UOM If either Upper or Lower values or both are entered.
	KEY-CLRREC	Call No_act_on_char.
	KEY-CREREC	Call No_act_on_char.
	KEY-DELREC	Call No_act_on_char.
	KEY-ENTQRY	Call No_act_on_char.
	KEY-NEXT-ITEM	Go to Row_id field on DEFTEXTTPV Block.

Module Component/Item	Trigger	Event
	KEY-NXTREC	Call No_Act_on_Char.
DUMCHAR / CHARNAME	KEY-CLRREC	Display error message.
	KEY-CREREC	
	KEY-DELREC	
	KEY-ENTQRY	
	KEY-NXTREC	
	KEY-NEXT-ITEM	
DEFTEXTPV	KEY-COMMIT	Commit form.
	KEY-NXTREC	Call No_Multi_Def procedure to ensure that only one Characteristic Default can exist for each Characteristic.
	PRE_INSERT	Create a row of TSRCHDEF.
	PRE_UPDATE	Update TSRCHDEF.
	KEY-CREREC	Call No_Multi_Def procedure to ensure that only one Characteristic Default can exist for each Characteristic.
	ON-MESSAGE	Suppress Message.
	POST-QUERY	Override query associated lookup item values for the foreign key(s).
	PRE-QUERY	Call GET_CHAR to get display name.
	WHEN-NEW-RECORD-INSTANCE	Call Pop_ANPR.
	WHEN-VALIDATE-RECORD	Call CHG_ANPR.
DEFTEXTPV / UNA (button)	WHEN-BUTTON-PRESSED	Unassign data.

Business Rules:

CDX_CHARGRP

- C Characteristic Group ID must be unique within the Organization.
- C Characteristic Group ID, Name, and Field Activity are mandatory fields.
- C Allow query based on Characteristic Group ID. Only show Characteristic Groups defined for the current Organization.
- C Have an LOV on Characteristic Group ID and Citation Title.
- C No Biological Characteristic Groups may be inserted, updated, or deleted.
- C There will be no cut/copy/paste functions.
- C No characteristic details information will be displayed.
- C Row_ID must be unique within the Organization.
- C For User-defined Characteristics, Characteristic Name must be unique within the Organization.
- C Only Physical, Chemical, Permitted Value, and Text Defaults are allowed (no Taxa).
- C Retired Characteristics will not be displayed in characteristic selection lists.
- C If Habitat_assess_ind = "Y", fld_act_type_nm should default to "Field Mrs/Obs" and be non-updateable and medium_type_name should be hidden.
- C Char_defined_ind should be set to null until characteristics are added to the characteristic group; at that point, define it either as "U" or "S".
- C If a characteristic group has characteristics assigned, then disallow update to Fld_act_type_nm, Medium_type_name, and Habitat_assess_ind.
- C On the Characteristic Selection Lists, do not show all characteristics by default; display the characteristics only after a search string has been entered.

CDX_CHARDEF

- C Row_ID is a mandatory field.

Error Handling:

CDX_CHARGRP

- C Duplicate checking to ensure Characteristic group ID is unique within a given Organization.
- C Error if one of the following mandatory fields are not provided: ID, Name, and Field Activity.
- C Error if Medium_type_name is not supplied for a non-Habitat Characteristic group.
- C Error if adding characteristics for Habitat Assessment when no Definition Type (System-Defined or User-Defined) has been specified.

CDX_CHARDEF

- Row_ID are mandatory fields.
- Cannot have duplicate Row_IDs.
- For the existing data, can update a record without Row_ID.

Delete Rules:

- When a Characteristic Group is deleted, cascade delete any Characteristic to Characteristic Group Assignments, Characteristic Defaults, and Habitat Class Scheme Characteristics associated with it.
- Disallow delete of a Characteristic Group if Results are tied to one of its Habitat Class Scheme Characteristics.

NOTE: All cascade delete and delete restrictions (disallow delete) rules are handled in a separate SIR 1349.

Disabling Rules:

CDX_CHARGRP

- On insert of characteristic group, disable Characteristics button until all required fields have been entered and saved.
- Disable Defaults button if no characteristic exists in Characteristic Group.
- Don't allow query or update of Organization ID or Name.
- LOV button for Characteristic Group ID is disabled when form is in entry/update mode; enabled when in query mode.

CDX_CHARDEF

- Don't allow query or update of Characteristic Name.

Controls/Tab Processing:

Left to right, top to bottom.

Header Information:

<u>Module</u>	<u>Prompt</u>	<u>Field</u>
CDX_CHARGRP	Organization	TSMORGAN_ORG_ID, NAME
CDX_CHARDEF	Characteristic	TSRCHAR.DISPLAY_NAME

Called Procedures (SQL-PL/SQL):

CDX_CHARGRP:

- ASSIGN_CHAR.
- CHECK_RI_TSRCHGRP.
- CHECK_RI_TSRHCSC.
- POP_CHAR_LIST.
- CALL_CHARDEF.

CDX_CHARGRP.CHARGRP:

- GO_NEXT_ENABLED_ITEM.
- GO_PREV_ENABLED_ITEM.
- QRY_CHARGRP_CHGRP_CITN_FK.
- CHECK_MED_TYPE.
- DUPLICATE_ID_CHECK.

CDX_CHARDEF:

- NO_ACT_ON_CHAR.
- NO_MULTI_DEF.

CDX_CHARDEF.DEFCHEM:

- CHK_COMP_IND.
- CHK_DUP_ROWID.
- POP_ANPR_LSPP.
- POP_SFT_STAT.
- ADD_UPDATE_ANPR.
- ADD_UPDATE_ISPP.
- CHECK_UNIT_VALUE_RANGE.
- VAL_UNBOUND_SFT_STAT.

CDX_CHARDEF.DEFTEXTVPV:

- CHG_ANPR.
- CHK_COMP_IND1.
- CK_DUP_ID.
- GET_CHAR.
- POP_ANPR.

Configurable Item(s):

<u>Source</u>	<u>Executable</u>	<u>Library</u>
CDX_CHARGRP.fmb	CDX_CHARGRP.fmx	STORETLIBFRM.olb
CDX_CHARDEF.fmb	CDX_CHARDEF.fmx	
<u>Template</u>	<u>Menu</u>	
STORTEMPLATE.fmb	MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

Level	Short_Name	Settings
Module - CDX_CHARGRP	BLKJUS	LEFT
	LOVVAL	Y
Module - CDX_CHARDEF	PAGCWD	100
	LOVVAL	Y
	USEPKR	QUERY
Module Component - ORG	BLKFTS	1
	BLKJUS	LEFT
Module Component - CHARGRP	BLKMAR	0.1 cm
Item Group - CHARGRP.CHAR_GRP	GRPDEC	RECTANGLE
	GRPFTS	0.2 cm
	GRPHDS	0
	GRPMAR	0.1 cm

Level	Short_Name	Settings
Item Group - CHARGRP.HAB_GRP	GRPDEC	RECTANGLE
	GRPFTS	0.1 cm
	GRPHDS	0.15 cm
	GRPMAR	2
Item Group - CHARGRP.CITATION	GRPFTS	0.2 cm
	GRPMAR	0.2 cm
Item Group - CHARGRP.BUT_AREA	GRPFTS	0
	GRPMAR	0
	GRPVIS	10
Module Component - CHARASSOC	OFADFT	N
	SPRBEV	NONE
Module Component - USERCHAR	BLKHDS	1
Module Component - CHAR	BLKFTS	1
	BLKLYS	FILL
Item Group - CHAR.ADD_GRP	GRPDEC	RECTANGLE
	GRPFTS	0.2 cm
	GRPHIS	2
Item Group - CHAR.ALIAS_GRP	GRPDEC	RECTANGLE
	GRPFTS	0.2 cm
	GRPHDS	0.2 cm
Item Group - CHAR.DEF_GRP	GRPFTS	0
	GRPHDS	1
Module Component - SYS_GRP_HEAD	BLKFTS	1

Window Snapshots:

Characteristic Groups & Defaults Maintenance

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: `http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx`. The browser window contains a Java applet titled "Characteristic Groups & Defaults Maintenance".

The applet has a menu bar with the following items: Action, Edit, Query, Block, Record, Form, Window, Help. Below the menu bar is a toolbar with various icons for navigation and editing.

