To: Distribution

From: Ernestine Bryant, STOrage and RETrieval (STORET), Technical Project Leader (TPL), SDC/SAIC

Subject: Minutes of STORET Change Control Board (CCB) Meeting

1.0 Purpose

A CCB Meeting was held on February 27, 2003 at the Systems Development Center (SDC). The purpose of the meeting was to review and address the status of the STORET Project activities, resolve project issues, and ensure that changes are within the Task Order scope and are processed in a visible and traceable manner.

2.0 Attendees

SDC	EPA
Ernestine Bryant	Robert King (TOPO)
Stephen Smith	Lee Manning (ATOPO)
Blythe Norris	Kevin Christian
Ganesh Thadkamalla	Cary McElhinney
Joseph Wilson	

3.0 Discussion Topics

The following sections detail the discussions of the project tasks and associated Software Incident Reports (SIRs).

3.1 Web Registration Application

The Web Registration Application was jointly reviewed by EPA and SDC STORET staff members. Below is the aggregated culmination of meetings with researched issues and requested changes.

- The following modifications will be made before releasing the Web Registration Application as final.

- Disable the List of Values (LOV) button next to every ID field when the user is not in Enter-Query mode; enable in all other modes.

- Reposition cursor at first enterable block upon pressing the Save button (e.g., Station ID on the Station form) on every window. Do the same upon pressing the Insert button.

- After performing a Cancel Query, change the default behavior which leaves the form in Insert mode on all windows so that the default behavior performs a query on all records.

- Remove hard-coded URL references which call Help and identify a web page for the post-form event on CDX_Menu. Update the Installation Instructions accordingly.

- Restrict the list of Organizations to only include those for which the user has update authority.

• The CCB attendees reviewed the open Test Incident Reports (TIRs) prior to release of the Web Registration Application. It was decided that none of the issues would interfere with the primary operation of the system, and that release of the system could proceed as planned. The reviewed TIRS are as follows:

- Use of Windows 98 with Netscape browser causes the system to hang. Windows 98 is not supported with the Oracle 9ias release 2 (9.0.2).

- Unable to use the search function behind the edit button when positioned in the last field on the Project form.

- Cannot query on Comparable National Procedure ID field.

- A second, error message stating that a “field must be entered” is being given on the Cooperating Organization/ Personnel form when adding a duplicate ID.

- Analytical Procedure and National Analytical Procedure forms do not display the selected record/row with a yellow background.

• Some additional changes to the Web Registration Application were requested for implementation after the initial release of the Web Registration Application v2.0.

- Requery the Organization list on the Web Registration Application window each time the form is displayed.

- Add a confirmation dialog box on the Web Registration Application window close/exit.

- Create a visual differentiation between the read-only Source (i.e., Basic Procedure Information Source) field and the other data entry fields on the Field/Lab Analytical Procedures window.

- Create the ability to display a list of National Citations on the Citations window.

- The following items were discussed, but did not result in requested changes to the software products.

  - Changing the search on the Comparable National Procedure selection list to be by NAME rather than ID. It was decided that the search should be by ID.

  - The 508 requirement for color scheme was discussed. B. Norris demonstrated the Oracle Forms color scheme options. After much discussion, a decision was made to stay with the current color choices as they are not used to convey a function or action, and are therefore compliant with the 508 requirement.

  - Due to various differences in business rules between the STORET 2.0 Data Entry Application and the Web Registration Application, a suggestion was made to create a new set of DEMOTEST data with a different Organization Name which would implement the business rules applied to the Web Registration Application.

3.2 STORET v2.0

The STORET v2.0 application and installation was jointly reviewed by EPA and SDC STORET staff members. Below is the aggregated culmination of researched issues and requested changes to the various systems and components comprising the STORET Version 2.0 application and installation. The following dissertation for STORET Version 2.0 is being submitted in satisfaction of the deliverable titled *Demonstration and Briefing of the Installation Package* (16-5.2) as stated in the Project Plan.

Reports Module:

- Add “Disk 1" to CD label.
- Incorporate the STORET v2.0 icon into the STORET Report Module v2.0 program group upon installation.

C Modify the Unassigned Activities to Projects report to display missing Activity to Project assignments when DEMOTEST is the only organization in the database.

C Add Well Number and Pipe Number to the Activity Details report in the Actual Activity Location area for the Assigned Station Location point.

C Remove the auto-run capability from the installation disk.

Data Entry Module:

- Add “Disk 2" to CD label.

C The Imaging software used to display JPEG and BMP files no longer comes coupled with Microsoft software. This will cause a problem on Windows XP. The project team is exploring other options.

