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**Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS**

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Reply to:

Scott Parke  
ASTM Test Monitoring Center  
6555 Penn Avenue  
Pittsburgh, PA 15206

November 5, 2001

To: The Data Communications Committee

Enclosed are the combined minutes of the Data Communications Committee and Electronic Data Transmission Methods Subcommittee meetings held in San Antonio, TX, on October 18, 2001.

Scott Parke  
Secretary, DCC

Attachments

## MEETING MINUTES

### DATA COMMUNICATIONS COMMITTEE and ELECTRONIC DATA TRANSMISSION METHODS SUBCOMMITTEE

HELD OCTOBER 18, 2001  
SOUTHWEST RESEARCH INSTITUTE, SAN ANTONIO, TEXAS

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The Electronic Data Transmission Methods Subcommittee (EDTM) and Data Communications Committee (DCC) meeting were held consecutively on the same day. As was the case for the last meeting, the DCC secretary agreed to serve as secretary for the EDTM subcommittee. The minutes of the proceedings for both meetings are combined in this single document.

#### **8:40 EDTM CALL TO ORDER**

DCC Chairman Frank Farber called the meeting to order and made several brief announcements regarding the day's schedule. He reviewed the meeting agenda (attachment 1) and membership list and attendance sheet (attachments 3 and 2, respectively) and then turned the meeting over to EDTM Chairman Dave Hood. Later in the day, the minutes of the April meeting were approved as published.

#### **8:43 EDTM RECOMMENDS SSL TO DCC**

Dave Hood reported that the EDTM held several conference calls since the last physical meeting in April. Notes from these calls are shown as attachment 4. The result of these calls was the decision to recommend that the DCC adopt Secure Socket Layer as a replacement for X.400 transmission protocol.

Dave made a presentation outlining the work of the EDTM that led to this decision (attachment 5).

#### **9:00 SSL DEMO**

As part of Dave Hood's presentation, Jeff Robinson and Mike Kahn presented a demo of some of the work that Chevron Oronite has done to date (pages 8-12 of attachment 5). They first demonstrated how manual file transfer might work and then showed an automated version.

Mike and Jeff fielded several questions during the demo. Of particular interest was what third-party software was necessary to duplicate the functionality of the demo. *Siteminder* is the software used to handle the login/authentication process. For the demo, login was done manually. Mike conceded that automating this will require some cleverness on the part of the transmitting party but should be possible. Two other pieces of software used were *SAX-File* and *SA-FileUp* both produced by Software Arts. The manual transfer can be done using *SA-FileUp* alone but automating things requires *SAX-File*.

Mike felt that that development was coming along nicely but that there were still some issues to be

resolved. For example, after transfer the original files still reside at the sending location; this will cause them to be re-sent again on the next transmission.

John White asked what controlled the contents of the log file produced during a transfer (shown at the top of page 11 of attachment 5). Mike replied that the entirety of the contents of the log file was developer-controlled.

Some questions remained but generally dealt with details that all agreed could be worked out later. The demo concluded, Dave Hood wrapped up by discussing some of the nuts-and-bolts necessary to implement the methods shown in the demo (remaining pages of attachment 5).

#### **10:00 BEGIN DCC MEETING**

Based on the recommendation of the EDTM, Dave Hood moved that SSL be adopted as the replacement for X.400 and that the DCC focus its efforts on implementing SSL. This motion was unanimously approved (7 for, 0 against, 0 waive).

With that motion approved, Dave then moved that the DCC consider the work of the EDTM to be concluded and that EDTM be disbanded. This motion was also unanimously approved (7-0-0).

And, finally, Dave moved that a *new* sub-panel be formed to carry forward the actual implementation of SSL. This motion, too, was unanimously approved (7-0-0). Dave agreed to head this sub-panel (to be dubbed the SSL Standardization Sub-Committee or SSL SSC) and urged all parties to participate actively in it explaining that in order for this course of action to be successful *all* companies must embrace it.

#### **10:20 DATA DICTIONARY UNITS & DESCRIPTIONS – APRIL MEETING ACTION ITEM**

DCC Chairman Frank Farber reviewed the action items from the April meeting. The TMC has ceased automatically appending the units field to the description field. Mark Griffin reported that the process used to do this has been largely successful but still exhibits the occasional glitch.

#### **10:25 EXTENDED LENGTH TEST TASK FORCE**

Mark Griffin distributed notes from the teleconference that his task force on extended length tests held on October 11 (attachment 6).

Frank Farber described some of the complications the inclusion of data dictionaries and report forms in the various standards/test procedures has been causing. For example, full D2 balloting is required every time a change is made to a report package that is included in a standard or test procedure. Frank pointed out that in the case of the IIIF test, balloting is not necessary because that test procedure only refers to the TMC as the supplier of the report package, it does not actually *include* the report package. He also explained that there has been some controversy of late as to whether or not it was permissible for a test standard to provide direction on the running or reporting of non-standard (extended length) tests.

Since the IIIF report package is *not* part of the test procedure, Sally Lloyd moved that the DCC direct TMC to request that the IIIF surveillance panel allow the DCC (through its extended length test task

force) to develop rules and systems for handling extended length IIIF tests. The motion was unanimously approved (7-0-0).

Some discussion followed regarding the notification process used for report package changes not requiring information letters (e.g. IIIF). All acknowledged that a formal system with a recognized title (a la the "Information Letter" system) is desirable. Mark Griffin moved that the TMC be directed to develop such an analogous system for report package changes. The motion received unanimous approval (7-0-0).

#### **11:10 BETA TESTING PRIORITY**

Frank Farber reviewed the beta testing priority list (attachment 7). The L-10 injector test was removed and some of the dates were shuffled.

#### **11:21 REPORT FORM AND DATA DICTIONARY STATUS**

Frank Farber presented the report form and data dictionary status (attachment 8). He pointed out that IVD is currently awaiting action by the EPA (page 2).

#### **11:35 TELECOM/FAX SUMMARY**

Frank Farber reviewed the telecom/fax summary shown in attachment 9. He noted that there has been a marked improvement in the proportion of tests electronically transmitted to TMC due largely to the effort that is finally being made to get the bench tests transmitted electronically.

#### **11:42 DEFINITION OF "EFFECTIVE DATE"**

Mark Griffin wished to clarify everyone's understanding of the intended meaning of "effective date" as it pertains to implementation of report package changes. Some parties have made comments implying that they were misconstruing "effective date" to be a deadline by which the changes had to be implemented. After polling the panel (attachment 10), Mark reiterated that "effective date" is the date *on which* a change must be made, not *by which* it must be made. All present seemed to be clear on this distinction but agreed that they may need to re-disseminate this information to others within their companies.

Part of the driving force behind this discussion was the general feeling on the part of the T-10 and M11EGR surveillance panels and users of those tests that the currently-pending changes on those report packages have been given an effective date much later than they would like. Frank Farber queried the panel about the feasibility of moving this date up. All panel members agreed to investigate how quickly they might be able to implement those changes given the pressing demand.

Addendum: the week after this meeting, the panel agreed via email to change the effective date on these two report packages to November 2 for M11EGR and November 10 for T-10.

#### **13:09 PARTIAL TRANSMISSIONS**

ETRTM rule 2.2 requires that, except for aborted tests, all transmissions include *all* fieldnames defined in the data dictionary even if the data for a field is blank. This is intended to allow the receiver

to verify that he received a complete transmission. However, this creates a difficulty for labs that want to transmit data before the entirety of it has been checked or validated. For example, Mark Griffin would like to be able to transmit test results *after*, say, oil analysis data has been entered but *before* that data has been verified. He would like to drop the unverified fields from the transmission and proposed several wording changes to 2.2 (attachment 11). Frank Farber polled the panel as to whether or not receiving a seemingly incomplete transmission would pose difficulties for anyone's system. Three said it would; three said it wouldn't. All agreed to investigate the impact on their systems and then vote on a proposal that Mark Griffin will circulate via email.

Addendum: The panel approved via email ballot the wording labeled "OPTION 2" in attachment 11.

#### **14:15 TMC DEMO OF .PDF**

As discussed during the April meeting, TMC has continued to investigate Adobe's .PDF format as a replacement for JetForm. Tim Farley from the TMC presented a proof-of-concept demo that uses the same .PDF file for screen presentation, data entry, and printouts (attachment 12). Scott Parke asked how many of the labs are continuing to use JetForm and of those, how many use the JetForm format files as produced by the TMC. Lubrizol and Southwest Research were the only two to reply that they use JetForm but each of them either modify the TMC-supplied forms or create their own versions from scratch. Jody Fromer said that Lubrizol would be very interested in pursuing .PDF. None of the parties present had any reservations about transitioning away from JetForm.