The main form area is titled "Characteristic Groups & Defaults Maintenance" and contains the following fields and controls:

- Organization:** A text field containing "CHRISTIN".
- Basic Characteristic Group Information:**
 - ID:** A text field containing "1048GRP1".
 - Name:** A text field containing "group for SIR 1048 sampleS".
 - Field Activity:** A dropdown menu with "Sample" selected.
 - Medium:** A dropdown menu with "Sediment" selected.
 - Habitat Asses...:** A checkbox and a dropdown menu.
 - Citation ID:** A text field containing "WRAP TEST 4".
 - Citation Title:** A text field containing "xxxxxxxx1xxxxxxxx2xxxxxxxx3xxxxxxxx4xxxxxxxx5xxxxxxxx6xxxxxxxx7xxxxxxx".
 - Description:** A text area.
- Buttons:** "Unassign" and "Characteristics".

The status bar at the bottom of the applet shows "Char Group ID" and "Record: 5/7".

The browser window also shows a status bar at the bottom with the text "Applet started." and "Internet".

Characteristic Group Characteristics List Maintenance

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print View W Help

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx Go

Action Edit Query Block Record Form Window Help

Characteristic Group Characteristics List Maintenance

Characteristic Group 1048GRP1 group for SIR 1048 sampleS

Row ID	Display Name	Unit	Complete	Sample Fraction	V
TEST1	Particle distribution	%	N		
1	Temperature, air		N		
A	Nitrogen		N		

Add Characteristics

Search by Char Name Alias Type Search by Char Alias Defaults

Char Default Row ID

Record: 1/3 <QSC>

Applet started. Internet

Habitat Classification Scheme Characteristic Maintenance

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Habitat Classification Scheme Characteristic Maintenance

Characteristic Group 1349GRP2 1349GRP2B

Row ID	Habitat Characteristic Name	Description
TEST1	TEST1	test1 desc
TEST2	TEST2	test2 desc

Char Default Row ID

Record: 1/2 ... <OSC>

Applet started. Internet

Chemical Characteristic Default Data Entry

Oracle9iAS Forms Services - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print W Go

Address http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx

Action Edit Query Block Record Form Window Help

Chemical Characteristic Default Data Entry

Characteristic Nitrogen, Nitrate

Basic Char Default Info

Row ID* 4

Sample Fraction Total

Value Unit meq/L Value Type Statistic Type

Basis

Duration Temperature

Weight

Acceptable Result Range

Lower 0 Upper 400 Units meq/L

Assigned Field/Lab Analytical Procedure

Source ID Name Unassign

Assigned Lab Sample Prep Procedure

Source ID Name Unassign

Char Default Row ID

Record: 1/1

Applet started. Internet

Physical Characteristic Default Data Entry

The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx. The browser window contains a Java applet titled "Physical Characteristic Default Data Entry".

The applet interface includes a menu bar with "Action", "Edit", "Query", "Block", "Record", "Form", "Window", and "Help". Below the menu is a toolbar with various icons. The main form area is titled "Physical Characteristic Default Data Entry" and contains the following sections:

- Characteristic:** Particle distribution
- Basic Char Default Info:**
 - Row ID*: TEST1
 - Value Unit: %
 - Value Type: Actual
 - Statistic Type: (empty dropdown)
- Basis:**
 - Duration: (empty dropdown)
 - Temperature: (empty dropdown)
 - Weight: (empty dropdown)
 - Particle Size: (empty dropdown)
- Acceptable Result Range:**
 - Lower: (empty text box)
 - Upper: (empty text box)
 - Units: %
- Assigned Field/Lab Analytical Procedure:**
 - Source: CHRISTIN
 - ID: CHRIS/DLFP1
 - Name: Data Log Field Procedure 1
 - Unassign button
- Assigned Lab Sample Prep Procedure:**
 - Source: CHRISTIN
 - ID: LSP1
 - Name: lab sample prep proc one
 - Unassign button

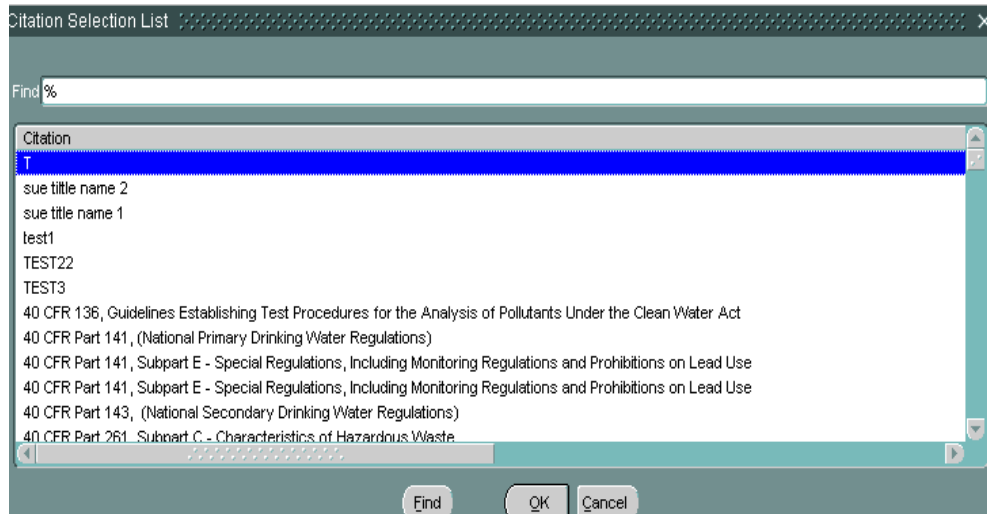
At the bottom of the applet, there is a status bar that reads "Char Default Row ID" and "Record: 1/1". The browser window also shows a status bar at the bottom with the text "Applet started." and "Internet".

Characteristic Default Data Entry for Text or PV

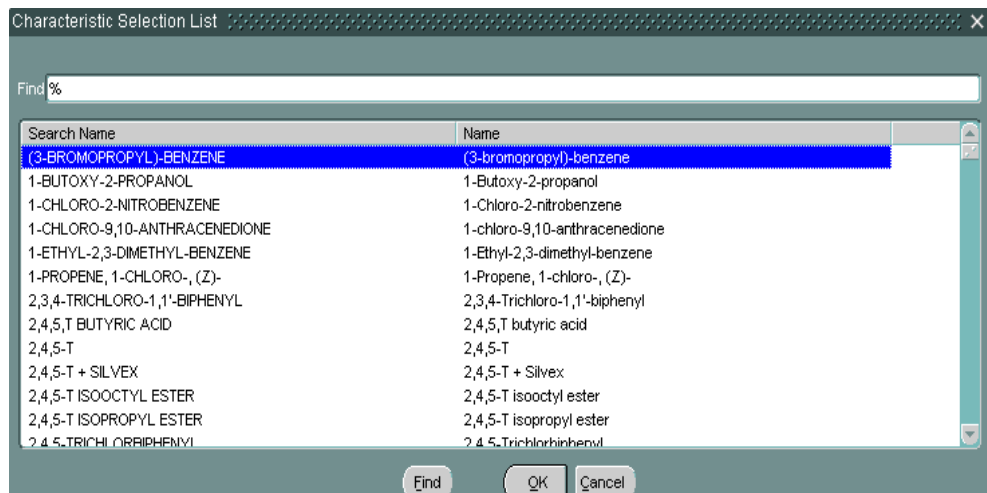
The screenshot shows a web browser window titled "Oracle9iAS Forms Services - Microsoft Internet Explorer". The address bar displays the URL: `http://storet-l-11592.sdc-moses.com:7778/forms90/f90servlet?form=CDX_MENU.fmx`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains standard navigation buttons like Back, Forward, Home, and Search, along with icons for Favorites, Media, and printing. The main content area displays the "Characteristic Default Data Entry" form. At the top of the form, there is a label "Characteristic" followed by a text field containing "Floating algae mat - severity (choice list)". Below this is a "Row ID*" field with the value "FLOATING ALGAE". A section titled "Assigned Field/Lab Analytical Procedure" contains three input fields: "Source", "ID", and "Name". To the right of the "Name" field is an "Unassign" button. At the bottom of the form, there is a status bar that reads "Char Default Row ID" and "Record: 1/1". The browser's status bar at the very bottom shows "Applet started." and "Internet".

