



**To:** Distribution

**From:** Chimwemwe Munthali, Technical Writer

**Thru:** Ernestine Bryant, STOrage and RETrieval (STORET), Project Manager (PjM),  
Solutions Development Center (SDC)

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

## **1.0 Purpose**

A CCB Meeting was held on July 28, 2004 at the SDC. The purpose of the meeting was to review and address the status of current project activities, resolve project issues, and ensure that activities are within the scope of the Job Assignment (JA).

## **2.0 Attendees**

Bryant, Ernestine - Project Manager  
King, Robert - Job Assignment Manager (JAM)  
Manning, Lee  
McElhinney, Cary  
Munthali, Chimwemwe  
Norris, Blythe  
Smith, Stephen  
Thadkamalla, Ganesh  
Wilson, Joseph

## **3.0 Discussion Topics**

The discussion covered the following topics:

- Unit Conversion.
- Report Module Restoration Utility.
- Report Module.
- Integrated Taxonomic Information System (ITIS).

- Reference Tables.
- Data Warehouse.

### **3.1 Introduction**

The Software Incident Report (SIR) Log (Attachment A) and User Support Log (Attachment B) are included as deliverables with these CCB Minutes.

Attendees opened the meeting with a summary of project activities, and then began addressing open action items. This entailed receiving design feedback, and making key design and project deliverable decisions.

### **3.2 Unit Conversion**

The group discussed changing the conversion of milligrams per kilogram and milligrams per liter to parts per million. It was decided that mass/mass and mass/volume units will remain converted to other like units, but the concentrations (e.g., ppt, ppm, ppb) would use parts per billion (ppb) as the target conversion unit. This should align the target conversion factors of the mass/mass (i.e., ug/kg), mass/volume (i.e., ug/l), and concentration (i.e., ppb units) units.

### **3.3 Report Module Restoration Utility**

The Report Module Restoration Utility will be delivered independent of a Report Module version upgrade and will be handled as a utility. This package will create and/or update database objects associated with the Report Module up to and including version 2.0.3.

Several design options and associated risks were discussed. It was noted that the log file will generate constraint violations when objects or rows already existed. L. Manning stated that these log messages were common given the installation methodologies already employed for other applications and felt the users were accustomed to seeing and properly interpreting these messages. The log files will show the constraint violations; this will be mentioned in the read\_me file. L. Manning asked to have the installation include grants to the default roles provided by the STORET v2.0 Compact Disk (CD) as well as grants to the users. The selected design was reviewed and validated (see Attachment C) with the addition of grants to roles.

Installing the Restoration Utility on top of Report Module v2.0, v2.0.1, or v2.0.2 will cause reports to be listed that do not have supporting software. The development team was directed to add this as a note in the read\_me file with a suggestion that the user download the current Report Module upgrade from the STORET Web site. L. Manning requested another copy of Report Module v2.0.3.

### 3.4 Report Module

The SIRs allocated to Report Module version 2.0.4 were reviewed and validated (see Attachment D) with the following decisions.

- An additional report was added to Report Module version 2.0.4 which will provide the Reference Table Chemical Names report without STORET Parameter Codes.
- SIR 1120 was clarified to be a report of Characteristic Permitted Values with short names and descriptions.
- An additional report was added to Report Module version 2.0.4 which will provide Permitted Values from the permitted value table (TSMPRMVL).

A new SIR for the Reference Table Taxonomy Names report will be allocated to Report Module version 2.0.5. A design session will be needed to determine the content of the report.

A decision to *not* include any parameters for the reports showing reference table data (e.g., Reference Table Chemical Names report) invoked the following changes to the Report Module interface:

- Change default cursor placement on RPT3 Report Parameters to the Preview button for Printed Reports and the Export button for Export Reports.
- Hide the Save Report Parameters and Load Report Parameters buttons when there are no report parameters.
- Add message on RTP3 Report Parameters, "Parameters not required for this report." when there are no report parameters.
- Update Help for RPT3 Report Parameters regarding reports with no parameters.