C Default the query upon opening SBJ1 Subject Selection List to show all Multi-Taxon Population Census (MTPC) characteristics, and always enable the MTPC button.

C Alter the logic on P17 to show Characteristics which are classified as both biological and chemical in nature.

C Modify the North American Industrial Classification System (NAICS) search so that it is not case sensitive.

C Make the associated Citation and data entry Description always updateable on P13 Characteristic Group Data Entry.

C Change the month shown on M1A STORET Information to March.

C Decrease width of characteristic name column and rename Species # column title in list box to SP # on the R2 Bio Individual / Tissue Result Maintenance window in order to show the complete Value column.

C Refresh the Characteristic list on R9 when returning from assignment of Characteristics.

C Remove the auto-run capability from the installation disk.

C Prevent the message from appearing that indicates the Pictures window is open.

C Incorporate a security measure that disallows changes in Pictures when user does not have update authority to the Organization.

C Alter the Pictures database logon encryption routine so that hard returns are eliminated from encrypted codes.

C Provide B.King with an 8"x11" printable PDF of the STORET v2.0 Designer Server Model.

C Provide B. King some sample batch files that demonstrate new system functionality.

Installation:

C Reword the message warning against re-installation of the version 2.0 database when production data currently exists. Definitively state that corruption will occur in this scenario.

C Remove the last two paragraphs on the installation Welcome screen regarding copyright law protection, and unauthorized distribution or reproduction.

C Default all drive choices to the “c” drive rather than the most recently accessed drive, if possible.

C Replace the icon appearing in the STORET Data Entry Module v2.0 Program Group with the waterdrop icon.

C Replace wording “…would take up to…” with “…may take up to…”.

- Remove working directory on all Process Interchange Format (PIF) files.

- Remove “Back” button on Type Selection window.

- Add logic to check for existence of a dump file on the client machine in a predetermined (TBD) location. If present, then skip checks and perform import directly from that dump file.

C A variety of changes were requested to the wording of the installation windows and messages.

  – Change any occurrences in messages or windows in the installation from v1.2/1.1to v1.1/1.2.

- Change wording that says …depending on your STORET… to … depending upon the size of your STORET….
- Change wording that says …need at least 300mb space… to … use at least 300mb of temporary working space….
- Change the wording on the data migration window as edited by B. King and L. Manning.

• Numerous changes were made to the installation guide to including the following:

- Move the Report Module installation section to the beginning and note that it should be installed first.
- Report Module installation - Prior to beginning installation, be sure to stop the Oracle database. Stop all Oracle services if running Windows NT.
- Report Module installation - Add a brief section on how to create a new Oracle home and set as primary if a local Oracle 8i database exists.
- Report Module installation - Add step to press <**OK**> for Oracle 8.0.5 message, if received.
- Report Module installation - Add step to press <**OK**> for Microsoft upgrade message, if received.
- Report Module installation - Add step to press <**OK**>, reboot, and re-run the installation if a Net8 error message occurs.
- Data Entry Module installation - Add step to mention that Wise may need to upgrade the Microsoft Data Access Components (MDAC) software.
- Data Entry Module installation - Add standard screen prints that appear during installation.
- Add a section providing manual steps to uninstall the software and database. No scripts are necessary.
- Add a note to refer to a particular site (TBD) for Operating System/Oracle issues.

- Incorporate an approximate 15 second delay in the Oracle login after the database start-up.

- Move the Windows NT family and Windows 98 specific installation executables to a subdirectory on the root of the CD.

Database Scripts:

- Provide scripts for manually starting and stopping the STORET database in additional to those supplied during the application installation.

- Incorporate changes to the reference table data. These changes are in addition to the previously established baseline of fix012, and summarily include:

  - Incorporate Unit of Measure (UOM) changes to the reference table and create scripts to update user UOM data.

  - Alter Characteristic Type Codes and Result Screen Type codes to represent "G" and "VAR" respectively for Characteristics classified as both Chemical and Biological.

  - Change the Characteristic Type Code from "O" to "P" for Biomass Characteristics.

  - Add the Sample Fraction Type value 19/Pot. Dissolved/Potentially Dissolved to Characteristic Group and Result values in the Permitted Value table.

  - Fix invalid Taxon Rank Code/Taxon Rank Name combinations.

  - Incorporate modifications to ITIS Taxon Sort Codes.

- Implement a Referential Integrity (RI) check after importing the version 1.1/1.2 database into the STO2 instance. This will provide a snapshot of existing RI problems before the migration activity.