LOVs:

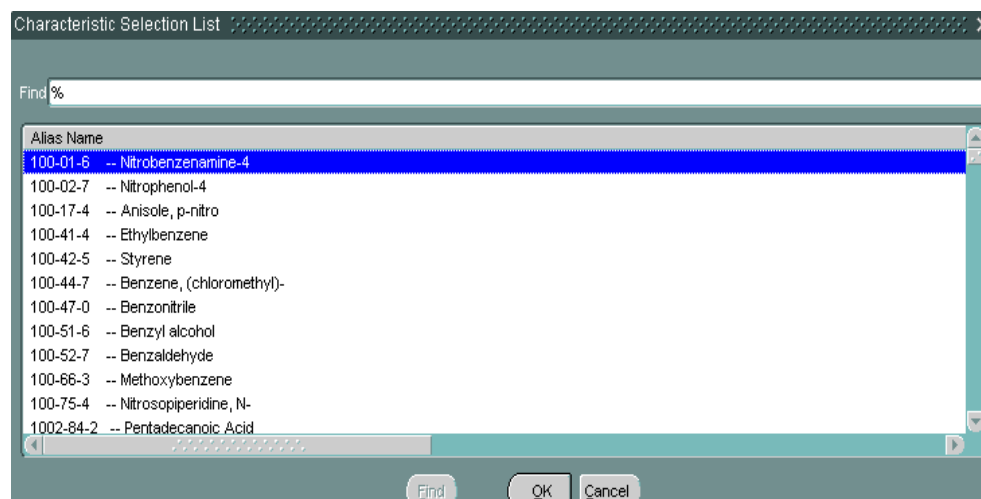
Citation Selection List



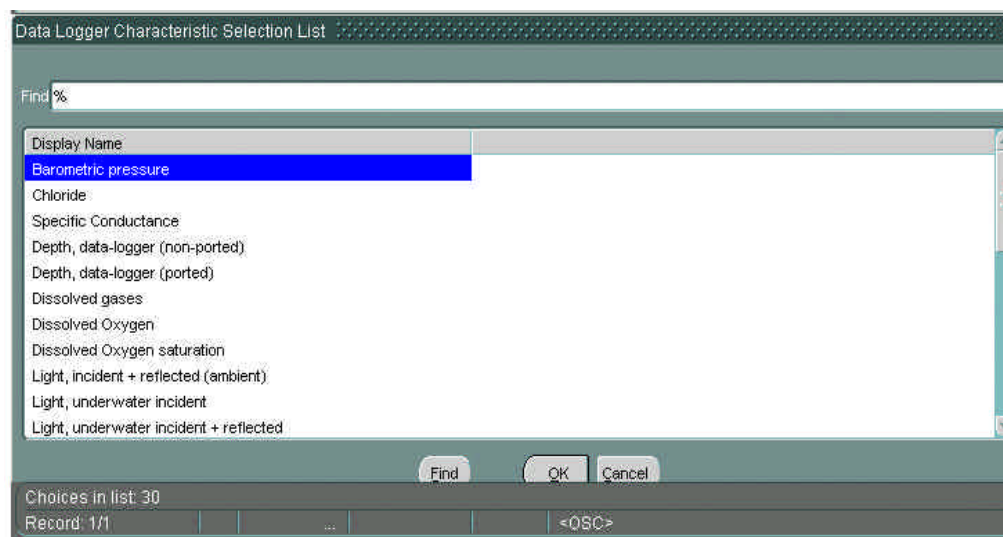
Characteristic Selection List (Search by Name)



Characteristic Selection List (Search by Alias)



Data Logger Characteristic Selection List



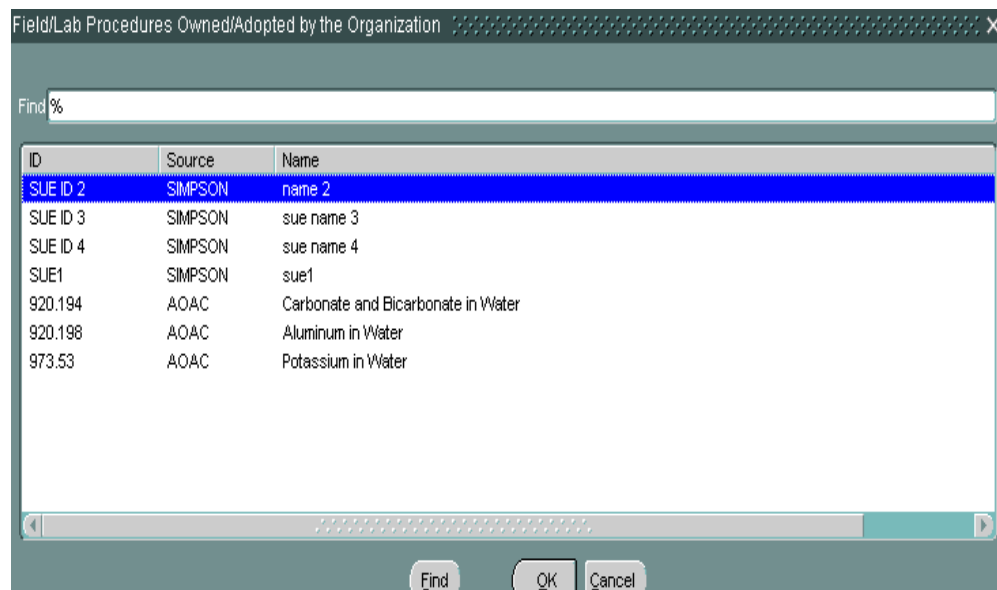
Characteristic Group Selection List

ID	Name	Field Activity	Medium	Habitat Assessment?
DDD	dd	Field Msr/Obs	Other	N
SUE ID 1	sue name 1	Sample	Air	N
SUE ID 2	d	Field Msr/Obs	Other	N
SUE ID 5	sue name 5	Field Msr/Obs	Soil	N
SUE ID 6	SUE NAME 6	Field Msr/Obs		Y
SUE ID 7	DD	Field Msr/Obs	Other	N
SUE ID 8	sue name 8	Sample	Soil	N

Unit of Measure Selection

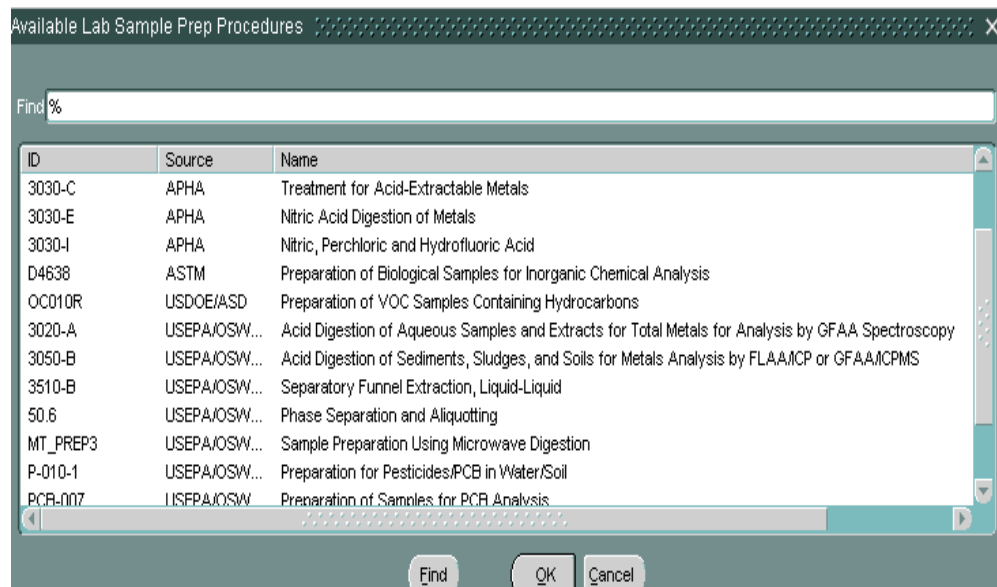
Name	Description
Molal	Molal
Molar	Molar
Mole/l	Moles per liter
Normal	Normal
g	grams
g/cm3	grams per cubic centimeter
g/kg	grams per kilogram
g/m2	grams per square meter
g/m3	grams per cubic meter
kg	kilograms
kg/m2	kilograms per square meter
kg/m3	kilograms per cubic meter
lb	pounds

Field Procedures Owned/Adopted by the Organization



ID	Source	Name
SUE ID 2	SIMPSON	name 2
SUE ID 3	SIMPSON	sue name 3
SUE ID 4	SIMPSON	sue name 4
SUE1	SIMPSON	sue1
920.194	AOAC	Carbonate and Bicarbonate in Water
920.198	AOAC	Aluminum in Water
973.53	AOAC	Potassium in Water