Issues regarding the Characteristic Alias table (TSRCHALS) were raised. There are approximately 1650 rows that are not associated to the Characteristic Alias Type table (TSRCALT). These orphaned rows were created during the last reference table upgrade. The rows are currently in the Reference Table Chemical Names report. This data was also identified during Central Warehouse construction, but caused no immediate harm. It was also noted that the TSRCHALS.tsrcalt\_is\_number value of "1" was associated to two different alias type (i.e., type\_name) values in the characteristic alias table. Although the TSRCHALS.type\_name column is no longer in use, it was decided that the contents of column would be set to null to avoid possible confusion. L. Manning stated that he would include scripting in the next reference table upgrade to remove the superfluous rows and nullify the column values.

### **3.5 Integrated Taxonomic Information System (ITIS)**

There could potentially be some duplication across serial numbers for rows in Characteristic and Alias Tables due to ongoing simultaneous updates. The Project Team will check to make sure there are no conflicts.

L. Manning asked for strategies to merge the various characteristic data updates.

A deliverable will be prepared with an export dmp file consisting of updated TSRCHAR and TSRCHALS tables. It will also include a structured way of updating taxonomy data in STORET based on the Taxonomy data files provided by L. Manning.

The Project Team anticipates using the publicly accessible ITIS data in future releases.

### **3.6 Reference Tables**

B. King stated that he liked the overall design of the Reference Tables maintenance application prototype. He noted one minor menu change to list the tables by ascending physical table name. The Project Team is in the process of moving the initial set of reference tables from Visual Basic (VB) to VB.NET. Some benefits of the conversion to VB.NET include version control, Extensible Markup Language (XML) support, and web services support. Upon review of the VB.NET prototype, the Project Team will prioritize the next set of reference tables to be implemented.

### **3.7 Data Warehouse**

This discussion included a brief update on project activities that have an impact on the Data Warehouse, and a demonstration of the new Station Retrieval page. The main topics are summarized as follows:

- The Project Team will update the Central Warehouse to implement the newly defined target units.
- Central Warehouse help will be updated to reflect the new data elements and functionality introduced since the last release. It was determined that the help document will provide short (one or two sentence) descriptions for each Converted Result report element rather than a full description of the business rules and mappings used for implementing unit conversion.
- The Unit Conversion table will become a permanent part of the Central Warehouse database schema. It will be documented in the data model and deployed at Research Triangle Park (RTP) as part of the next release.

- The data element Description Text will be added to the Station Fact table Extract, Transform, and Load (ETL) software and the corresponding Site Description Report Template.
- Station Type selection will be added to the Select Stations by Organization and Station ID page.

#### 4.0 Action Item Summary

Action items that emerged from this meeting included:

Number	Action Item	Assignment	Date Issued	Status	Date Completed
0001	Research VB.NET capabilities and provide response.	B. Norris	06/02/2004	Open	
0002	Provide STORET team with copy of Dasler software.	B. King	06/02/2004	Open	
0003	Provide BEACHES program with STORET architecture information (e.g., Entity Relationship Diagram, data definitions).	J. Wilson	06/28/2004	Closed	7/28/2004
0004	Run new ETL software week of July 12 <sup>th</sup> .	J. Wilson	06/28/2004	Closed	7/28/2004
0005	Provide copy of email discussing required changes to implement Uniform Resource Locator (URL) encoding for the STORET Station Home Page.	B. Norris	06/14/2004	Open	
0006	Send Report Module v2.0.3 deliverable.	S. Smith	07/28/2004	Open	
0007	Include scripts to remove orphaned rows and nullify type_name column in TSRCHALS for next reference table upgrade.	L. Manning	07/28/2004	Open	
0008	Investigate public access to ITIS data and the process to establish ITIS data files.	Lee Manning	07/28/2004	Open	

## 5.0 Next Meeting

The next meeting will be held on Wednesday, August 25, 2004, at the SDC. The time has not yet been determined.

