



To: Distribution

From: Stephen Smith, Technical Writer

Thru: Teresa Sutch, STorage and RETrieval (STORET), Project Manager (PjM),
Solutions Delivery Center (SDC)

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

1.0 Purpose

A CCB Meeting was held on October 11, 2005 via teleconference. 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

Christian, Kevin - Job Assignment Manager
Smith, Stephen
Sutch, Teresa - Project Manager
Szajgin, Tracey

3.0 Discussion Topics

- Action Items.
- Deliverable Status.
- User Support.

3.1 Introduction

Attendees opened the meeting with a summary of project activities and a status of open action items. The Software Incident Report (SIR) Log (Attachment A) and User Support Log (Attachment B) are included as deliverables with these CCB Minutes.

3.2 Deliverable Status

The change request for improved flow of Characteristic data association and update was delivered September 28, 2005.

The three Compact Disk (CD) set of STORET Deliverables on CD was deposited for Federal Express delivery on September 29, 2005. Delays in Federal Express delivery were discussed. S. Smith had directly contacted Federal Express on October 6, 2005, confirmed address information, and was informed that it would be delivered the next day. The package had still not arrived as of the CCB. The SDC will continue to follow-up on the delivery status and will hand deliver a duplicate package if necessary.

STORETINFO data on change requests and requirements pertaining to STORET products was delivered on September 30, 2005.

3.3 User Support

The Portable Document Format (PDF) files of the STORET and Central Warehouse Entity Relationship Diagrams (ERDs) were delivered October 6, 2005.

The Development Environment document will be delivered by the end of the week.

System defects discovered while performing User Support activity will be recorded as SIRs and reported in the CCB Minutes.

The following tasks were prioritized in the given order:

- Create sample Extensible Markup Language (XML) output for proof of concept in support of Environmental Sampling, Analysis, and Results (ESAR) data exchange. It was agreed that the proof of concept need only include Organization, Project, and Station information.
- Provide an Attribute Definition Report (ADR) modeled after the STORET v1.1 ADR. This will include permitted values defined in the COOL:Gen model.
- Revise the STORET Installation Guide to target Oracle 9i as the primary database version.
- Create documentation that maps columns from the STORET tables to the Central Warehouse downloads.
- Create an implementation plan for Characteristic Inventory data retrieval in the Central Warehouse.

- Create an implementation plan for correcting duplicate Characteristic Search Name creation and unintentional Characteristic row creation (see Attachment A).
- Provide additional Quality Assurance/Quality Control capabilities to the user community. K. Christian will make inquiries to the user community to develop and prioritize QA needs.

4.0 Action Item Summary

Action items and their status are as follows:

Number	Action Item	Assignment	Date Issued	Status	Date Completed
0001	Research VB.NET capabilities and provide response.	B. Norris	06/02/2004	Closed	09/08/2004
0002	Provide STORET team with copy of Dasler software.	B. King	06/02/2004	Closed	08/25/2004
0003	Provide BEACHES program with STORET architecture information (e.g., Entity Relationship Diagram, data definitions).	J. Wilson	06/28/2004	Closed	07/28/2004
0004	Run Extract, Transform, and Load (ETL) software week of July 12 th .	J. Wilson	06/28/2004	Closed	07/28/2004
0005	Provide copy of email discussing required changes to implement Uniform Resource Locator (URL) encoding for the Station Home Page.	B. Norris	06/14/2004	Closed	08/06/2004
0006	Send Report Module v2.0.3 deliverable.	S. Smith	07/28/2004	Closed	07/28/2004
0007	Include scripts to remove orphaned rows and nullify type_name column in TSRCHALS for next reference table upgrade.	L. Manning	07/28/2004	Closed	08/23/2004
0008	Investigate Integrated Taxonomic Information System (ITIS) data acquisition and supplementary data processing.	L. Manning	07/28/2004	Closed	01/12/2005
0009	Examine Native American Land (NAL) data for compliance to the Environmental Data Registry (EDR).	B. Norris	08/23/2004	Closed	09/08/2004
0010	Review structure of TSMNAICS table to see if it was expanded from its original source.	S. Smith	08/23/2004	Closed	09/08/2004
0011	Send Data Entry Module v2.0.1 deliverable.	S. Smith	09/08/2004	Closed	09/08/2004