Available Lab Sample Prep Procedures



ID	Source	Name
3030-C	APHA	Treatment for Acid-Extractable Metals
3030-E	APHA	Nitric Acid Digestion of Metals
3030-I	APHA	Nitric, Perchloric and Hydrofluoric Acid
D4638	ASTM	Preparation of Biological Samples for Inorganic Chemical Analysis
OC010R	USDOE/ASD	Preparation of VOC Samples Containing Hydrocarbons
3020-A	USEPA/OSW...	Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by GFAA Spectroscopy
3050-B	USEPA/OSW...	Acid Digestion of Sediments, Sludges, and Soils for Metals Analysis by FLAA/MCP or GFAA/CPMS
3510-B	USEPA/OSW...	Separatory Funnel Extraction, Liquid-Liquid
50.6	USEPA/OSW...	Phase Separation and Aliquotting
MT_PREP3	USEPA/OSW...	Sample Preparation Using Microwave Digestion
P-010-1	USEPA/OSW...	Preparation for Pesticides/PCB in Water/Soil
PCB-007	USEPA/OSW...	Preparation of Samples for PCB Analysis

STORET
Web Registration Application Specification
SIR: 1344

Module Name: Web Registration Application Main Menu (CDX_MENU)

Module Components: MENU

Last Update: February 13, 2003

Processing Overview/Description:

This is the start up form for the web registration application. Displays a list of Organizations to select. The first item is selected by default. Navigation buttons (e.g., "Organization", "Station", "Citation") are displayed below the list to allow flow to each called module/form for the selected Organization. No data entry is possible on this form.

01/30/2003 - SIR 1408 - List of Organizations should only include those for which the current user has access (i.e., read the TSMUOA table).

Tables:

Table	Column/Foreign Key	Item Prompt	Item Group Prompt	Display Width	Align ment	Processing
TSMORGAN	ORG ID	Organization ID		12	L	Query - List
	NAME	Name		100	L	Query - List
	TSMORGAN_IS_NUMBER	n/a				(Hidden)

Links From:

None.

Links To:

Module	Button/Text	Argument Passed	Value
CDX_ORG	Org Description	ORG	MENU.ORG_ID
CDX_COOP	Cooperating Org/Personnel	ORG	MENU.ORG_ID
CDX_PROJECT	Projects	ORG	MENU.ORG_ID
CDX_STATION	Stations	ORG	MENU.ORG_ID
CDX_CITATION	Citations	ORG	MENU.ORG_ID
CDX_LAB	Laboratories	ORG	MENU.ORG_ID
CDX_ANPR	Field/Lab Analytical Procedures	ORG	MENU.ORG_ID
CDX_PROCGEAR	Sample Collection/Creation Procedures & Gear	ORG	MENU.ORG_ID
CDX_SDP	Sample Preservation, Transport, & Storage	ORG	MENU.ORG_ID
CDX_CHARGRP	Characteristic Groups and Defaults	ORG	MENU.ORG_ID

Input Parameters:

The menu displays only Organization(s) that the current user is allowed to maintain based on what is defined in the TSMUOA table.

Output Parameters:

Argument	Value
ORG	MENU.ORG_ID
STARTUP_MODE	AUTO QUERY

Images:

None.

Trigger/Events Processing:

Module Component/Item	Trigger	Event
MENU	Table level "Where" clause	tsmorgan_is_number in (select b.tsmorgan_is_number from tsmuoa b where b.tsmuser_userid = (select TSMUSER_USERID from TSMUSER where TSMUSER_USERID = (select TSMDBUSR_USERID FROM TSMDBUSR)))
MENU.ORG_ID	KEY-PREV-ITEM	GO PREV BLOCK - to go to last button in previous block.
MENU.NAME	KEY-NEXT-ITEM	GO NEXT BLOCK - to go to next block to navigation buttons.
Module	KEY-EXIT	Check Any Open Windows - don't allow this window to be closed if other forms are still open. Prompt user for confirmation before exiting form.
	WHEN-NEW-FORM-INSTANCE	Execute query.
	POST-FORM	Display the EXIT_URL defined in the STORET.TSRWRVAR table.
	WHEN-WINDOW-ACTIVATED	Execute query to display changed data.
Action Item - ORGAN	KEY-PREV-ITEM	Go to Organization Name in list.
	WHEN-BUTTON-PRESSED	Set Variable And Open Form - Calls selected form ensuring an existing one has not already been open.

Module Component/Item	Trigger	Event
Action Items (CDX_COOP, PROJECT, STATION, CITATION, CDX_LAB, ANPR, FIELD PROC GEAR, SAMPLE_DEFAULT_PROFILE)	WHEN-BUTTON-PRESSED	Set Variable And Open Form - Calls selected form ensuring an existing one has not already been open.
Action Item - CHARGRP	KEY-NEXT_ITEM	Go to Organization Identification.
	WHEN-BUTTON-PRESSED	Set Variable And Open Form - Calls selected form ensuring an existing one has not already been open.

Business Rules:

- List available Organizations at startup; sorted by Organization ID.
- Allow Query on Organization ID and Name.
- Do not show the National (i.e., ZZZZZZZZ) Organization.
- Disallow window from being closed if other called forms are still open.
- Only allow one instance of a given called form to be open at a time.

Error Handling:

- Disallow query on National (i.e., ZZZZZZZZ) Organization.
- Error on attempts to insert, update, or delete Organization ID or Name.
- Disallow window from being closed if other called forms are still open.
- Only allow one instance of a given called form to be open at a time.

Delete Rules:

None.

Disabling Rules:

None.

Controls/Tab Processing:

Left to right on list, then to buttons (left to right).

Header Information:

None.

Called Procedures (SQL-PL/SQL):

None.

Configurable Item(s):

<u>Source</u> CDX_MENU.fmb	<u>Executable</u> CDX_MENU.fmx	<u>Library</u> STORETLIBFRM.olb
<u>Template</u> STORTEMPLATE.fmb	<u>Menu</u> MENUDEFS.mmb	

Modified Generator Preferences and/or Layouts:

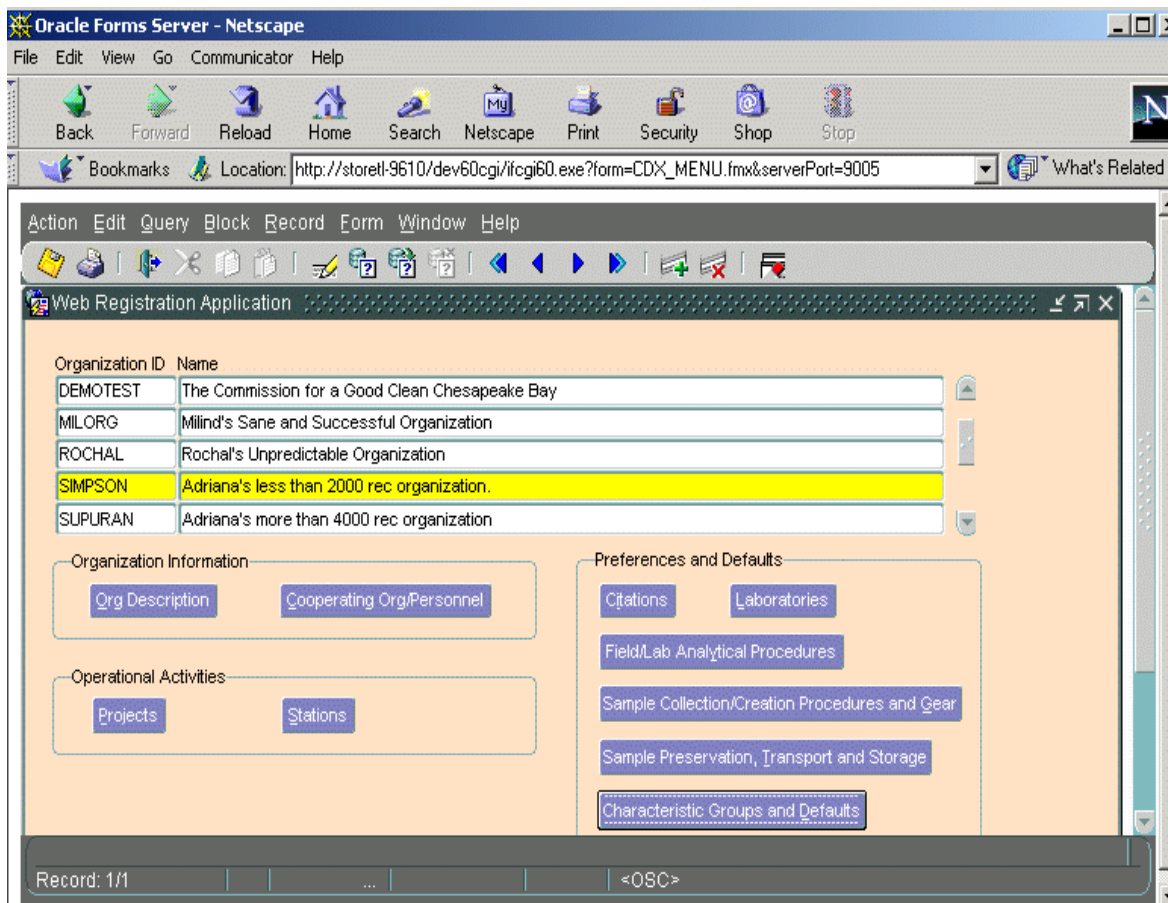
Level	Short_Name	Settings
Module Component - MENU	BLKHDS	1
	ITMIPG	0
	ITMPIG	0
Module	BLKMAR	2
Application	AIBBWD	INDIVIDUAL TEXT
	BSCSCP	F
	CURREC	MULTI
	HLPTYP	HTML_BASED HELP
	MSGSFT	F
	FMNDMA	MENUDEFS