- Create scripts to set the Temporary Data and Rollback Segments tablespace default storage to 1 megabyte, and the associated extents to 1 megabyte.

- Extract a replicate of the database creation and migration scripts from the installation package, and provide them on the CD as independently executable scripts for database administrator use.

- Change the database import so that it will not import associated grants. Create a script that will create all grants, and incorporate the script into the installation package.

- Change the database import so that each table is independently identified for migration, rather than identifying migration objects at the schema level.

- Incorporate Netstart redundancy in batch installation files.

- Incorporate the TSMEISN.sql script which syncronizes TSMEISN rows with existing data.

- Incorporate the Oracle provided UTLRP.sql script which will check for invalid database objects and make them valid.

- Incorporate updates to DEMOTEST data.

- Provide additional scripts on the CD that optionally allows replacement of version 1.1/1.2 DEMOTEST data with version 2.0 DEMOTEST data in the user's database after migration.

Analysis:

- The ability to control the menu options of the Oracle 6i runtime Previewer was investigated. The ability to fully redirect or disable the options for Mail, Distribute, and Oracle Help was not achievable with Oracle commands. It was decided that project resources should not be expended to develop this capability.

- The need for a check during migration to determine if the database instance was already started was researched and deemed not necessary.

- A user can establish a Trip with at least 2 Projects, create Activities and stop before making Project assignments, then unassign all Projects, which have no existing Project to Activity Assignments, from the Trip, except one Project. This would create a scenario that would allow the user to enter Result information for Activities with no Project Assignment. Since this scenario would be rare, no software change to provide additional enforcement was necessary.

- B. King noticed that on a Windows XP machine, opening up a Bitmap (BMP) file in Pictures no longer has vertical and horizontal scroll bars. This was researched without immediate resolution.

A multitude of revisions and updates were made to the documentation included on the STORET v2.0 Installation disks.

B. King will make sure all existing DEMOTEST Citations have an ID in the final STORET v2.0 data.

3.3 Reference Table Application

An initial prototype using Designer 6i was reviewed in a series of reviews and discussions. With a focus on the Characteristic Maintenance area, the effort required to build the application using Oracle 6i versus modifying the existing application developed using COOL:Gen was weighed. It was decided that the existing COOL:Gen application would be modified to provide maintenance capability for Characteristics for the STORET v2.0 data model.

Additional requirements were established, and existing requirements clarified as follows:

- From the Preview Unit of Measure (UOM) button, the UOM1 window shall include the capability to display all types. Initially, list only the units for the UOM_TYPE associated with selected Characteristic. On UOM1, allow the "display all" checkbox to show all UOMs sorted by type and then name.

- The Status drop-down and Author Date on RT5 shall be optional, and will be moved down to the Taxon Specific group box.

- The Taxon Rank Code and Taxon Rank Name fields on RT5 are a related pair. The Rank Code shall be selectable from a drop-down list (based on a read distinct from the table) with the Rank Name as read-only.

- The Add, Update, and Delete buttons shall be removed from RT11.

- "Retired" and "General/Variable" characteristics shall be shown on RT4 and RT4A. "General/Variable" Characteristics shall be treated as PURE Taxons.

- The Category/Subcategory search shall be included on RT4, but limited to Biological/Physical Measures and Physical/Data-Logger Probes. A script shall be included to remove all rows in the TSRCHTYP table except Biological/Physical Measures and Physical/Data-Logger Probes.
- Help IDs and help text shall be added to all areas as per the standard for the STORET Data Entry Module.

- Users shall not be prevented from making changes to "Retired" Characteristics.

- Users shall not be prevented from making changes to Characteristics that are tied to Results.

- Prev/next shall be removed from RT13, and the view size changed to 1000.

- IS_NUMBERS shall be shown as a read-only field on every Characteristic data entry window.

3.4 Central Warehouse

Additional planning is needed to assure a smooth transition from the STORET v1.1 to the v2.0 data model. A matrix will be created that maps each data element in the current Central Warehouse data model to its location in the v1.1 and v2.0 data models. Data transformations that occur will also be noted where necessary. Based on this information, the level of effort for the data model transition can be determined, and the effects on the work plan evaluated.

The content and layout of the Result reports that will be generated by the Central Warehouse were discussed in detail. It was decided that two separate report templates would be created for biological and non-biological results. The initial beta release of the Result portion of the Central Warehouse will focus on the delivery of non-biological result information. Attachment A is a preliminary design of the data content and data element groupings that will be displayed on the report customization screen for non-biological results.