Number	Action Item	Assignment	Date Issued	Status	Date Completed
0012	Prepare Entity Relationship Diagrams of the Central Warehouse and STORET Database for the National Conference.	B. Norris	10/8/2004	Closed	12/01/2004
0013	Prepare graphs showing results converted to target units for possible use at the National Conference.	S. Smith	10/08/2004	Closed	10/21/2004
0014	Email URL to access STORET Station Home Page and Extensible Markup Language (XML) stream to B. King.	B. Norris	12/01/2004	Closed	12/02/2004
0015	Update BLOBs on preformatted reports matrix for review at next CCB.	S. Smith	12/01/2004	Closed	12/16/2004
0016	Aggregate pertinent Reference Table SIRs for review and disposition.	S. Smith	01/12/2005	Closed	03/03/2005
0017	Schedule ITIS data load meeting.	E. Bryant	01/12/2005	Closed	02/16/2005
0018	Provide Practical Extraction and Report Language (PERL) and Statistical Analysis System (SAS) programs supporting ITIS data load to SDC.	L. Manning	01/12/2005	Closed	02/16/2005
0019	Add a comment to the ALL_TAB_COMMENTS view identifying the full name of each STORET and STORET1 table.	K. Christian	02/16/2005	Closed	05/04/2005
0020	Provide L. Manning a report of duplicate Display Names and Taxon Serial Numbers found in ITIS data.	G. Thadkamalla	03/23/2005	Closed	04/07/2005
0021	Send duplicate Taxon Serial Numbers found in data during development to L. Manning when duplicates are identified as Approved.	G. Thadkamalla	04/07/2005	Closed	04/21/2005
0022	Send duplicate display names to L. Manning when duplicates are within the same hierarchical branch.	G. Thadkamalla	04/07/2005	Closed	04/26/2005
0023	Provide rules and conditions for ITIS comment information extraction.	L. Manning	04/07/2005	Closed	04/26/2005
0024	Provide Report Module User Guide with Document/Graphic retrieval description.	S. Smith	04/21/2005	Closed	04/22/2005
0025	Provide list of display names truncated by the Taxonomy Update Utility.	G. Thadkamalla	05/17/2005	Closed	05/17/2005
0026	Check on availability of DBMS_JOB package in production environment.	K. Christian	07/13/2005	Closed	07/19/2005
0027	Send latest TSRUOM to SDC development team.	K. Christian	08/16/2005	Closed	08/23/2005

Number	Action Item	Assignment	Date Issued	Status	Date Completed
0028	Send Source file for STORET v2.0 Installation Instructions.	E. Bryant	08/30/2005	Closed	08/30/2005
0029	Send script(s) that modify TSRUOM for unit conversion.	S. Smith	08/30/2005	Closed	08/31/2005
0030	Send material for Extensible Markup Language (XML) sample output.	K. Christian	09/28/2005	Closed	10/3/2005
0031	Make inquiries to the user community to develop and prioritize QA needs.	K. Christian	10/11/2005	Open	

5.0 Next Meeting

The next meeting was scheduled for October 25, 2005 at 2:00 P.M. via teleconference.

6.0 Distribution

Name	Email
Christian, Kevin	Christian.Kevin@epamail.epa.gov
McElhinney, Cary	Mcelhinney.Cary@epa.gov
Sutch, Teresa	
Szajgin, Tracey	
Wilson, Joseph	Wilson.Joe@epamail.epa.gov

7.0 Approval of Minutes

 Kevin Christian
 Job Assignment Manager

 Date

ATTACHMENT A

Software Incident Report Log

Software Incident Reports Since Last CCB - Period: 09/28/2005 - 10/10/2005			
System Version	Date Initiated	SIR Number	Description
T	10 03 2005	1725	Correct the ability to create duplicate Characteristic Search Names through the manipulation of redundant spaces. Scenario: Add a Characteristic that is a duplicate of an existing Characteristic except for an extra space to the right of the name; delete the extra space to create the duplicate. Logic should always check for duplicates upon Accept.
T	10 03 2005	1726	Correct the unintentional creation of Characteristics. Scenario: move focus from Details tab to another tab (e.g., Alias), then returns focus to Details tab; system forces Insert mode even if a Characteristic row is highlighted. Modifications to the Characteristic after this action cause an additional record to be created rather than an update to the selected record.