Level	Short_Name	Settings
	BLKDEC	NONE
	BLKFTS	0
	BLKHDS	0
	BLKMLL	0
	BLKMLR	0
	BLKSBP	RIGHT
	PAGCHT	17
	PAGCWD	67
	PAGTFB	Y
	CONDEC	NONE
	CONDFT	N
	CONGRP	ONE
	ITMASP	N
	ITMIPG	1
	ITMTIP	NONE
	GRPDEC	NONE
	GRPHDS	0
	GRPHIS	0
	GRPUTT	SD
	GRPVIS	0
	OFADDEC	NONE
	PLSMAX	20
	POPTFB	N
	FKLOVT	F
	LOVBUT	Y
	LOVITG	0
	LOVMHT	18

Level	Short_Name	Settings
	LOVVAL	N
	NAVBWN	Y
	NAVKEY	Y
	STFFMB	stortemplate.fmb
	STOOLB	storetlibfrm.olb

Window Snapshots:

Web Registration Application Menu



Note: The layout of the buttons MUST be done using Developer and saved as a .fmb file. All functional changes is to be continued in Designer. After code changes, generate the form using "Preserve Layout" option and use the saved .fmb file as the layout source file.

STORET
Web Registration Application Specification
SIR: 1351

Application Name: STORET Web Registration

Module Name: MENUDEFS (menu form)

Module Components: None

Last Update: January 30, 2003

Processing Overview/Description:

The MENUDEFS template defines the content and layout of the menu and SmartBar for every form in the STORET Web Registration application. This template is based on the default Oracle menu and SmartBar definition with a few modifications. First, the record Lock command has been removed from both the menu and SmartBar. Second, a button for Edit (which calls the Oracle Text Editor) has been added to the SmartBar. Third, the Scroll Up/Scroll Down options from the Record menu item and Fetch Next Set option in the Query menu item have been removed as they were causing conflicting behavior with the Prev Record and Next Record buttons. Also, the corresponding function keys need to be disabled. This is done on the forms server by editing the FMRWEB.RES file.

Updates:

11/04/2002 - Remove function keys altogether as this causes additional coding throughout forms.

11/07/2002 - Add mnemonic keys to navigation items and custom buttons on forms.

12/06/2002 - Incorporate SIR 1385 to add a Cancel Form feature.

01/13/2003 - Modify procedures (enable_disable_query_items and enable_disable_regular_items) to replace the enable_item and disable_item command with set menu_item_property.

01/16/2003 - Modify Help key to read STORET.TSRWRVAR table for the Help Uniform Resource Locator (URL).

01/27/2003 - Modify Editor start Y position based on Y position of current field to prevent it from being displayed below the viewable portion of the form (SIR 1393 TIR).

Tables:

None.

Links From:

None.

Links To:

None.

Commands and Actions:

Command Name	Menu Location	SmartBar Icon Filename	Action Description
Save	Action	save	Commits the current transaction block.
Print	Action	print	Prints the form that currently has focus.
Exit	Action	exit	Closes the form that currently has focus. If the menu form is exited, the application (and user's database connection) is closed.
Cut	Edit	cut	Removes the currently selected text and stores it in the 'Paste' buffer.
Copy	Edit	copy	Stores the currently selected text in the 'Paste' buffer.
Paste	Edit	paste	Copies the stored text from the 'Paste' buffer to the current location.
Edit	Edit	afedit	Opens the Oracle Text Editor for the currently selected field. Added logic to this button to ensure editor is positioned and visible on form.
Enter	Query	entrqry	Initiates query mode.
Execute	Query	exeqry	Executes a query using the currently entered criteria.
Cancel	Query	canqry	Exits query mode.
Count Hits	Query		Gives a message indicating the number of records returned in a query.

Command Name	Menu Location	SmartBar Icon Filename	Action Description
Last Criteria	Query		Available in Enter Query mode only. Displays last search criteria entered (e.g., 'TEST%' in an ID field). Have to press Execute Query again.
Previous	Block		Moves control to the last field in the previous data block.
Next Block	Block		Moves control to the first field in the next data block.
Clear	Block		Clears all fields in the current block.
Previous	Record		Moves to the previous record in the data set.
Next Record	Record		Moves to the next record in the data set.
Insert Record	Record	insrec	Creates a new record.
Remove Record	Record	delrec	Deletes the current record.
Duplicate	Record		While in insert mode, populates the fields with the previous record's data.
Clear	Record		Clears fields for the current record.
Cancel Form	Form	Afclrall.gif	Closes form without validation.
Cascade	Window		Default Windows behavior.
Tile	Window		Default Windows behavior.
Arrange Icons	Window		Default Windows behavior.
<Opened Form(s)>	Window		Default Windows behavior.
Help	Help	help	Displays the application's help Hyper-Text Markup Language (HTML) page.
Display Error	Help		Displays most recent error message.

Function Keys:

NOTE: The keys used are the default. Some have been removed from the forms server. TAB, SHIFT+TAB, and F2 (list tabs on a tabbed page) are the only available keys. The keys listed in the table below are included in this document to ensure none of the functionality exists when testing, etc.

Function	Key
Clear Block	F7
Clear Field	F5
Clear Form	F8
Clear Record	F6
Commit	Ctrl+S
Count Query	F12
Delete Record	Ctrl+Up
Display Error	Shift+Ctrl+E
Down	Down
Duplicate Field	Shift+F5
Duplicate Record	Shift+F6
Edit	Ctrl+E
Enter Query	F11
Execute Query	Ctrl+F11
Exit	F4
Help	Ctrl+H
Insert Record	Ctrl+Down
List of Values	Ctrl+L
*List Tab Pages	F2
Next Block	Shift+PageDown
*Next Field	Tab
Next Record	Down
Previous Block	Shift+PageUp
*Previous Field	Shift+Tab
Previous Record	Up
Print	Ctrl+P
Return	Return

Function	Key
Show Keys	Ctrl+K
Toggle Query Mode	Ctrl+B
Up	Up
Update Record	Ctrl+U

Button Mnemonics:

Module Name	Button Name	Mnemonic Key (Alt+)
CDX_Menu	Org Description	O
	Cooperating Org/Personnel	C
	Projects	P
	Stations	S
	Citations	I
	Laboratories	L
	Field/Lab Analytical Procedures	Y
	Sample Collection/Creation Procedures & Gear	G
	Sample Preservation, Transport & Storage	T
	Characteristic Groups & Defaults	D
CDX_ANPR	Unassign	U
	Add More Nat'l	M
	Unadopt	U
CDX_ANPRNAT	Select	S
	Cancel	C
CDX_PROCGEAR	Unassign	U
CDX_CHARGRP	Unassign	U
	Characteristics	C
	Search by Name	N

Module Name	Button Name	Mnemonic Key (Alt+)
	Search by Alias	S
	Defaults	D
CDX_CHARDEF	Unassign Anal Proc	U
	Unassign Lab Sample Prep	S
MENUDEFS	Cut	t
	Execute	x

Input Parameters:

None.