#### **15:11 M11 EGR TRANSFORMED UNITS FOOTNOTES**

Frank Farber showed a problem that has come up reconciling units of measure and transformed units on form 4 of the M11 EGR test (attachment 13). After some discussion, it became apparent that this could be resolved by relocating some of the footnote "B" notation. Frank, Jeff Clark and the TMC will change form 4 for the next release of the M11 EGR report package.

#### **15:15 ETRTM REVIEW – SECTION 1.12**

Mark Griffin proposed a motion change section 1.12 to increase the length of ALTCODE1, ALTCODE2, and ALTCODE3 to 15. The motion was unanimously approved (7-0-0).

Sally Lloyd requested that LABOCODE also be increased to a length of 15. This was also unanimously approved (7-0-0).

Addendum: In the days following this meeting, Mark Slepsky asked that the panel members consider that with the data type of TESTLEN being Z and the length being 3, the EDTM convention of providing room for a sign and decimal is violated. The panel agreed via email ballot to expand the length of TESTLEN to 5.

#### **15:25 OBJECTIVES REVIEW**

Frank Farber reviewed the DCC objectives. The panel adjusted the priorities as shown in attachment 14. A preliminary report from the newly-formed SSL SSC was made a high priority targeted for April 2002.

**15:40 NEXT MEETING AND ADJOURNMENT**

The next meeting is tentatively scheduled for the week of April 25, 2002 in Cleveland, OH.

**ACTION ITEMS**

- |         |   |
|---------|---|
| TMC     | <ol style="list-style-type: none"><li>1) Request IIF surveillance panel permission for DCC to work on extended length data dictionary issues for IIF.</li><li>2) Develop an "Information Letter" system analog for notification of report package changes where the change does not require an information letter.</li><li>3) Revise M11 EGR form 4 footnote "B" for transformed units.</li><li>4) Continue investigating Adobe Acrobat as a JetForm replacement.</li></ol> |
| SSL SSC | <ol style="list-style-type: none"><li>1) Prepare a preliminary report for the April 2002 meeting.</li></ol>   |
| All     | <ol style="list-style-type: none"><li>1) Work on garnering support for SSL implementation within your organization.</li></ol>   |

**ASTM Data Communications Committee Meeting**  
**October 18, 2001**  
**At the Conclusion of EDTM – 5:00 pm**  
**Southwest Research Institute**  
**Auditorium of Building 160**  
**(it's the one across the road from the cafeteria )**  
**San Antonio, TX**

Attachment	1
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Reference	

1. Call to Order – Agenda Review
2. Membership Changes
3. Approval of April 26, 2001 meeting minutes
4. Review Scope
5. Review Action Items From Last Meeting

**ACTION ITEMS**

TMC: 1) Change data dictionary programming to end automatic appending of units column to description column.  
 2) Continue investigating Adobe Acrobat as a JetForm replacement.

Mark Griffin: 1) Form a Task force to devise conventions to govern data reporting for extended length and non-standard tests.

6. Data Dictionary Construction Status
  - Priority of next test areas
  - Report Forms/Data Dictionary Memos/IL's
  - TMC Telecom Test Summary
  - ETRTM Review
  - Transmission Of Truncated Flat File – Mark Griffin
7. EDTM Subcommittee Report – David Hood
8. Review Objectives
9. New Business
  - Adobe PDF Presentation – TMC
  - Data Dictionary/ Report Form Effective Dates
  - M11EGR Transformation Units
10. Adjournment



DCC Meeting #28 Attendance List (October 18, 2001 San Antonio, TX)

Name	Company	Address	Telephone Fax Email	Present
Michael Burke	ExxonMobil	P.O. Box 480 Paulsboro, NJ 08066-0480	609-224-2441 609-224-3611	phone
Graham Fisher	Oronite Chevron	Chevron Chemical SA 79 RucArotrole France	0146393639 GRLF@chevron.com	
Frank Farber	ASTM Test Monitoring Center	6555 Penn Avenue Pittsburgh, PA 15206	412-365-1030 412-365-1047 fmf@tmc.astm.cmri.cmu.edu	Frank
Jody Fromer	Lubrizol Corporation	29400 Lakeland Blvd Wickliffe, OH 44092	440-943-1200 x5172 440-943-7215 jff@lubrizol.com	JFF
Mark Griffin	Southwest Research Institute	6220 Culebra Road San Antonio, TX 78228	210-522-3502 210- mgriffin@swri.edu	Mark
Francisco Gonzalez	Registration Systems, Inc. / ERC	4139 Gardendale Suite 205 San Antonio, TX 78229	210-545-1889 210-341-4038 cisco@txdirect.net	
<del>Renee Hauserman</del>	Infineum USA LP	P. O. Box 735 Linden, NJ 0703	(908) 474-3139 Renee.Hauserman@Infineum.com	
David Hood	Chevron Chemical Company- Oronite Global Technology	100 Chevron Way Richmond, CA 94802-0627	510-242-3345 510-242-2100 daho@chevron.com	David
Michael Kahn	<del>Chevron Chemical</del> Oronite Global Technology	100 Chevron Way Richmond, CA 94802-0627	510-242-2717 510- mjka@chevron.com	Michael
Sally Lloyd	PerkinElmer Automotive Research	5404 Bandera Road San Antonio, TX 78238	210-523-4611 210-523-4633 Sally.Lloyd@PerkinElmer.com	S.L.

Sally.Lloyd@PerkinElmer.com



DCC Meeting #28 Attendance List (October 18, 2001 San Antonio, TX)

Name	Company	Address	Telephone Fax Email	Present
Scott Parke	ASTM Test Monitoring Center	6555 Penn Avenue Pittsburgh, PA 15206	412-365-1036 412-365-1047 sdp@tmc.astm.cmri.cmu.edu	
Maryse Shull	Ethyl Corporation	500 Spring Street Richmond, VA 23218	804-788-5280 804-788-6358 maryse_shull@ethyl.com	
Don Silver	Valvoline Inc	P.O. Box 391 Ashland, KY 41114	606-329-5809 606-329-5155 dwsilver@ashland.com	
Mark Slepsky	Lubrizol Corporation	29400 Lakeland Blvd Wickliffe, OH 44092	440-943-1200 Ext 2801 440-943-9041 mgs@lubrizol.com	
John White	Southwest Research Institute	6220 Culebra Road San Antonio, TX 78228	210-522-2434 210- jwwhite@swri.edu	

Attachment	2
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DCC Guest Attendance List

Name	Company	Address	Phone Fax Email	Include on Mailing List?
Tim Farkes	TMC-ASTAR	6555 Penn Ave P. H. S. W. 701 PA 15206	417-265-1022 TJF @ tmc-astar.com 202	
John Beck	RSI	5903 Rosebay Forest PL MIDDLETHIAN, VA 23112	804-739-9536 & fax jwbeckrsi@home.com	yes
Lika Barnabishvili	Infineum	1900 Linden Ave Linden NJ 07036	Lika.Barnabishvili@Infineum.com	yes
Christopher Richtberg	SWPI	6220 Culebra Road San Antonio, TX 78238	210-522-3343 210-684-7523 Crichtberg@swpi.edu	yes

## DCC Member List

<b>Voting Members</b>	
Scott Parke	TMC
Michael Burk	ExxonMobil
Mark Slepisky	Lubrizol
Mark Griffin	Southwest Research Institute
Lika Barnabishvili	Infineum
Maryse Shull	Ethyl Petroleum Additives
Mike Kahn	Chevron Chemical Company
Sally Lloyd	PerkinElmer Automotive Research
Don Silver	Valvoline Inc.
Ralph Grace	Imperial Oil Inc.
<b>Non-Voting Members</b>	
Frank Farber	TMC
Jody Frommer	Lubrizol
David Hood	Chevron Chemical Company
Chris Richtberg	Southwest Research Institute
John Beck	RSI/ERC
John White	Southwest Research Institute

**ASTM Data Communication Committee**  
**Electronic Data Transmission Methods**  
**HTTPs Sub-Committee Meeting Agenda**

Attachment	4
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Reference	

**Meeting Date:** Tuesday, August 14, 2001

**Time:** 12pm --1:30pm PDT

**Duration:** 1.5 Hours

**Expected Meeting Attendees:** Frank Farber, Mark Griffin, Bill Mahoney, Sally Lloyd, Jody Fromer, Lika Barnabishvili, Maryse Shull, and David Hood.

**Phone Bridge:** 925-842-7560

**Meeting ID:** 2084

**Meeting Objectives:** The primary objective is to review status of the Chevron Oronite SSL web site and the Ethyl/PerkinElmer Secure ftp prototype projects. Updating any work done since the last meeting, in preparation for our October DCC.