## 6.0 Distribution

Name	Email
Bryant, Ernestine	
Christian, Kevin	Christian.Kevin@epamail.epa.gov
King, Robert	King.Robert@epamail.epa.gov
Manning, Lee	Manning.Lee@epamail.epa.gov
McElhinney, Cary	Mcelhinney.Cary@epa.gov
Szajgin, Tracey	

## 7.0 Approval of Minutes

\_\_\_\_\_  
Robert E. King  
Job Assignment Manager

\_\_\_\_\_  
Date

**ATTACHMENT A**

SIRs Since Last CCB

Software Incident Reports Since Last CCB - Period: June 28, 2004 to July 23, 2004				
System Version	Status	Date Initiated	SIR #	Description
C2.0.3	Construction	06 28 2004	1619	<p>Enhance Extract, Transform, and Load (ETL) process to improve system performance and capabilities. The specific changes are as follows:</p> <ul style="list-style-type: none"> <li>- Consolidate Characteristic Alias Structured Query Language (SQL) to improve ETL performance.</li> <li>- Modify software to set table Percent Free (i.e., %free) sizes to pre-ETL processing values.</li> </ul> <p>07/13/2004 - The following additions were made:</p> <ul style="list-style-type: none"> <li>- Add TSMALP_IS_NUMBER to the Station fact table.</li> <li>- Add ORGANIZATION_IS_NUMBER to the Regular Result, Biological Result, and Habitat Result fact tables.</li> </ul>
T3.0	New	07 21 2004	1620	<p>Modify the Central Administration Module to allow the assignment of any alias type to any characteristic. This change should also be reflected in the Data Entry Module to provide the ability to search on any alias type for any characteristic.</p>

Legend for Release Version: System Letter is concatenated with Version Number.

System Letter Key: C = Central Warehouse, E = Station Home Page, P = Data Entry Module, R = Report Module, T = Central Administration.