Output Parameters:

None.

Images:

- Pencil graphic for Edit command on SmartBar (afedit.gif).
- Clear All graphic for Cancel Form command on SmartBar (afclrall.gif).

Business Rules:

The menu template is compiled with each of the web forms to provide the overall menu/toolbar functionality.

Error Handling:

None.

Delete Rules:

None.

Disabling Rules:

No changes made from the default behavior.

Controls/Tab Processing:

None.

Header Information:

None.

Called Procedures (SQL-PL/SQL):

None.

Configurable Item(s):

Source
MENUDEFS.mmb

Executable
MENUDEFS.mmx

Forms Server File:
FMRWEB.RES

Attached Libraries:

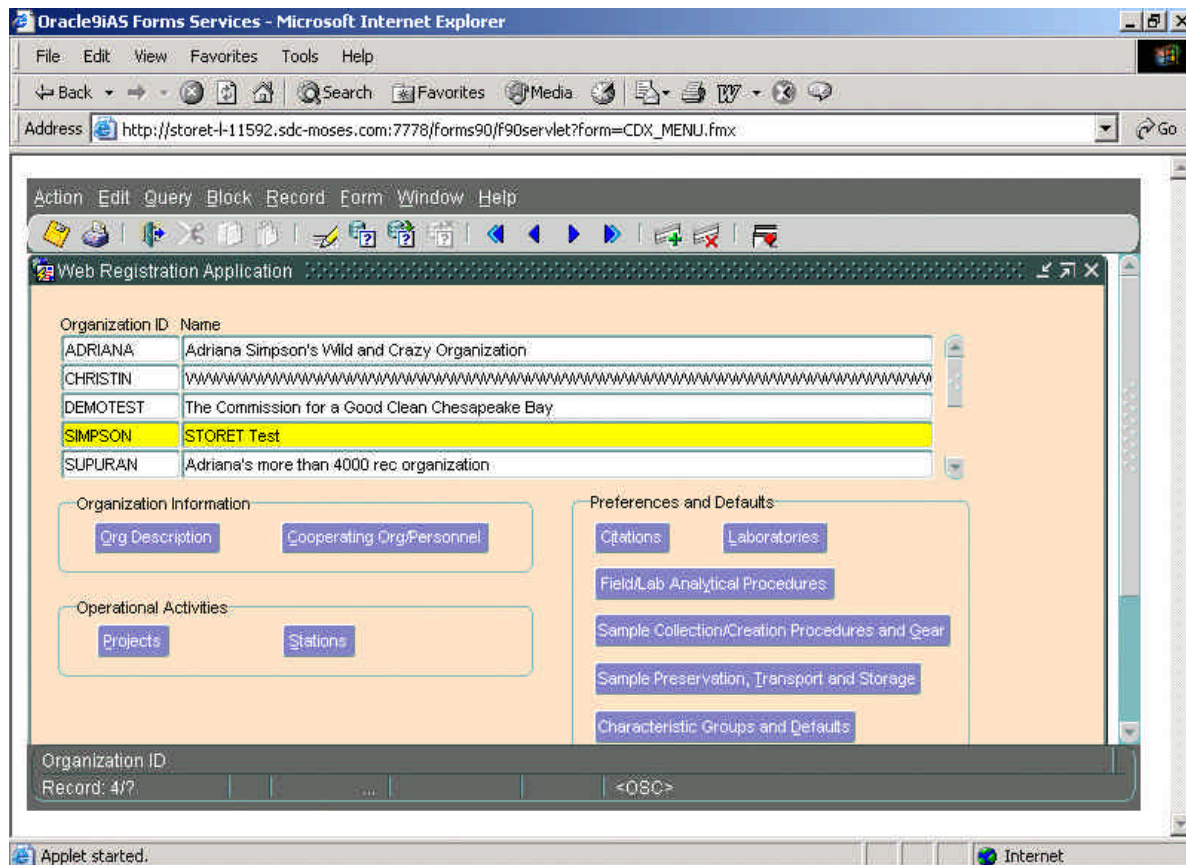
C D2KHELP.PLL.

Modified Generator Preferences and/or Layouts:

None.

Window Snapshots:

(SmartBar is displayed at the top of the form)



APPENDIX B

Delete Rules

STORET
Web Registration Application Specification
SIR: 1349

Delete Restrictions Rules:

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
TSMADDR	disassociate with TSMORGAN	N/A (no foreign key)
	disassociate with TSMSTATN	N/A (no foreign key)
	disassociate with TSMCPORG	N/A (no foreign key)
	disassociate with TSMWLE	N/A (no foreign key)
	disassociate with TSRLAB	N/A (no foreign key)
TSRANLPR	disassociate with TSRANLEQ	nullifies
	disassociate with TSRANLPR (2)	nullifies
	delete TSROAPA	cascade
	disassociate with TSRCITN	N/A (no foreign key)
	disallow delete if TSRRSULT	restrict
	disassociate with TSRCHDEF	nullifies
TSRCCGA	disassociate with TSRCHAR	N/A (no foreign key)
	disassociate with TSRCHGRP	N/A (no foreign key)
	delete TSRCHDEF	cascade
TSRCHDEF	disassociate with TSRCCGA	N/A (no foreign key)
	disassociate with TSRLSPP	N/A (no foreign key)
	disassociate with TSRANLPR	N/A (no foreign key)
	disassociate with TSMPRMVL (3)	N/A (no foreign key)

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
TSRCHGRP	delete TSRCCGA	cascade
	disassociate with TSMORGAN	N/A (no foreign key)
	delete TSRHCSC	cascade
	disassociate with TSRCITN	N/A (no foreign key)
TSRCITN	disallow delete if TSRFLDPR	restrict
	disassociate with TSMORGAN	N/A (no foreign key)
	disallow delete if TSRANLPR	restrict
	delete TSRCPA	cascade
	disallow delete if TSRLSPP	restrict
	disallow delete if TSRCHGRP	restrict
TSMCPORG	delete TSRFACOA	cascade
	disassociate with TSMORGAN	N/A (no foreign key)
	delete TSMADDR	cascade
	delete TSMEADDR	cascade
	delete TSMPCOA	cascade
TSMEADDR	disassociate with TSMORGAN	N/A (no foreign key)
	disassociate with TSMPERSON	N/A (no foreign key)
	disassociate with TSMSTATN	N/A (no foreign key)
	disassociate with TSMCPORG	N/A (no foreign key)
	disassociate with TSRLAB	N/A (no foreign key)
TSRFLDPR	disassociate with TSRCITN	N/A (no foreign key)
	disallow delete if TSRFDCT	restrict
	disassociate with TSMORGAN	N/A (no foreign key)
TSRGRCFG	disassociate with TSRFLDGR	N/A (no foreign key)

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
	disassociate with TSMORGAN	N/A (no foreign key)
	disallow delete if TSRFDACT	restrict
	delete TSMGNTXT	cascade
TSMGNTXT	disassociate with TSRRSULT	N/A (no foreign key)
	disassociate with TSMPROJ	N/A (no foreign key)
	disassociate with TSMPROG	N/A (no foreign key)
	disassociate with TSRGRCFG	N/A (no foreign key)
TSROAPA	disassociate with TSRANLPR	N/A (no foreign key)
	delete TSROAPCA	cascade
	disassociate with TSMORGAN	N/A (no foreign key)
TSMPEPSN	delete TSMEADDR	cascade
	disassociate with TSMORGAN	N/A (no foreign key)
	delete TSMPPA	cascade
	delete TSRAPEA; however code is in place to disallow delete if present.	restrict
	delete TSRAQSPA; however code is in place to disallow delete if present.	restrict
	delete TSMPPA; however code is in place to disallow delete if present.	restrict
TSMPROJ	disallow delete if TSMPSA	restrict
	disassociate with TSMORGAN	N/A (no foreign key)
	delete TSMVSC	cascade
	delete TSMPPA	cascade