Note: This is work directed by the EDTM subcommittee of the DCC. Our role is to guide the prototype activity to insure it meets the needs of the participating additive companies and labs. The EDTM subcommittee's responsibility is to make a recommendation to the DCC for a new EDTM Standard for the ASTM.

Time	Topic & Leader(s)	Desired Outcome or Understanding
12pm PDT	Introductions & Confirmation of Meeting Scribe <b>All</b>	Confirm all attendees.
12:05 PM	Review/Adjust Agenda <b>D.Hood</b>	Insure all topics are represented with adequate time. Add items not previously identified.
12:10 PM	Where we are & how we got here <b>D.Hood</b>	All agree on where we are in the process to make recommendations to the DCC. <ol style="list-style-type: none"> <li>1. Confirm Participants</li> <li>2. Agree on a Scope</li> <li>3. Identify Method Requirements</li> <li>4. Identify Potential Solutions</li> <li>5. Data Gathering</li> <li>6. Analysis of Methods</li> <li>7. Present Summary to Subcommittee</li> </ol> Make Recommendations(s) to Data Communication's Committee
12:15 PM	SSL Web Prototype Status & Next Steps <b>D. Hood, SwRI, and PE</b>	Report any new information on the SSL Prototype. Determine if any of this information changes our process or plans. Date Script to Labs: <b>Sept. 14</b> SSL Conference Call: <b>by Sept. 26<sup>th</sup></b> EDTM Conference Call: <b>by Oct. 12.</b> DCC: <b>Oct. 18</b>
12:45 PM	ftp Prototype discussion <b>Ethyl, PE, and all</b>	Report any new information on the secure ftp solution.
12:50 PM	Open Discussion on Next Steps <b>All</b>	Allow time for open discussion.
1:00 PM	Discuss Date and Location for next EDTM. <b>All</b>	Recommend having this the morning session of the DCC
1:10 PM	Adjourn <b>All</b>	

# ASTM Data Communication Committee

## Electronic Data Transmission Methods HTTPs Sub-Committee Meeting Agenda SSL Meeting Minutes Tuesday August 14, 2001 12:00pm – 1:00pm PDT

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Reference	

**Attendees:** Frank Farber (TMC), Mark Griffin (SwRI), Bill Mahoney (ERC/RSI), Sally Lloyd (PE), Jody Fromer (Lubrizol), Lika Barnabishvili (Infinium), Maryse Shull & Steve Peterson (Ethyl), and David Hood & Jeff Robinson (ChevronOronite).

Minutes by D.Hood (Chevron Oronite), edited by M. Griffin (SwRI)

### 12:05: Call for attendance and Introductions

No Changes to Agenda

### 12:10: Project Plan Update

Chair provided update on where Project is regarding process plan (see 12:10PM Item on Agenda). We are currently on steps 5 and 6, developing the SSL prototype, still preparing to make an EDTM recommendation to the DCC at the fall meeting.

### 12:15: Current status of SSL prototype at Chevron Oronite, SwRI, and PE:

Oronite's SSL application developer visited San Antonio labs on July 31st to provide automation expertise for SSL solution. It was determined that Oronite would provide VB script to labs as a proof of concept. The scripting will be based on utilities and component decisions Oronite had made when constructing their SSL site. These are specifically file utilities, information protection, authentication and verification.

Oronite also noted that they will take some further liberties with standards, primarily based on directory structure and file naming. All of the decisions that they make when constructing this script have been discussed at the EDTM level.

Oronite noted that all participants believe that SSL is the appropriate solution for our industry, the prototype is being developed to insure automation and identify any red flags.

The following timeline was discussed and what was agreed to by the end of the conference call.

**Script to Labs (PE and SwRI):** Sept. 14<sup>th</sup>, 2001

**SSL Conference Call to review:** Sept. 26<sup>th</sup> (no later than)

*Communication to EDTM from SSL (Chair), on current status of prototype work & recommendation from EDTM to DCC on SSL solution.\**

**EDTM Conference Call to discuss Communication from SSL Team:** Oct. 12<sup>th</sup> (no later than)

*Note: SSL Team is hopeful that we can vote to make this the EDTM recommendation to DCC during this Conference Call.*

\*- Suggestion by Bill Mahoney that SSL was the EDTM subcommittee's selection by default, led to this definition. He based this primarily on Ethyl's proclamation of lack of interest in Secure ftp and Chevron Oronite's comment regarding information protection/security issues through firewalls using Secure ftp. The participants agreed.

Chevron Oronite asked all additive companies, labs, and TMC for comments on any phase of the prototype work or next steps as defined above, and non were offered. Some specifics questions were asked and settled at that time. Basically, the group endorsed the work to proceed as planned. No suggestions for change were made.

### 12:40: Secure ftp work was put on hold (See note above)

# ASTM Data Communication Committee

## Electronic Data Transmission Methods HTTPs Sub-Committee Meeting Agenda

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### 12:45 Open Discussion and Next Steps.

Scripting clarification and comment provided by Ethyl was based on ftp and SSL scripting being conceptually similar solutions. Chevron Oronite agreed.

Frank Farber asked Chevron Oronite if they could utilize/publish the white paper they had developed for this project. Oronite suggested that the EDTM, DCC, or other subgroup work on making it a generic document for publication as part of the ASTM DCC standard. All agreed that was the best way to proceed and could begin in or around the Fall DCC Meeting.

Frank also inquired about TMC's need for some of the scripting work being done, and we think that as a data consumer that will not be necessary, but it is an issue to be determined.

Mark Griffin noted that he attended a Borland Symposium that had some vendor that solicited utilities that could provide solution(s) for those that wish to automate but not write the scripting themselves. The software name is IP\*WORKS, and their website is <http://www.nsoftware.com>

**ASTM Data Communication Committee**  
**Electronic Data Transmission Methods**  
**HTTPs Sub-Committee Meeting Agenda**

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**Meeting Date:** Tuesday, October 8, 2001

**Time: 10am –11:30pm PDT**

**Duration:** 1.5 Hours

**Expected Meeting Attendees:** Frank Farber, Mark Griffin, Bill Mahoney, Sally Lloyd, Jody Fromer, Lika Barnabishvili, Maryse Shull, Mike Kahn and David Hood.

**Phone Bridge:** 925-842-7555

**Meeting ID:** 1617

**Meeting Objectives:** The primary objective is to :

- review status of the SSL web solution project.
- Determine/Agree that we are prepared to recommend the https solution to the DCC.
- Determine any further work this group needs to do.
- Agree to recommend a timeline to include beta test and final implementation to DCC

Note: This is work directed by the EDTM subcommittee of the DCC. Our role is to guide the prototype activity to insure it meets the needs of the participating additive companies and labs. The EDTM subcommittee's responsibility is to make a recommendation to the DCC for a new EDTM Standard for the ASTM.

<b>Time</b>	<b>Topic &amp; Leader(s)</b>	<b>Desired Outcome or Understanding</b>
10am PDT	Introductions & Confirmation of Meeting Scribe <b>All</b>	Confirm all attendees.
10:05 AM	Review/Adjust Agenda <b>D.Hood</b>	Insure all topics are represented with adequate time. Add items not previously identified.
10:10 AM	Review current Oronite work and project status. <b>D.Hood</b>	Inform SSL group of: <ul style="list-style-type: none"> <li>• what has been done and what still needs to be resolved</li> <li>• Issues identified/lessons learned</li> <li>• Plans for completion and distribution of information.</li> </ul>
10:25 AM	Report on ATC QMWG meeting (9/25/01) <b>D.Hood &amp; B.Mahoney*</b>  *-Bill is welcome to add his comments	Report decisions/recommendations made during our European partners last meeting and identify impact.
10:40 AM	Open discussion on moving forward with recommendation to DCC. <b>All</b>	<ul style="list-style-type: none"> <li>• Identify any issues that need to be resolved before making recommendation to DCC.</li> <li>• Determine if any of these will negate a decision to recommend SSL to DCC.</li> </ul>
10:55 AM	Next Steps <b>All</b>	If the answer to previous topic is move to recommend, then: <ul style="list-style-type: none"> <li>• Identify next steps</li> <li>• Agree on timeline for completion</li> </ul>
11:10 AM	Can we recommend timeline for implementation <b>All</b>	Note: this request is only in general terms to give labs , TMC, and ERC?RSUI a feel for when they need to be ready to go.
11:30 AM	Adjourn <b>All</b>	

# ASTM Data Communication Committee

## Electronic Data Transmission Methods HTTPs Sub-Committee Meeting Agenda

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### EDTM/SSL Meeting Minutes 10/9/2001

#### Introductions & Confirmation of Meeting Scribe

**Meeting Attendees:** Mark Griffin (SwRI), Bill Mahoney (ERC), Francisco Gonzalez (RSI), Sally Lloyd (PE), Jody Fromer (Lz), Lika Barnabishvili (Infineum), Maryse Shull & Steve Peterson (Ethyl), Mike Kahn, Jeff Robinson and David Hood (Chevron Oronite)

**Scribe:** D.A. Hood

#### Review/Adjust Agenda

No Adjustments to meeting were recommended.