Legend for System Version:
 System Letter is concatenated with Version Number.
 T = Reference Table Module

ATTACHMENT B

User Support Log

User Support Log - Period: 09/28/2005 - 10/10/2005			
Date Received	System Version	Issue	Response
9/28/05	C2.0.5	Create documentation that maps columns from the STORET tables to the Central Warehouse downloads.	Priority Established.
9/28/05	C2.0.5	Create an implementation plan for Characteristic Inventory data retrieval in the Central Warehouse.	Priority Established.
9/28/05	n/a	Revise the STORET Installation Guide to target Oracle 9i as the primary database version.	Priority Established.
9/28/05	P2.0	Provide documentation on permitted values defined in the COOL:Gen model.	Priority Established.
9/28/05	n/a	Provided Entity Relationship Diagrams (ERDs) in Portable Document Format (PDF) for the Central Warehouse and STORET data models.	Sent ERDs via email for the Central Warehouse and STORET data models. Two versions of each ERD were provided. One sized 26 x 24 for a plotter, the other sized for multiple sheets of 8.5 x 11 paper which can be printed and assembled.
9/30/05	P2.0	After looking at the Data Structure List with Definitions the following question was asked. Is there a report in the Case Tool to which business rules are conditionally captured using specific columns: (TSRCHAR0IS_NUMBER vs. TSRCHAR_IS_NUMBER) (TSRFDACT0IS_NUMBER vs. TSRFDACT_IS_NUMBER) (TSMSTATN0IS_NUMBER vs. TSMSTATN_IS_NUMBER) (TSMPRMVLOIS_NUMBER vs. TSMPRMVL_IS_NUMBER) (TSRANLPROIS_NUMBER vs. TSRANLPR_IS_NUMBER)	The Data Structure List with Definitions was probably the most straightforward place to look. Below is a more detailed description of the relationships inferred by the listed keys: ***** (TSRCHAR0IS_NUMBER vs. TSRCHAR_IS_NUMBER) - Assumed TSRRSULT: TSRCHAR0IS_NUMBER - Relates to Single Taxon Frequency Class - Biological Results, Secondary Class Descriptor. TSRCHAR_IS_NUMBER - Relates to Single Taxon Frequency Class - Biological Results, Primary Class Descriptor. ***** (TSRFDACT0IS_NUMBER vs. TSRFDACT_IS_NUMBER) - Assumed TSRFDACT: TSRFDACT0IS_NUMBER - The recursive key that identifies a Composite Sample Activity. TSRFDACT_IS_NUMBER - The primary key of any Activity. ***** (TSRFDACT1IS_NUMBER vs. TSRFDACT_IS_NUMBER) - Assumed TSRFDACT: TSRFDACT0IS_NUMBER - The recursive key that identifies a Sample from Sample Activity. TSRFDACT_IS_NUMBER - The primary key of any Activity.