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
	delete TSMPRPRA	cascade
	delete TSMPCOA	cascade
	delete TSRFAPRA	N/A (beyond scope)
	delete TSRTPA	N/A (beyond scope)
	delete TSRCPA	cascade
	delete TSRPOPA	cascade
	delete TSMGNTXT	cascade
TSRSDP	disassociate with TSMORGAN	N/A (no foreign key)
	disassociate with TSMPRMVL (3)	N/A (no foreign key)
TSMALP	disassociate with TSMPPMGRD	N/A (no foreign key)
	disassociate with TSMPPMTCT	N/A (no foreign key)
	disassociate with TSMPIPE	N/A (no foreign key)
	disassociate with TSMSTATN	N/A (no foreign key)
	disassociate with TSMWELL	N/A (no foreign key)
	disassociate with TSMRRR	N/A (no foreign key)
	disassociate with TSMGEOPA (2)	N/A (no foreign key)
	disassociate with TSMFHU	N/A (no foreign key)
	disassociate with TSMNAL	N/A (no foreign key)
	delete TSMGLL	cascade
	delete TSMOCNLC	cascade
	delete TSMESTLC	cascade
	delete TSRAAL	cascade
TSMESTLC	disassociate with TSMESTRY	N/A (no foreign key)

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
	disassociate with TSMALP	N/A (no foreign key)
TSMGLL	disassociate with TSMALP	N/A (no foreign key)
TSRHCSC	disassociate with TSRCHGRP	N/A (no foreign key)
	disallow delete if TSRRSULT	restrict
TSMOCNLC	disassociate with TSMALP	N/A (no foreign key)
TSMSTATN	delete TSMRFLBL	cascade
	delete TSMWELL	cascade
	delete TMSPRNG	cascade
	delete TSMPPMGRD	cascade
	delete TSMPPMTCT	cascade
	delete TSMPPSA; however code is in place to disallow delete if present.	restrict
	disassociate with TSMORGAN	N/A (no foreign key)
	delete TSMALP	cascade
	delete TSMFCLTY	cascade
	delete TSMADDR	cascade
	delete TSMEADDR	cascade
	delete TSRTSA	N/A (beyond scope)
	disassociate with TSMVSTC	N/A (no foreign key)
	delete TSRADL	N/A (beyond scope)
TSRCPA	disassociate with TSRCITN	N/A (no foreign key)
	disassociate with TSMPROJ	N/A (no foreign key)
TSRFACOA	disassociate with TSRFDACT	N/A (no foreign key)
	disassociate with TSMCPORG	N/A (no foreign key)

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
TSMMPMGRD	disassociate with TSMSTATN	N/A (no foreign key)
	delete TSMALP	cascade
TSMPMTCT	disassociate with TSMSTATN	N/A (no foreign key)
	delete TSMALP	cascade
TSMPPRA	disassociate with TSMPERSON	N/A (no foreign key)
	disassociate with TSMPPROLE	N/A (no foreign key)
TSMPCOA	disassociate with TSMCPORG	N/A (no foreign key)
	disassociate with TSMPROJ	N/A (no foreign key)
TSMPPA	disassociate with TSMPERSON	N/A (no foreign key)
	disassociate with TSMPROJ	N/A (no foreign key)
	delete TSMPPRA	cascade
TSMPPRA	disassociate with TSMPPROGM	N/A (no foreign key)
	disassociate with TSMPROJ	N/A (no foreign key)
TSMRFLBL	disassociate with TSMERS	N/A (no foreign key)
	disassociate with TSMSTATN	N/A (no foreign key)
TSMVSC	disassociate with TSMPROJ	N/A (no foreign key)
TSRLAB	disassociate with TSMORGAN	N/A (no foreign key)
	disallow delete if TSRRSULT	restrict
	delete TSMADDR	cascade
	delete TSMEADDR	cascade
TSMCSNG	disassociate with TSMINTVL	N/A (no foreign key)
TSMFNA	disassociate with TSMNAICS	N/A (no foreign key)
	disassociate with TSMFCLTY	N/A (no foreign key)
TSMFSA	disassociate with TSMFCLTY	N/A (no foreign key)

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
	disassociate with TSMSIC	N/A (no foreign key)
TSMFCLTY	disassociate with TSMSTATN	N/A (no foreign key)
	delete TSMPIPE	cascade
	delete TSMFSA	cascade
	delete TSMFNA	cascade
TSMFILL	disassociate with TSMINTVL	N/A (no foreign key)
TSMHOLE	disassociate with TSMINTVL	N/A (no foreign key)
TSMINTVL	delete TSMIGUA	cascade
	delete TSMHOLE	cascade
	disassociate with TSMLTHUN	N/A (no foreign key)
	disassociate with TSMWELL	N/A (no foreign key)
	delete TSMCSNG	cascade
	delete TSMFILL	cascade
	delete TSMOPNG	cascade
TSMIGUA	disassociate with TSMINTVL	N/A (no foreign key)
	disassociate with TSMGEOUN	N/A (no foreign key)
TSMLOG	disassociate with TSMWELL	N/A (no foreign key)
TSMOPNG	disassociate with TSMINTVL	N/A (no foreign key)
TSMPIPE	disassociate with TSMFCLTY	N/A (no foreign key)
	delete TSMALP	cascade
TSPUMP	disassociate with TSMWELL	N/A (no foreign key)
TSMWLE	disassociate with TSMWELL	N/A (no foreign key)
	delete TSMADDR	cascade
TSMWELL	delete TSMWLE	cascade

Row being deleted from Table	COOL:Gen Action Enforced	Designer Action*
	disassociate with TSMSTATN	N/A (no foreign key)
	delete TSMINTVL	cascade
	delete TSMLOG	cascade
	delete TSM PUMP	cascade
	delete TSMALP	cascade
TSMSPRNG	disassociate with TSMGEOUN	N/A (no foreign key)
	disassociate with TSMLTHUN	N/A (no foreign key)
	disassociate with TSMSTATN	N/A (no foreign key)
TSRAAL	disassociate with TSMALP	N/A (no foreign key)
	disassociate with TSRFDCT	N/A (no foreign key)
TSMPPRA	disassociate with TSRPROLE	N/A (no foreign key)
	delete TSMPPA	cascade
TSROAPCA	disassociate with TSRCHAR	N/A (no foreign key)
	disassociate with TSROAPA	N/A (no foreign key)

* - Cascade Designer Action will be implemented via database script. Restrict Designer Action is handled through default foreign key delete rule (i.e., "restrict"). No database script is required to enforce this.

Numbers in parenthesis represent more than one association with the indicated table.

Cascade Delete Rules:

TSMSTATN

delete TSMRFLBL
 disassociate with TSRERS
 disassociate with TSMSTATN
delete TSMWELL
 delete TSMWLE
 disassociate with TSMWELL
 delete TSMADDR
 disassociate with TSMORGAN
 disassociate with TSMSTATN
 disassociate with TSMCPORG
 disassociate with TSMWLE
 disassociate with TSRLAB
disassociate with TSMSTATN
delete TSMINTVL
 delete TSMIGUA
 disassociate with TSMINTVL
 disassociate with TSMGEOUN
 delete TSMHOLE
 disassociate with TSMINTVL
disassociate with TSMLTNUN
disassociate with TSMWELL
delete TSMCSNG
 disassociate with TSMINTVL
delete TSMFILL
 disassociate with TSMINTVL
delete TSMOPNG
 disassociate with TSMINTVL
delete TSMLOG
 disassociate with TSMWELL
delete TSM PUMP
 disassociate with TSMWELL
delete TSMALP
 disassociate with TSM PMGRD
 disassociate with TSM PMTCT
 disassociate with TSM PIPE
 disassociate with TSMSTATN
 disassociate with TSMWELL
 disassociate with TSMRRR