#### Review current Oronite work and project status

Chevron Oronite has estimated 80 completion of automated data transfer using https on a development server.  
Complete:

1. Coded automation for file transfer utility (SAFileup)
2. Creates text log-file of all transferred data and places on data supplier and consumers server.
3. We had to build a "workaround" for SiteMinder (authentication software).as we were unable to get the software in what we would consider a reasonable time.

Note: filenames, directory structure, utility standards were "assumed" to build prototype to this point.

#### To Do

1. We hope to have a server with SiteMinder and VeriSign installed for our planned demo. on October 18<sup>th</sup>. (MKahn & JRobinson)
2. Test tool outside Chevron Oronite's firewall. (ChevOro, SwRI, and PE)
3. Distribute to labs for review/critique.
4. Identify areas for standardization discussion on 10/18 (MKahn)

#### Report on ATC QMWG meeting (9/25/01)

D.Hood read unconfirmed meeting minutes from 9/25 ATC-QMWG Meeting, in quotes below:

#### "4.2 Review of funding for alternative to X.400

The pros and cons of having a HTTPS secure website at the ERC were discussed. It was agreed that this would be necessary for the ERC especially in view of the fact that it will become the industry standard and that X.400 will eventually disappear. It was underlined that the ATC member companies present at this meeting want to continue receiving data directly from laboratories.

The issue of costs to implement the secure web site was discussed in some detail. The current ERC proposition would cost \$50,000 for the ACC and ATC; this would mean \$25,000 for the ATC. Maintenance costs would be absorbed into the current contract. The QMWG are in agreement in principal over the use of existing registration fee funds in order to pay for this if necessary and subject to ATC main-board approval. The QMWG will ask for some more detail regarding costs for the secure web site before approaching the ATC main group meeting on the 7<sup>th</sup> November.



**ASTM Data Communication Committee**  
**Electronic Data Transmission Methods**  
**HTTPs Sub-Committee Meeting Agenda**

Attachment	4
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Reference	

Action GF to request additional details of the cost breakdown from the ERC.”

Note: B.Mahoney , G. Fisher, and D.Hood to discuss details and present to relevant ASTM and ATC groups.

Bill Mahoney confirmed that Europe has embraced the https solution after almost one year of presentation, discussion, and finally concurrence. This solution has not been voted on by main ATC body, however they meet on 11/7/01, and it is anticipated they will formally approve after the 10/18/01 DCC approval.

**Open discussion on moving forward with recommendation to DCC**

Chevron Oronite, Lubrizol, Infineum, Ethyl, SwRI \*, PerkinElmer, and ERC agreed to recommend https as the new EDTM solution to the DCC on October 18, 2001.

\* - SwRI noted that approval was based on a reasonable timeline, and that all additive companies plan participation in the https solution.

D.Hood will summarize the EDTM's work with details still the DCC will need to develop a timeline. This includes identifying all issues that need standardization, tools required/recommended for each business function, and a general on costs expected for each (Additive Company, Lab, ERC/RSI\*\*, and ASTM)

\*\* - This has already been done, but more detail will follow. See previous subject note re: : B.Mahoney , G. Fisher, and D.Hood

**Next Steps**

Prepare to vote on https solution at October 18, 2001 Data Communications Meetings.

Chevron Oronite to provide Screen Scrapes of demonstrated https automation to aid committee in understanding standardization issues.

Prepare to discuss standardization issues for resolution and estimating first draft of timeline.

D.Hood recommended we develop a timeline to provide participating companies the incentive to move forward with this project due to the impending limitations and availability of X.400. Note: This is simply validation of the scope of the EDTM subcommittee.

**Can we recommend timeline for implementation**

See note above.

**Adjourn**

At approximately 11:10AM PDT

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Reference	

# Electronic Data Transmission Method Subcommittee

## Recommendation to Data Communications Committee

DCC Winter Meeting  
@ Southwest Research Institute  
San Antonio, Texas

10/18/2001

D.Hood



## Meeting Objectives

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- DCC Preface
  - EDTM Scope & Objectives
- EDTM Requirements Matrix
- Prototype Selection
  - Review
- Recommended Solution
  - Identified Issues
- Issue Resolution



## DCC Preface

As part of the Electronic Test Report Transmission Model (ETRTM) the ASTM Data Communications Committee (DCC) has specified two transmission protocols. The two protocols are X.400 and Internet FTP. Of the two, X.400 protocol is preferred method for proprietary data, for the following reasons:

- Secure** – Documents managed by secure systems
- Traceable** – Misrouted mail can be tracked down
- Receipts** readily available
- Sender certified by originating e-mail carrier
- Known path** – Only handled by responsible commercial e-mail firms
- Fast** – X.400 standards require 95% of mail delivered within 45 minutes

However, the use of X.400 on a global scale is expected to decline over the next five years for reasons such as:

- The rising use of the Internet and the World Wide Web Standards
- The minimal resources being invested in X.400 product development by the world's leading e-mail software vendors
- The lower cost of Internet e-mail
- Most notably to electronic test report transmission trading partners, is that several European industry members do not have access to X.400 providers.

As a result, the DCC has formed the Electronic Data Transmission Methods Sub-Committee to investigate a suitable replacement protocol for X.400.



## EDTM Formation

- **Broad Representation\***
  - International Additive Companies
    - Dependant Test Laboratories
      - Including International Lab Representation
  - Independent Test Laboratories
    - Domestic and European
  - Monitoring/Governing Agencies
    - Domestic and European

\* - Ongoing effort by Additive Companies to align ATC and ASTM Standards



## Initial EDTM Roster

Member	Company	Email	Phone
David Hood	Chevron Oronite Company, LLC	daho@chevron.com	510.242.3345
Frank Farber	Test Monitoring Center	ffa@tmc.asim.cmu.edu	412.365.1030
Mark Griffin	Southwest Research Institute	MGriffin@swri.edu	210.522.3502
Bill Mahoney	European Registration Centre	mahoney-erc@netcommander.com	210.340.5635
Francisco Gonzalez	Registration Systems, Inc.	cisco@txdirect.net	210.341.2680
Mike Eischen	PerkinElmer	mike.eischen@perkinelmer.com	210.647.9489
Graham Fisher	Chevron Oronite, S.A.	griff@chevron.com	0.11.33.1.46.39.36.39
Mike Kahn	Chevron Oronite Company, LLC	mjka@chevron.com	510.242.2717
Jody Promer	Lubrizol Corporation	jif@lubrizol.com	440.347.5172
Dan Himmelman	Lubrizol Corporation	drlum@lubrizol.com	440.347.5157
Thomas Gross	ISP	Th.Grosse@ISPLABS.de	0.11.49.59.76.94.75.30
Michael SantaMaria	ExxonMobil	michael_santamaria@email.mobil.com	609.224.2534
Dan Walker	Infiniteum USA L.P.	Dan.Walker@infiniteum.com	908.474.2170
Maryse R Shull	Ethyl Corporation	Maryse_Shull@Ethyl.com	804.788.5280



## EDTM Process Path

1. Confirm Participants
2. Agree on Scope
3. Identify Method Requirements, Include EEG Requirements
4. Identify Potential Solutions, Create Short List
5. Data Gathering
6. Analysis of Methods vs.. Requirements Matrix
7. Present Summary to Subcommittee
8. Make Recommendations(s) to Data Communication's Committee



## EDTM Scope and Objectives

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### Scope Statement

The subcommittee will develop an understanding of the methods currently available for electronic data transmission of the ASTM standard Flat File, or bench and engine test result data.

The methods identified must meet the requirements, needs, and expectations of the stakeholders (data providers and consumers), and will make a recommendation(s) to the ASTM Data Communications Committee based on this understanding

Note: This was the initial Statement form 8/2000 EDTM meeting.

### In Simple Terms:

Find a replacement for X.400 utilizing current, scalable technology that is easily available to any/all participating companies.