User Support Log - Period: 09/28/2005 - 10/10/2005																																																																							
Date Received	System Version	Issue	Response																																																																				
		Also (TSMSTATN1IS_NUMBER vs. TSMSTATN_IS_NUMBER) (TSMPRMVL1IS_NUMBER vs. TSMPRMVL_IS_NUMBER) (TSRFDACT1IS_NUMBER vs. TSRFDACT_IS_NUMBER)	<p>The table below helps further explain. (For a single organization)</p> <table border="1"> <thead> <tr> <th>TSRFDACT _IS _NUMBER</th> <th>TSRFDACT OIS _NUMBER</th> <th>TSRFDACT 1IS _NUMBER</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>-</td><td>-</td><td>A water Sample</td></tr> <tr><td>2</td><td>-</td><td>1</td><td>A split/subsample taken from #1</td></tr> <tr><td>3</td><td>-</td><td>1</td><td>A split/subsample taken from #1</td></tr> <tr><td>4</td><td>6</td><td>-</td><td>A Water Sample to be composited</td></tr> <tr><td>5</td><td>6</td><td>-</td><td>A Water Sample to be composited</td></tr> <tr><td>6</td><td>-</td><td>-</td><td>A composite sample, formed from #4 and #5</td></tr> <tr><td>7</td><td>-</td><td>6</td><td>A split/subsample taken from previously composited #6</td></tr> <tr><td>8</td><td>-</td><td>6</td><td>A split/subsample taken from previously composited #6</td></tr> </tbody> </table> <p>*****</p> <p>(TSMSTATNOIS_NUMBER vs. TSMSTATN_IS_NUMBER) - Assumed TSMALP: TSMSTATNOIS_NUMBER - Identifies the location points of a Station. TSMSTATN_IS_NUMBER - Identifies the location point of a Permanent Grid.</p> <p>(TSMSTATN1IS_NUMBER vs. TSMSTATN_IS_NUMBER) - Assumed TSMALP: TSMSTATN1IS_NUMBER - Identifies the location points of a Permanent Transect. TSMSTATN_IS_NUMBER - Identifies the location point of a Permanent Grid.</p> <p>*****</p> <p>(TSMPRMVL0IS_NUMBER vs. TSMPRMVL_IS_NUMBER) (TSMPRMVL1IS_NUMBER vs. TSMPRMVL_IS_NUMBER)</p> <p>There are several tables which implement one or more of these keys. I believe these are all of them below:</p> <table border="1"> <thead> <tr> <th></th> <th>TSMPRMVL0IS_NUMBER</th> <th>TSMPRMVL1IS_NUMBER</th> <th>TSMPRMVL_IS_NUMBER</th> </tr> </thead> <tbody> <tr><td>TSRCHDEF</td><td>Voltinism</td><td>Habit</td><td>Sample Fraction</td></tr> <tr><td>TSRFQS</td><td>Container Color</td><td>n/a</td><td>Container Type</td></tr> <tr><td>TSRFQSDP</td><td>Container Color</td><td>n/a</td><td>Container Type</td></tr> <tr><td>TSRRSULT</td><td>Habit</td><td>Voltinism</td><td>Sample Fraction</td></tr> <tr><td>TSRSDP</td><td>Container Color</td><td>Temp. Preservation</td><td>Container Type</td></tr> <tr><td>TSRSMPLE</td><td>Container Color</td><td>Temp. Preservation</td><td>Container Type</td></tr> <tr><td>TSRRQCAF</td><td>n/a</td><td>n/a</td><td>QC Adj. Factor Type</td></tr> </tbody> </table> <p>*****</p> <p>(TSRANLPROIS_NUMBER vs. TSRANLPR_IS_NUMBER) - Assumed TSRANLPR: TSRANLPROIS_NUMBER - Identifies a Comparable National Analytical Procedure. TSRANLPR_IS_NUMBER - Primary key of any Analytical Procedure.</p>	TSRFDACT _IS _NUMBER	TSRFDACT OIS _NUMBER	TSRFDACT 1IS _NUMBER	Description	1	-	-	A water Sample	2	-	1	A split/subsample taken from #1	3	-	1	A split/subsample taken from #1	4	6	-	A Water Sample to be composited	5	6	-	A Water Sample to be composited	6	-	-	A composite sample, formed from #4 and #5	7	-	6	A split/subsample taken from previously composited #6	8	-	6	A split/subsample taken from previously composited #6		TSMPRMVL0IS_NUMBER	TSMPRMVL1IS_NUMBER	TSMPRMVL_IS_NUMBER	TSRCHDEF	Voltinism	Habit	Sample Fraction	TSRFQS	Container Color	n/a	Container Type	TSRFQSDP	Container Color	n/a	Container Type	TSRRSULT	Habit	Voltinism	Sample Fraction	TSRSDP	Container Color	Temp. Preservation	Container Type	TSRSMPLE	Container Color	Temp. Preservation	Container Type	TSRRQCAF	n/a	n/a	QC Adj. Factor Type
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User Support Log - Period: 09/28/2005 - 10/10/2005			
Date Received	System Version	Issue	Response
9/30/05	P2.0	<p>Is there a report in the case tool that generates all of the business rules as SQL, PL/SQL or triggers? Attached is an email from a user attempting to update the STORET Database directly via a 3rd party application. STORET has ALWAYS recommended NOT doing this approach. An "in English" report of all the business rules may have already been delivered. Note: (for documentation purpose) ANY Oracle SQL Business Rule Check would act as a validation script for all data received. Thanks for researching this request.</p>	<p>There is really no report or output from the case tool that provides the business rules as SQL, PL/SQL or triggers. The STORET v2.0 Business Rules document is available for users to download on the EPA STORET Web site given below. It should be noted that the Business Rules extend beyond those that enforce data integrity (e.g., You could have perfectly good Referential Integrity, and still violate several Business Rules).</p> <p>http://www.epa.gov/storet/updates.html</p>