The Central Warehouse should support Characteristic Alias searches. An initial prototype of the Characteristic Alias search functionality was demonstrated during the meeting.

Screen designs were also discussed. Attachment B is a draft screen design for the first page of the Result portion of the Central Warehouse that will be developed for the initial beta release. The effect on performance of offering multiple date ranges for a single search will be explored.

A second page is also being planned that will allow users to search result values that have been converted to Universal Result Units (URUs). Future meetings are planned to discuss the specifics of URU searches.

4.0 Action Item Summary

Number	Description	Date Issued	Status	Assignment	Date Completed
02-0020	Determine order of Station Types.	11/20/2002	Open	B. King	
02-0021	Research the possibility of an 8-character Beach ID.	12/12/2002	Closed	B. King	02/27/2003
03-0001	Add Citation IDs to the Data Entry Application v2.0 DEMOTEST.	02/27/2003	Open	B. King	
03-0002	Send PDF of Server Model to B. King	02/27/2003	Open	B. Norris	
03-0003	Provide sample batch files containing new functionality to B. King.	02/27/2003	Open	B. Norris	

5.0 Next Meeting

The next meeting was scheduled for March 6, 2003.

6.0 Distribution to EPA & SDC Interested Parties

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7.0 Approval of Minutes as Submitted or Revised

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Robert E. King Date
Task Order Project Officer

ATTACHMENT A

Non-Biological Result Data Content Preliminary Design

Warehouse Result Report Element Layout - CHEM Results

February 18, 2003

Basic Org Info
- Org ID
- Org Name

Basic Station Info
- Station ID
- Station Name

Station Location Info
- Station Latitude
- Station Longitude
- State
- County
- HUC
- Geopositioning Method
- Horizontal Datum

Station Visit Info
- Visit Num
- Visit Start
- Visit Stop
- Trip ID
- Trip Name

Basic Activity Info
- Activity ID
- Activity Start
- Activity Stop
- Activity Medium
- *Activity Matrix*
- Activity Type
- Activity Category-Rep#
- Activity Intent
- Community Sampled
- Subject Taxon
- Biopart
- Field Procedure ID
- Field Procedure Name
- Gear Config ID
- Gear Config Name

Actual Activity Location Info
- Actual Activity Latitude
- Actual Activity Longitude
- Actual Location Point Type
- *Actual Point Name*
- Actual Point Sequence #
- Well Number
- Pipe Number

Activity Depth Info
- Activity Depth
- Activity Depth Unit
- Activity Upper Depth
- Activity Rel Depth
- Activity Lower Depth
- Upr Lwr Depth Unit

Sample Handling Info
- Container Type
- Container Color
- Temp. Pres. Type
- Sample Handling Desc.

Basic Result Info
- Characteristic Name
- Sample Fraction
- Result Type
- Result Statistic
- Result Numeric Value
- Result Text Value
- Units
- Result Std Value
- Result Std Unit
- Weight Basis
- Temperature Basis
- Duration Basis
- Particle Size Basis
- Result Comment
- Distance Measured From
- Distance Measured To
- Text Result

Analytical Proc. Info
- Analytical Proc. ID
- Analytical Proc. Name
- Sample Prep. Proc.
- Proc. Exception

Basic Lab Info
- Lab ID
- Lab Name
- Lab Batch ID
- Lab Cert.
- Analysis Date
- Detection Limit
- Detection Limit Descript.
- Lower Quantification Limit
- Upper Quantification Limit
- Lab Remark

Result QA Info
- No. of Reps.
- Precision
- Conf Level
- *Bias*
- Dilution Ind
- Recovery Ind
- Correction Ind

Notes:

Underlined Elements are selected by Default

Italics Elements are New in v2.0

ATTACHMENT B

Draft Screen Design

Result Search Criteria

Geographic Location

Select the type of location search you wish to perform (state/county, latitude/longitude, or HUC). Then enter the corresponding search criteria.

(•) State/County	State Name: All; County Name: All; Look Up
( ) Latitude/Longitude	North Limit: 90 N; West Limit: 180 W; East Limit: 0 W; South Limit: 0 N
( ) Drainage Basin/HUC	Cataloguing Unit: All; Look Up

Date

Please specify an Activity Start Date range

FROM: JAN 1 1950 **TO:** DEC 31 2003

Characteristics

Use the Characteristic Search to create a list of Characteristics. If no Characteristics are selected, all Characteristics will be searched for.

Characteristic Search | Naming Convention: CAS Number

Search | [x] Hide Taxon Names

Selected Characteristics

Clear Selected | Clear All

Continue | Clear Form | Help