- disassociate with TSMGEOPA (2)
- disassociate with TSMFHU
- disassociate with TSMNAL
- delete TSMGLL
 - disassociate with TSMALP
- delete TSMOCNLC
 - disassociate with TSMALP
- delete TSMESTLC
 - disassociate with TSMALP
 - disassociate with TSMESTRY
- delete TSRAAL
 - disassociate with TSMALP
 - disassociate with TSRFDCT
- delete TMSPRNG
 - disassociate with TSMGEOUN
 - disassociate with TSMLTHUN
 - disassociate with TSMSTATN
- delete TSMPMGRD
 - disassociate with TSMSTATN
 - delete TSMALP
 - disassociate with TSMPMGRD
 - disassociate with TSMPTCT
 - disassociate with TSMPIPE
 - disassociate with TSMSTATN
 - disassociate with TSMWELL
 - disassociate with TSMRRR
 - disassociate with TSMGEOPA (2)
 - disassociate with TSMFHU
 - disassociate with TSMNAL
 - delete TSMGLL
 - disassociate with TSMALP
 - delete TSMOCNLC
 - disassociate with TSMALP
 - delete TSMESTLC
 - disassociate with TSMALP
 - disassociate with TSMESTRY
 - delete TSRAAL
 - disassociate with TSMALP
 - disassociate with TSRFDCT
- delete TSMPTCT
 - disassociate with TSMSTATN

delete TSMALP
 disassociate with TSMPPMGRD
 disassociate with TSMPPMTCT
 disassociate with TSMPIPE
 disassociate with TSMSTATN
 disassociate with TSMWELL
 disassociate with TSMRRR
 disassociate with TSMGEOPA (2)
 disassociate with TSMFHU
 disassociate with TSMNAL
 delete TSMGLL
 disassociate with TSMALP
delete TSMOCNLC
 disassociate with TSMALP
delete TSMESTLC
 disassociate with TSMALP
 disassociate with TSMESTRY
delete TSRAAL
 disassociate with TSMALP
 disassociate with TSRFDCT

disallow if TSMPSA

disassociate with TSMORGAN

delete TSMALP

 disassociate with TSMPPMGRD
 disassociate with TSMPPMTCT
 disassociate with TSMPIPE
 disassociate with TSMSTATN
 disassociate with TSMWELL
 disassociate with TSMRRR
 disassociate with TSMGEOPA (2)
 disassociate with TSMFHU
 disassociate with TSMNAL
 delete TSMGLL
 disassociate with TSMALP
delete TSMOCNLC
 disassociate with TSMALP
delete TSMESTLC
 disassociate with TSMALP
 disassociate with TSMESTRY
delete TSRAAL
 disassociate with TSMALP
 disassociate with TSRFDCT

delete TSMFCLTY
 disassociate with TSMSTATN
delete TSMPIPE
 disassociate with TSMFCLTY
delete TSMALP
 disassociate with TSMMPMGRD
 disassociate with TSMPMTCT
 disassociate with TSMPIPE
 disassociate with TSMSTATN
 disassociate with TSMWELL
 disassociate with TSMRRR
 disassociate with TSMGEOPA (2)
 disassociate with TSMFHU
 disassociate with TSMNAL
delete TSMGLL
 disassociate with TSMALP
delete TSMOCNLC
 disassociate with TSMALP
delete TSMESTLC
 disassociate with TSMALP
 disassociate with TSMESTRY
delete TSRAAL
 disassociate with TSMALP
 disassociate with TSRFDCT
delete TSMFSA
 disassociate with TSMFCLTY
 disassociate with TSMSIC
delete TSMFNA
 disassociate with TSMFCLTY
 disassociate with TSMNAICS
delete TSMADDR
 disassociate with TSMORGAN
 disassociate with TSMSTATN
 disassociate with TSMCPORG
 disassociate with TSMWLE
 disassociate with TSRLAB
delete TSMEADDR
 disassociate with TSMORGAN
 disassociate with TSMPSRN
 disassociate with TSMSTATN
 disassociate with TSMCPORG
 disassociate with TSRLAB

delete TSRTSA - N/A (won't exist if TSMPSA doesn't exists)
disassociate with TSMVSTC
delete TSRADL - N/A (won't exist if TSMPSA doesn't exists)

TSMPROJ

disallow delete if TSMPSA
disassociate with TSMORGAN
delete TSMVSC
 disassociate with TSMPROJ
delete TSMPPA
 disassociate with TSMPERSON
 disassociate with TSMPROJ
 delete TSMPPRA
 disassociate with TSRPROLE
 delete TSMPPA
delete TSMPPRA
 disassociate with TSMPROGM
 disassociate with TSMPROJ
delete TSMPCOA
 disassociate with TSMCPORG
 disassociate with TSMPROJ
delete TSRFAPRA - N/A (won't exist if TSMPSA doesn't exists)
delete TSRTPA - N/A (won't exist if TSMPSA doesn't exists)
delete TSRCPA
 disassociate with TSRCITN
 disassociate with TSMPROJ
delete TSRPOPA - N/A (won't exist if TSMPSA doesn't exists)
delete TSMGNTXT
 disassociate with TSRRSULT
 disassociate with TSMPROJ
 disassociate with TSMPROG
 disassociate with TSRGRCFG

TSMGNTXT

disassociate with TSRRSULT
disassociate with TSMPROJ
disassociate with TSMPROG
disassociate with TSRGRCFG

TSRCITN

disallow delete if TSRFLDPR
disassociate with TSMORGAN
disallow delete if TSRANLPR
delete TSRCPA
 disassociate with TSRCITN
 disassociate with TSMPROJ
disallow delete if TSRLSPP
disallow delete if TSRCHGRP

TSRLAB

disassociate with TSMORGAN
disallow delete if TSRRSULT
delete TSMADDR
 disassociate with TSMORGAN
 disassociate with TSMSTATN
 disassociate with TSMCPORG
 disassociate with TSMWLE
 disassociate with TSRLAB
delete TSMEADDR
 disassociate with TSMORGAN
 disassociate with TSMPERSON
 disassociate with TSMSTATN
 disassociate with TSMCPORG
 disassociate with TSRLAB

TSRSDP

disassociate with TSMORGAN
disassociate with TSMPRMVL (3)

TSMPERSON

delete TSMEADDR
 disassociate with TSMORGAN
 disassociate with TSMPERSON
 disassociate with TSMSTATN

- disassociate with TSMCPORG
- disassociate with TSRLAB
- disassociate with TSMORGAN
- delete TSMPPRA
 - disassociate with TSMPERSON
 - disassociate with TSMPROLE
- disallow delete if TSRAPEA
- disallow delete if TSRAQSPA
- disallow delete if TSMPPA

TSMCPORG

- delete TSRAFOA
 - disassociate with TSRAFACT
 - disassociate with TSMCPORG
- disassociate with TSMORGAN
- delete TSMADDR
 - disassociate with TSMORGAN
 - disassociate with TSMSTATN
 - disassociate with TSMCPORG
 - disassociate with TSMWLE
 - disassociate with TSRLAB
- delete TSMEADDR
 - disassociate with TSMORGAN
 - disassociate with TSMPERSON
 - disassociate with TSMSTATN
 - disassociate with TSMCPORG
 - disassociate with TSRLAB
- delete TSMPCOA
 - disassociate with TSMCPORG
 - disassociate with TSMPROJ

TSRCHGRP

- delete TSRAAGA
 - disassociate with TSRAHAR
 - disassociate with TSRCHGRP
- delete TSRAHDEF
 - disassociate with TSRAAGA
 - disassociate with TSRLSPP

- disassociate with TSRANLPR
- disassociate with TSMPRMVL (3)
- disassociate with TSMORGAN
- delete TSRHCSC
 - disassociate with TSRCHGRP
 - disallow delete if TSRRSULT
- disassociate with TSRCITN

TSRCHDEF

- disassociate with TSRCCGA
- disassociate with TSRLSPP
- disassociate with TSRANLPR
- disassociate with TSMPRMVL (3)

TSRCCGA

- disassociate with TSRCHAR
- disassociate with TSRCHGRP
- delete TSRCHDEF
 - disassociate with TSRCCGA
 - disassociate with TSRLSPP
 - disassociate with TSRANLPR
 - disassociate with TSMPRMVL (3)

TSRANLPR

- disassociate with TSRANLEQ
- disassociate with TSRANLPR (2)
- delete TSROAPA
 - disassociate with TSRANLPR
 - delete TSROAPCA
 - disassociate with TSRCHAR
 - disassociate with TSROAPA
 - disassociate with TSMORGAN
- disassociate with TSRCITN
- disallow delete if TSRRSULT
- disassociate with TSRCHDEF

TSROAPA

disassociate with TSRANLPR
delete TSROAPCA
 disassociate with TSRCHAR
 disassociate with TSROAPA
disassociate with TSMORGAN

TSRFLDPR

disassociate with TSRCITN
disallow delete if TSRFDCT
disassociate with TSMORGAN

TSRGRCFG

disassociate with TSRFLDGR
disassociate with TSMORGAN
disallow delete if TSRFDCT
delete TSMGNTXT
 disassociate with TSRRSULT
 disassociate with TSMPROJ
 disassociate with TSMPROG
 disassociate with TSRGRCFG

TSMADDR

disassociate with TSMORGAN
disassociate with TSMSTATN
disassociate with TSMCPORG
disassociate with TSMWLE
disassociate with TSRLAB

TSMEADDR

disassociate with TSMORGAN
disassociate with TSMPEPSN
disassociate with TSMSTATN

disassociate with TSMCPORG
disassociate with TSRLAB