User Support Log - Period: 09/28/2005 - 10/10/2005			
Date Received	System Version	Issue	Response
10/3/05	T2.0.1	<p>Investigate the following Issues with the STORET Reference Table Module v2.0.1</p> <ol style="list-style-type: none"> 1. Inconsistent search for Chemical Abstract Number (CAS) # Alias. Compare search via SQL and Application for CAS#. 2. Application does not display duplicate records, when duplicate records exist; list only shows the last record. 3. Search, Select, and Rename an existing Characteristic: <ol style="list-style-type: none"> a. Defaults to INSERT mode, even if search row is selected. b. Upon clicking ACCEPT, a new row is added rather than the desired modification to an existing record. 4. Search, Select, and add an Alias to an existing Characteristic: <ol style="list-style-type: none"> a. Defaults to INSERT mode. b. This works perfectly, in comparison to Issue 3 above. 	<ol style="list-style-type: none"> 1. I get the same search result from SQL as I do the application. I could not find CAS numbers 10061-01-5 or 576-24-9 as depicted in screen shots (even with latest reference table download dbfix21), but I did create some duplicate CAS Numbers on different Characteristics for my test. I will probably need a phone conversation where we can walk together through the steps to create the behavior. 2. I was able to trick the system by the addition and subsequent removal of redundant spaces to make a duplicate Characteristic Search Name. This scenario did not work for Aliases. Note: duplicates could also happen if records are added/changed outside the application. To test cleanup/correction of the duplicate data, my Search retrieved all duplicate Characteristic Search Names. A Search across a shared Alias Name on different Characteristics also returned all the expected records. In general: Duplicate Characteristic Search Names are not allowed by the system. An error message is given in this situation. Duplicate Alias are also not allowed. The combination of Alias Type and Alias Name must be unique. An error message is given in this situation. Duplicate Display Names are not prohibited. 3. I was able to cause this condition when modifying the Search Name independent of the Display Name. This is not correct behavior. 4. This seemed like an observation.
10/4/05	n/a	Provide proof of concept through Report Builder of XML output given example schema.	Priority Established.

User Support Log - Period: 09/28/2005 - 10/10/2005			
Date Received	System Version	Issue	Response
10/7/05	P2.0	For STORET version 1, we had an Attribute Definition Report that was formatted nicely and looked like something one could actually read as a reference manual. In STORET version 2, we created the report as a spreadsheet. I am sure there are advantages and disadvantages to both formats. Were these auto-generated from the CASE tool or manually created? If auto-generated, would it be possible to create a STORET version 2 Attribute Definition Report that looked like the format of the STORET version 1 report? If not easy to do...don't worry about it.	Thank you for inquiring. It is predominately auto-generated with some manual intervention. I believe a STORET version 2 content report with the STORET version 1 data elements and format can be created in a reasonable time frame. We will add it to the agenda for our 10/11/2005 CCB Meeting.

Legend for System Version:

System Letter is concatenated with Version Number. System Letter Key:

C = Central Warehouse, P = Data Entry Module, T = Reference Table Module