(SEE DCC Preface)



## Final Scope for EDTM

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- Scope Represented by:
  - EDT Methods Subcommittee Preface
  - EDT Methods Requirements Matrix



## Requirements "Matrix"

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- Provide Secure End-to-End Transmission
- Internationally Available
- Audits
  - Known Path
  - Receipt - FA
- Fits existing Standards
- Reasonably Priced



## Solutions Identified

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- **Encrypted files over FTP**
- **VPN (extra net)**
- **Encrypted e-mail**
- **Secured socket layer (HTTPS)**
- Mask data
- ISP (encrypted tunnel)
- Internet e-mail (SMTP)
- Hire 3rd party to host secure web site
- 3rd party app to package flat files
- point to point modem
- mail diskettes/CD-ROM

Each representative on the sub-committee should go back to their companies and discuss these potential solutions



## EDTM Solution "SHORT LIST"

---

- Secured Socket Layer (HTTPS) - **SELECTED for Prototype**
- Encrypted files over FTP - **SELECTED for Prototype**
- VPN (extra net) - Not selected based primarily on cost
- Encrypted e-mail - Note selected based primarily on administrative issues



## Prototype Decisions

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- *Secure ftp*
  - Decision to remove this solution based on some companies *Information Protection* rules regarding firewalls.
- SSL
  - EDTM agreed to reduce membership to an SSL "working group" in 3/2000.



## Formation of SSL Team

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EDTM agreed to reduce membership to an SSL "working group" in 3/2000.

This was a request from the Chevron Oronite prototype team to "expedite" development. As no other additive company could contribute resources to build an SSL site for testing, there were no objections.



## SSL Team Report

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- Chevron Oronite demo's SSL site to DCC at Spring '02 Meeting.
- 100% EDT automation for the SSL Prototype was not completed due to unforeseen reallocation of planned resources.
- Team agrees to recommend SSL solution without completing EDT automation based on their technical knowledge.

Note: Affirmative votes to recommend to DCC were made by Chevron Oronite, Ethyl, Infineum, Lubrizol, SwRI, PerkinElmer, and ERC. TMC was not available, but will have opportunity to vote during Oct. DCC





## SiteMinder Login Screen

Enter Network Password

Please type your user name and password

Site: EDT.ActiveCompany.Com

Realm: EDT.Realm

UserName:

Password:

Save this password in your password file

OK Cancel



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## EDT Login Screen

Chevron Oronite Technology Data Transfer Utility

**Warning to Unauthorized Users**

This utility is only for the use of Chevron Oronite Company LLC (COC) personnel or those authorized by COC. Individuals using this utility without COC's authority, or in excess of their authority, are subject to having all of their activities on this utility monitored and recorded by administrative personnel. In the course of monitoring individuals improperly using this utility, or in the course of maintenance, the activities of authorized users may be monitored. Anyone using this utility expressly consents to such monitoring, and is advised that if such monitoring reveals possible evidence of criminal activity, administrative personnel may provide evidence of such monitoring to law enforcement officials.

Username:

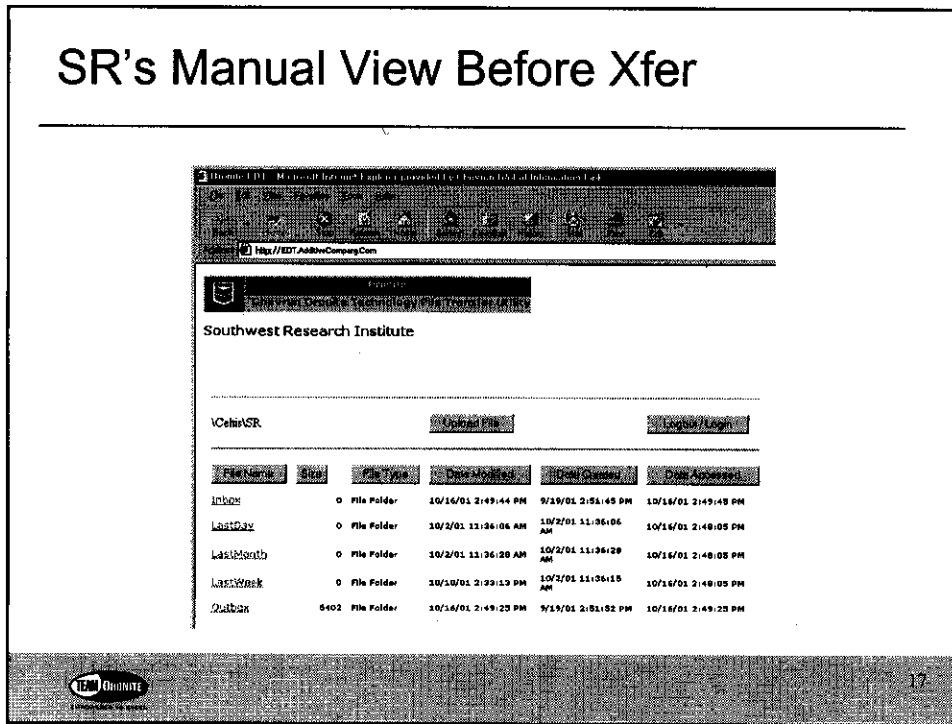
Password:

Login Logout

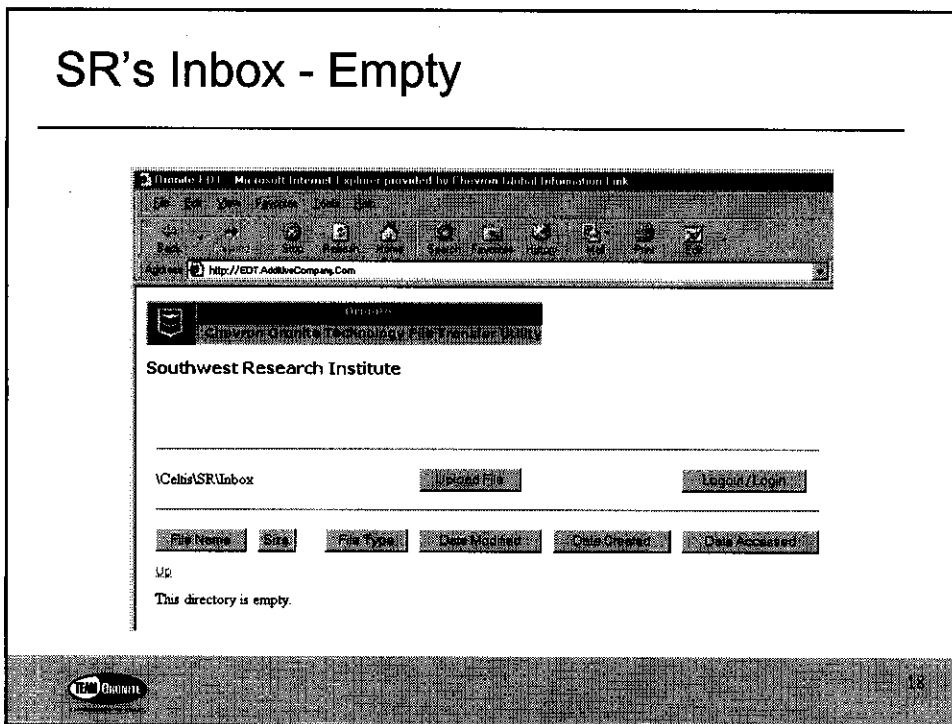


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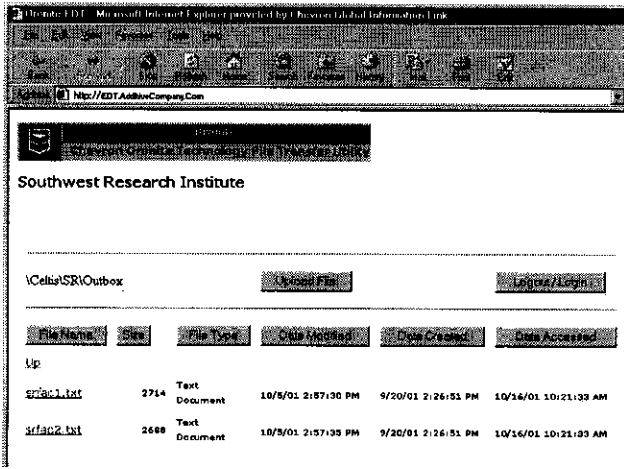
## SR's Manual View Before Xfer