**ATTACHMENT B**

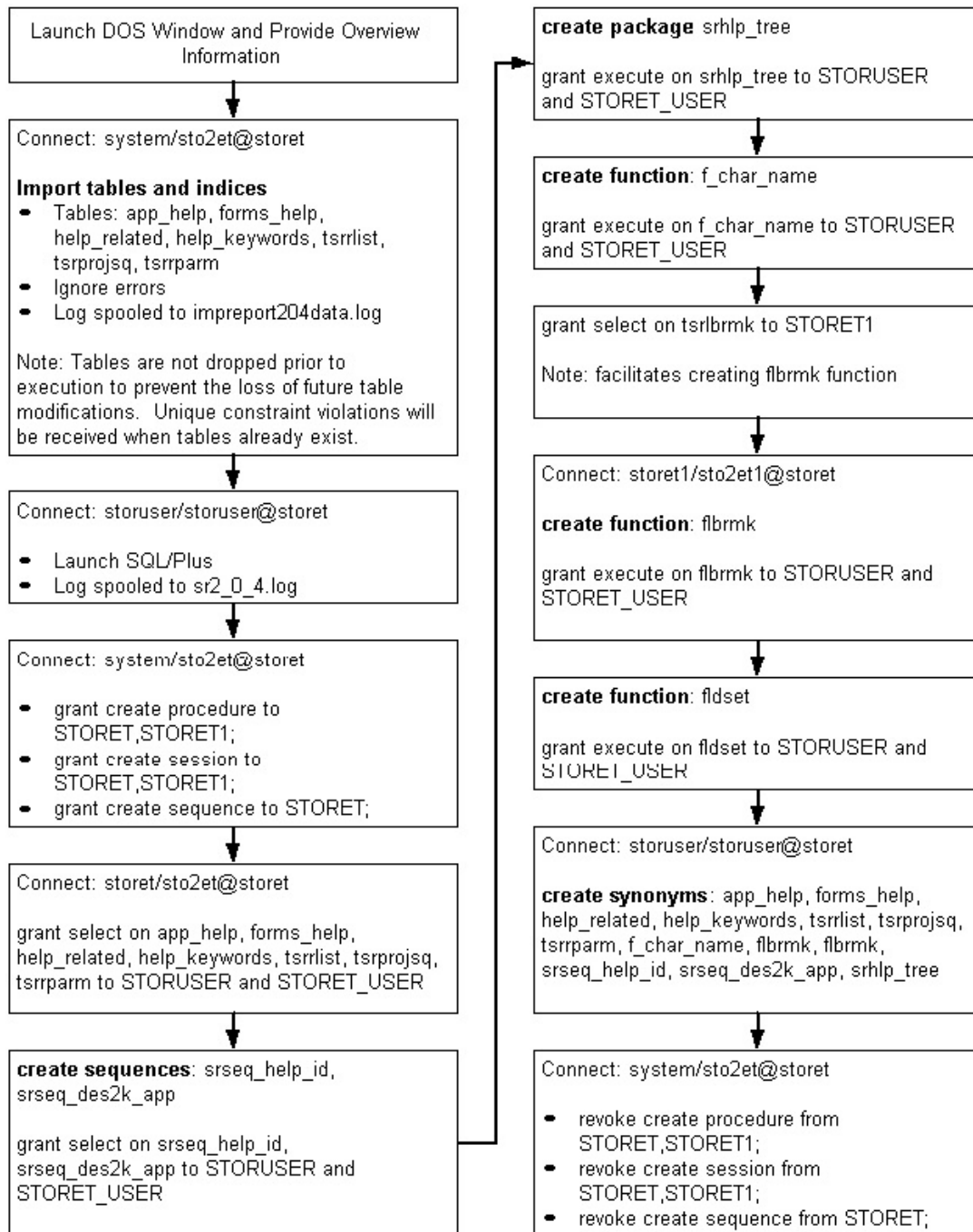
User Support Log

<b>User Support Log - Period June, 29, 2004 to July 23, 2004</b>			
<b>Date Received</b>	<b>Application</b>	<b>Issue</b>	<b>Response</b>
7/6/04	R2.0.2	07/06/2004 - When Projects are selected for the export reports, Results are retrieved for Trips and/or Activities not assigned to the selected Project.	07/06/2004 - The exports are functioning as designed. The current exports were modeled after the original Result Details export which interrogates Projects against the Station assignment; not against the Activity assignment. This was to ensure the retrieval of pre-v2.0 Result data which did not enforce/require Project to Activity assignment, and to provide consistency with the Report Module interface which displays available Stations based on assigned Projects. This is not applicable to the "printed" Result Details report. It was again recognized during redesign of the exports that interrogating Projects against the Station assignment may retrieve more data than anticipated.

**ATTACHMENT C**

Report Module Restoration Utility Design

## STORET Report Module Restoration Utility U2.0.4 Design and Product Component Integration Sequence



**ATTACHMENT D**

Report Module v2.0.4 SIRs

<b>Report Module v2.0.4 SIRs</b>	
<b>SIR #</b>	<b>Description</b>
1074	Export: Station Summary: Add the Suspended Status indicator field to the download.
1120	Create report showing Characteristic Permitted Values.
1161	Create ability to retrieve Binary Large Objects (BLOBs) via the Report Module.
1224	Create a preformatted report and an export report providing chemical names with alias information.
1606	Add the EPA Key Identifier field to the Station Summary Export.
1621	Modify Report Module windows so that scroll bars do not appear using Windows XP Professional default settings.
1622	Create version of Chemical Names report which shows all aliases except Parameter Codes.
1623	Create report showing Permitted Values from the permitted value table (TSMPRMVL).
1629	Update the Report Module interface to accommodate R2.0.3 changes.