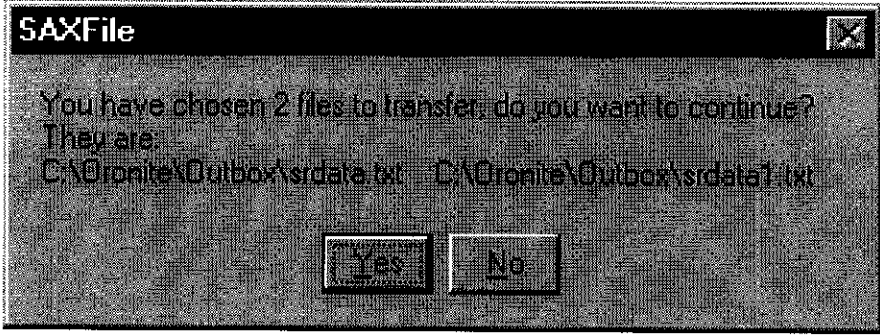
## SR's Inbox - Empty



## SR's Outbox: 2 Files



## Automatically Upload Two (2) SR Files

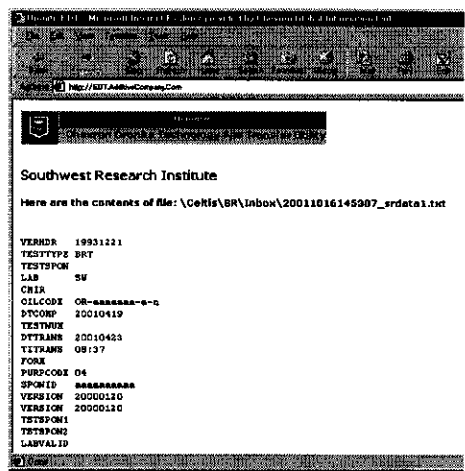


## Logfile after Automatic Up & Downloads

## Inbox After Automatic Uploads

File Name	Size	File Type	Date Modified	Date Downloaded	Date Accessed
20011016145306_srdata.txt	6770	Text Document	10/16/01 2:53:05 PM	10/16/01 2:53:05 PM	10/16/01 2:53:05 PM
20011016145307_srdata1.txt	6775	Text Document	10/16/01 2:53:05 PM	10/16/01 2:53:05 PM	10/16/01 2:53:05 PM

## Uploaded SR Data File Contents



```
VERHDR 19931221  
TESTTYPE BRT  
TESTSPCN  
LAB SW  
CRIR  
OILCODE OR-*****-*-  
DTCOMP 20010419  
TESTWUE  
DTTRANS 20010423  
VTTRANS 08:37  
FORM  
PURFCODE 04  
SPCNID *****  
VERSION 20000120  
VERSION 20000120  
TESTP01  
TESTP02  
LABVALID
```



## EDTM Recommendation

- Https solution for ASTM Electronic Data Transmission Method Standard
- Standardization & Implementation Issues Remain
  - DCC or EDTM



## Standardization Issues Identified

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- Filenames (filetypes)
- Directory Structure
- Upload Download Utilities
  - Vendors
  - Placement



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## Implementation Cost Issues

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- Hardware \$2-20K
  - requires any current Internet Browser
- Up-Download Utility
  - SA-FileUp License) \$179
  - SAX-File (multiple file xfer & others) \$399
- Authentication
  - Siteminder
- Security Certificate
  - VeriSign \$150 - \$400



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## Implementation Cost Issues, Cont.

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Cost for automation of file transfer can be a somewhat significant variable depending on how flexible you want your system to be.

We estimate simple automation for file transfer (up&download) to range from \$3-5,000.



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## EDTM Continue it's Work?

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- Standardization & Implementation Issues Remaining for Implementation\*
  - DCC or EDTM

\* - Upon DCC approval.



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## Extended Length Test / Non-Standard Test EDT Sub-committee

**Subject:** Teleconference meeting no. 1 held October 11,2001 1-2PM cdt  
(minutes prepared by Mark Griffin)

**Attachments:** (1) Sub-committee meeting notification (2) Handout w/corrections

**Attendees:** Lika Barnabishvili – Infineum  
Frank Farber – TMC  
Mark Griffin – SwRI  
Mike Kahn – Chevron Oronite  
Sally Lloyd – PerkinElmer  
Chris Richtberg – SwRI  
Maryse Shull – Ethyl

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The meeting was opened by Mark Griffin with a review of the action item documented in the minutes of the April 26,2001 DCC meeting (no. 27), re: pg 6. The scope of this sub-committee shall be to develop conventions to extend the DCC protocol for governing test reporting and EDT of extended length tests and non-standard tests (i.e. additional data). The goal will be to introduce these conventions as a set of rules to be included in the ETRTM document.

During the previous DCC meeting (no.27), Frank Farber offered a suggestion to Mark Griffin that the TMC assume the role of administrator and provide the repository for any additional data dictionary definitions needed for the extended length and non-standard data. This proffer was re-iterated during the teleconference and Frank stated that he would need to obtain TMC authorization (to make it binding).

The need to decide upon making the required data definitions as part of the standard dictionary (report package) or using a supplemental dictionary was recognized. And, the need for static (all fields uniquely defined) or dynamic (reuse of field definitions) dictionaries was also recognized. Neither of these issues were resolved during the teleconference.

There were several scenarios discussed as possible solutions for the extended length test data. In no particular order here is the listed that the sub-committee brainstormed.

1. Use the same set of mnemonics with multiple data transmissions, one for each value of TESTLEN (for each test hour occurrence). The TESTTYPE value used would vary. The normal data dictionary TESTTYPE to be used for the flat file containing data for the normal (test procedure defined) test hours (e.g. IIF), a modified TESTTYPE to be used for the flat file containing data for extended length tests (e.g. IIFEXT).



## Extended Length Test / Non-Standard Test EDT Sub-committee

2. Use data comm control triggers, surrounding each set of mnemonics with the "Actual hour" and "End group" (bookends) to represent each test hour being reported. This would mean the same mnemonic could appear more than once within the flat file.
3. Use truncated mnemonics (4 characters) and make all fields repeating (Hxxx), each data value to be reported would have a test hour association based upon the expanded mnemonic (xxx) suffix.
4. Use additionally defined mnemonics for all extended length test data. The repeating field specification would be extended to include all possible extended hour sample intervals. The definitions for all non-repeating mnemonics being used for intermediate test hours would be duplicated and assigned unique field names (hard-coded mnemonics, all possibilities are pre-determined). This solution uses the current convention for the standard report package where all data is defined ahead of time.
5. Use a set of mnemonics that apply to end-of-test data with the hours value as part of the mnemonic.
6. Use a generic set of mnemonics defined as needed for the test report but not maintained as part of the standard report. I.e. N0, N1, N2, etc. for generic numeric fields and C1, C2, C3, etc. for generic character fields. The definitions for each would be agreed upon between trading partners. This would be used as a possible solution for proprietary data transmissions. This usage is reminiscent of the mutually defined fields for ANSI EDI.
7. Use a "joint" dictionary which contains a METHOD field definition (similar to the 1K/1N report package). The METHOD combined with the TESTLEN would be used to identify standard test and extended length test EDT files.

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The need to use alternative solutions across test types was suggested. This would mean that no single solution would be the standard to follow for all test types. Making each possible solution a guideline, to be applied case by case per test type. E.g. use data comm control triggers and/or additional statically defined mnemonics for a given test type. (one flat file constructed using a combined set of solutions).

The following action items were agreed upon.

1. Begin work on a model test case for the development of extended length test solution(s). The IIIF was selected as the test type for the model.
2. Start drafting ETRTM rules.
3. Need to bring Lubrizol on board as a sub-committee member.

Meeting adjourned.

# Extended Length Test / Non-Standard Test EDT Sub-committee

## Attachment No 1.

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Subject: Extended Length Testing EDT sub-committee  
From: <MGriffin@swri.edu>  
To: Incognito2@CTC@SwRI26[(Lika.Barnabishvili@Infineum.com)],  
Incognito2@CTC@SwRI26[(Maryse\_Shull@Ethyl.com)],  
Incognito2@CTC@SwRI26[(Sally.Lloyd@PerkinElmer.com)],  
MGriffin@DataSys@SwRI08  
CC: Incognito2@CTC@SwRI26[(fmf@TMC6.astm.cmri.cmu.edu)]  
Reply To: Incognito2@CTC@SwRI26[<MGriffin@swri.edu>]  
Date: 10/03/01 11:17 AM  
Message Text: Message.htm,Message.txt  
Attachments: CLOSING THE EDT GAP.DOC  
Headers.822

To all:

During the DCC meeting held last April, I presented a proposal for developing rules to be added to the ETRTM standard which will provide for the EDT of additional data that is reported (beyond what is defined with the current TMC report package). There were two conditions identified which call for additional data to be transmitted: (1) data being reported for extended length testing and (2) data being reported which is non-standard for the ASTM test procedure. Technically condition (1) can be considered as a special case of condition (2). The result of my proposal was the formation of a new DCC subcommittee, I accepted the chairperson position. Below is the subcommittee membership list:

Lika Barnabishvili - Infineum USA L.P.  
Mark Griffin - Southwest Research Institute  
Mike Kahn - Chevron Oronite Technology  
Sally Lloyd - PerkinElmer Automotive Research  
Maryse Shull - Ethyl Corporation

I have attached the handout (with correction) that I distributed during the meeting. Please correct me if wrong, I believe the first three bullet items were decided upon.

- +Acceptance by DCC
- +Administrator assignment
- +Repository selection

DCC voted on motion to solve the problem, which passed 8-0-0. Frank Farber offered (off-line to me) that the TMC could administrate and maintain a repository.

I have not had an opportunity until now to begin work on this project. Sorry for the delay.

I would like to conduct a one hour teleconference meeting of the subcommittee prior to this month's DCC meeting. The goal will be to map out the objectives

October 11, 2001

## Extended Length Test / Non-Standard Test EDT Sub-committee

and open the floor to hear possible solutions (that may eventually be documented in the DCC rules). I do not expect that this first sub-comm meeting will resolve the problem, but at least we can get the ball rolling.

Please let me know ASAP which of the three dates will work for you.

Wed. 10/10/2001

Thur. 10/11/2001

Fri. 10/12/2001

I would propose a 1pm CDT start time for the call.

Thank You,  
Mark

Mark J. Griffin

SwRI - Automotive Products and Emissions Research Division

Data Systems - Principal Analyst

Tel: (210) 522-3502 Fax: (210) 684-7523 Internet: mgriffin@swri.edu

6220 Culebra Road San Antonio, Texas 78238-5166

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October 11, 2001

# Extended Length Test / Non-Standard Test EDT Sub-committee

## Attachment No. 2

### Preface

To date the task of implementing an EDT solution between trading partners has involved examining the hard copy test report and mapping test results located on every report page with data fields located in a data comm transmit file. This method of data definition has been driven by client generated requests received by the labs to include all of the data being reported in a test in an EDT file. Since the formation of the ASTM Data Comm Task Force (DCTF), and later the DCC, the focus has been refined (reduced) to review of only the official test report packet maintained by the ASTM Test Monitoring Center (TMC).

The current set of data dictionaries maintained by the TMC account for all of the data fields for a given test report as determined by the test procedure. While this approach satisfies the needs of reference test reporting, including the EDT file creation / transmission, it falls short of providing a complete solution for candidate (non-reference) test reporting. The labs and their clients must still develop additional definitions for data found on report pages (forms) which comprise the complete report packet. These additional fields will satisfy the need for reporting extended length test results, additional oil analysis data, ACC conformance data, additional rating and/or measurement results, etc. Basically, any data field not covered by the official test report / procedure.

The practice of working independent of the DCC for data definition to augment TMC developed report packets creates the potential for duplicate work among labs and their clients, who are working to achieve a common goal. The worst case being the creation of dissimilar definitions for the same data.

### Proposal

Since most of the trading partners involved with the additional definitions also maintains a DCC presence, it makes sense for the DCC to adopt a standard solution that all trading partners can use.

### Resolution

The DCC developed Electronic Test Report Transmission Model (ETRTM) provides a well defined protocol for data dictionary development and flat file transmissions. In order to maintain a standard among trading partners, the creation of any additional data definitions should adhere to the ETRTM. In fact, additional rules for the ETRTM would be required.

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## Extended Length Test / Non-Standard Test EDT Sub-committee

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To make this proposal feasible, there are some key issues to resolve.

- **Acceptance by DCC.** For the proposal of developing new rules for the ETRTM to handle additional data (undefined by procedure).
- **Administrator assignment.** To perform the role that the TMC currently provides for the standard report packet. To include maintenance for beta and production releases of dictionary and forms.
- **Repository selection.** For the storage and retrieval of additional definitions by trading partners.
- **Collection procedure.** To obtain consensus on which additional field definitions are required. Should allow a provision for excluding client sensitive data (where applicable).
- **Coordination method.** To coordinate additional mnemonics with existing standard report packet mnemonic definitions. This is crucial if the additional data will be transmitted in the same EDT file.
- **Version control.** Need to determine how the link with the standard report definitions will be managed. i.e. Use common version?
- **Composite vs. Supplemental dictionary.** Will the additional fields be maintained in a separate dictionary, or will they be appended to the standard dictionary (composite)?
- **Other Issues?**

### Next Steps

The DCC acceptance issue should be resolved first.

If proposal is accepted, then the resolution of the remaining issues by sub-committee is needed. The ETRTM rules to handle additional data definitions will need to be drafted (also by sub-committee?) and voted for approval by the DCC.

Next, a target set of additional fields (e.g. extended test length data) should be selected for a current test type and the data definitions should be collected and beta tested.

# Data Communications Committee Objectives

Stabilization of Data Dictionaries – High Priority				
Test Area	Beta Team Leader		Status	Expected Completion Date
	SR	EG		
L10	1		Pending Beta Release	5-2001
TC1/TC2/TC3	2		Pending Beta Release	6-2001
M11-EGR		3	Completed	4-2001

# Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission	
<b>Gasoline Tests</b>								
1	IIIE	Approved	Approved	19940114	94-1	19940413	19940201	
				19940414	94-89	19940413	19940413	
				19951129	95-1	19950725	19950725	
				19960628	96-1	19960221	19960124	
				19980331	98-1	19980202	19980202	
			In production	19980331	98-1	19980403	19980202	
2	VE	Approved	Approved	19941101	94-3	19940713		
				19950501	95-2	19950208	19950501	
				19950901	95-5	19950530	19950530	
				19961001	96-2	19960726	19960726	
				19970310	97-2	19970130	19970109	
			In production	19971124	97-5	19970902	19970902	
3	L38	Approved	Approved	19951201	21	19950816	19950803	
				19960201	22	19951002	19951002	
				19960515	23	19960326	19960326	
				19970404	25	19970129	19961024	
				20000315	30	19990621	19991123	
			In production					
4	IID	Approved	Approved	In production	19960415	96-1	19960206	19960213
5	VIA	Approved	Approved	19951101	95-1	19950818	19950818	
				19960315	96-1	19960112	19960112	
				19960916	96-3	19960612	19960612	
				19970402	97-1	19970225	19970124	
				19980409	98-1	19971215	19971215	
			In production	19990208	99-1	19981006	Editorial	
				19991112	99-3	19990729	19990729	
6	VG	Approved	Approved			19980708	19980708	
						19980820	19980820	
						19990412	19990412	
				19990503	99-56	19990412	19990412	
				19991025	99-154	19990827	19991015	
				20000215	00-1	20000112	20000127	
				20000802	00-2	20000713	20000629	
		20001101	20000831					
		20010206	20000914					
			In production	20010206	01-1	20001214	20001222	
7	IIIF	Approved	Approved			19981008		
						19981221	19981221	
				19990401	99-30	19990301	19990301	
				20000713	00-103	20000629	20000706	
				20001113	00-137	20001011	20001006	
				20010201	01-013	20010115	20010125	
				20010629	20010615E	20010529	20010611	
		20010913	20010914					
			In production	20010908	01-112			
8	IVA	Approved	Approved		98-161	19980625	19980625	
					98-185	19980804	19980804	
				19990216	99-5	19981201	19981201	
				19991015	99-142	19990716	19990716	
						20000126	20000519	
			In production	20000801	00-2			

# Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/ Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
				20010716	01-01	20010418	2001????
9	IVD Completed	Completed				19971117	AWAITING EPA ACTION
10	VIB Approved	Approved				19980810	19980810
					99-44	19990303	19990303
				19990430	99-82	19990427	19990427
				19990924	99-1	19990625	19990625
				20000901	00-3	20000626	20000714
				20010301	01-009	20010105	20010116
			In production	20011001	01-???	20010716	20010824
11	VIII Approved	Approved				19980609	19980609
					98-156	19980805	19980805
					98-180	19980820	19980820
				19990416	99-1	19980820	19980820
			In production	20000710	00-1	20000128	20000511
<b>Diesel Tests</b>							
12	T8 Approved	Approved				19940615	19940301
				19940727	94-1	19950321	19950321
				19950603	95-1	19960122	19960122
				19960815	96-1	19970702	19970630
				19971001	97-1	19980122	19980122
				19980316	98-1	19980702	19980702
				19980803	98-2	19980818	19980818
				19980928	98-3	19980902	19980818
				19980928	98-3	19981027	19981027
			In production	19990129	98-5		
13	1MPC Approved	Approved				19950607	19950607
				19950926	95-1	19980203	19980203
				19980430	98-2	19980922	19980922
			In production	19981109	98-4		
14	6V92 Approved	Approved				19940119	19940119
				19940119	94-1	19981208	19981208
				19990301	99-1	19990414	19990414
			In production	19990601	99-2		
15	RFWT Approved	Approved				19940503	
				19940901	94-1	19950606	19960606
				19950903	95-1	19960326	19960326
				19960701	96-1	19960828	19960828
			In production	19961201	96-2		
16	1K/1N Approved	Approved				19960808	19960816
				19960731	96-1	19960913	19960913
				19960923	96-2	19980701	19980701
				19980828	98-2	19980923	19980923
			In production	19981111	98-3		
17	M11 Approved	Approved				19970725	19970721
				19971006	97-178	19971113	19971113
				19980202	97-258	19980129	19980129
				19980202	98-25	19980604	19980604
				19980731	98-1	19981110	19981110
			In production	19990709	99-1		
18	M11EGR Approved	Approved	In production	asap		20010328	
				20011107	01-119	20010925	20010921



# Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/ Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
19	1P	Approved				19970923 19971015	19970923 19971015
			In production	19971024 19980601 19981102	97-224 98-51 98-1	19971024 19980302 19980921	19971024 19971223 19980921
20	1R/1Q	Approved	In production	20010207	01-016	20010122 20010604	20010207
21	T9	Approved					
			In production	19971013 19980202 19980803 19981026 19990323	97-183 97-257 98-1 98-2 99-1	19970822 19971106 19980601 19980804 19981110	19970822 19971106 19980601 19980804 19981110
22	T10	Approved	In production	20010103 20011114	01-002 01-118	20010102 20010924	20010102 20010921
23	EOAT	Approved	In production	19991101	99-1	19990803	19990803
<b>Gear Tests</b>							
24	L60	Approved	In production	19941120 19950918	IL-5 IL-6	19941012 19950710	19950216 19950710
25	L42	Approved					
			In production	19940903 19950823 19960715 19970317 19980302	IL-4 IL-5 96-1 97-1 98-1	19940707 19950721 19960607 19970305 19971211	19960111 19970305 19971125
26	L33	Approved					
			In production	19941020 19950819 19960506 19970602 19970602 19980303	IL-3 IL-4 96-2 97-1 97-3 98-1	19940909 19950509 19960329 19970411 19970609 19971218	19960212 19970331 19970609 19971218
27	L37	Approved					
			In production	19940829 19950819 19960603  19980309 19980310 19980901 19981116 20011101	IL-5 IL-6 96-3  98-1 98-3 98-4 98-5 01-115	19940707 19950424 19960425 19970902 19971124 19971223 19980203 19980605 19980908 20010927	19960410 19970902 19971104 19971223 19980203 19980605 19980908 20010927
28	L601	Approved					
						19950201 19950705	19950216 19950705
				19951115 19960531 19970530	95-1 96-3 97-1	19950912 19960408 19970411	19950912 19950912 19970411

## Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
				19970829	97-2	19970611	19970611
				19971107	97-3	19970902	19970902
				19981123	98-3	19980914	19980914
			In production	20000427	00-1	20000126	?
29	HTCT	Approved				19940809	
				19970324	97-1	19970128	19961104
				19980209	98-1	19971117	19971117
			In production	19980727	98-2	19980605	19980605
30	GST	Approved	Ready for Beta Testing			19980319	
<b>Bench Tests</b>							
31	CBT	Approved		19961101	96-1	19960408	19960214
				19990129	98-3	19981102	19981102
			In production	20010315	01-1	20010118	20010206
32	HTCBT	Approved		19980306	98-146	19980306	19980306
				19990122	98-256	19981120	19981120
			In production	20010201	01-01	20010117	20010123
33	OSCT	Approved				19940216	
						19960301	
				19971201	97-3	19970917	19970528
			In production	19980817	98-1	19980122	19980122
34	GI	Approved				19960403	
						19970128	19961203
			In production	19970315	97-20	20010926	20011005
35	TEOST	Approved				19960221	
			In production	19970330	97-38	19970128	19970128
36	VGC	Approved				19960423	
			In production	19970614	97-87	19970416	19970416
37	FOAM	Approved				19960502	
						19980128	
			In production	19980422	98-67	19980306	19980306
38	EVLO	Approved				19960403	
				19980123	97-270	19971107	19971107
				19980720	98-145	19980311	19980311
			In production	19990119	98-275	19981215	19981215
39	MTEOS	Approved		19980817		19980803	19980803
						19980820	19980820
			In production	20001120	00-142	20001013	20001013
				20010208	00-185	20001208	20001211
40	BRT	Approved				20000120	20000127
			In production	20000308	00-014		
41	EOFT	Approved				20000713	20000803
			In production	20000804	00-116		

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## Report Forms/Data Dictionary Status

<u>Test Type</u>	<u>Report Layout Status</u>	<u>Data Dictionary Status</u>	<u>Report Package Status</u>	<u>Industry Effective Date</u>	<u>Information Letter/ Memo</u>	<u>Current Dictionary Version</u>	<u>Date of DCC approval for use with electronic Transmission</u>
42	EOWT Approved	Approved	In production	20000804	00-117	20000720	20000803
43	D6417 Approved	Approved	In production	20001102	00-132	20000928	20000922
44	D5800 Approved	Approved	In production	20001107	00-133	20000926	20000928
45	D6082 Approved	Approved	Inproduction	20001109	00-136	20001002	20000930

### Two Cycle Tests

43	TC1	Approved	Approved				
44	TC2	Approved	Approved				
45	TC3	Approved	Approved				
	HDR	Header Data Dictionary used for Flat File Transmission				19931221	19931221
	ACK	Acknowledgement Message Dictionary				19980129	

SP = Surveillance Panel

TF = Task Force (Test Type is under development and not considered an approved procedure)

Last Updated: 20011016

**Reference Oil Test Transmission Summary  
20010400 to 20010930**

Group	Test Type	Reported Tests		
		# Transmitted via ETRTM	Total	% Transmitted via ETRTM
Bench Tests	BRT	173	177	97.74
	CBT	26	26	100.00
	D5800	32	38	84.21
	D6082	15	15	100.00
	D6417	15	15	100.00
	EOFT	91	107	85.05
	EOWT	417	485	85.98
	GI	46	51	90.20
	HTCBT	119	135	88.15
	MTEOS	33	34	97.06
	TEOST	6	6	100.00
	VGC	4	4	100.00
Diesel Tests	1K1N	12	12	100.00
	1MPC	17	17	100.00
	1P	1	1	100.00
	1R	25	25	100.00
	6V92	.	1	.
	L10	.	12	.
	M11	3	3	100.00
	M11EGR	20	26	76.92
	RFWT	1	1	100.00
	T10	28	30	93.33
	T8	7	7	100.00
	T9	1	1	100.00
Gasoline Tests	IIIE	1	1	100.00
	IIIF	46	46	100.00
	IVA	22	22	100.00
	L38	2	2	100.00
	VG	20	20	100.00
	VIA	4	4	100.00
	VIB	117	117	100.00
	VIII	17	17	100.00
Gear Tests	HTCT	1	1	100.00
	L33	37	37	100.00
	L37	17	17	100.00
	L42	81	81	100.00
	L601	36	36	100.00
	OSCT	.	66	.
	OSCTM	.	9	.
Two-Cycle Tests	TC1	.	11	.
	TC2	.	6	.
	TC3	.	2	.
<b>Totals</b>		<b>1511</b>	<b>1742</b>	<b>86.7</b>

**What are Industry Effective Dates?**

A - "Deadlines" or B - "Start of usage" for specific dd versions.

The issue of when an information letter change can be implemented for the standard report package has been questioned. Some consider these dates as deadlines for meeting information letter requirements; allowing labs the option of implementation and usage of a report package as soon as possible (prior to the industry effective date). While others consider these dates as the start of usage date, based upon the test EOT date; anything that EOTs on or after the industry effective date would use the new report package version.

Company	A	B	Other
Chevron <del>T</del>		✓	
ERC			NOT PRESENT
Ethyl			NOT PRESENT
Exxon Mobil		✓	
Imperial			NOT PRESENT
Infineum		✓	
Lubrizol		✓	
Perkin Elmer		✓	
RSI		✓	
SR		✓	
TMC		✓	
Valvoline			NOT PRESENT

**Data Communications Committee (DCC)  
Electronic Test Report Transmission Model (ETRTM)**

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Page	<u>1/2</u>
Reference	_____

**Section 2  
Flat File Transmission Format**

\*\*\*\*\* **OPTION 1** \*\*\*\*\*

2.2 All field names with their corresponding data found in the data dictionary for the particular test being transmitted shall be included in the flat file if they either contain data or are blank. This requirement enables the receiver of the data to verify that the entire report was received without any transmission errors.

\*\*\*\*\* **OPTION 2** \*\*\*\*\*

2.2 All field names with their corresponding data found in the data dictionary for the particular test being transmitted shall be included in the flat file if they either contain data or are blank. This requirement enables the receiver of the data to verify that the entire report was received without any transmission errors. The only exceptions are (a) for an aborted test where only the information needed to identify the test must be included and (b) for transmission of preliminary test data.

\*\*\*\*\* **OPTION 3** \*\*\*\*\*

2.2 The field names with their corresponding data found in the data dictionary for the particular test being transmitted shall be included in the flat file if they either contain data or are blank. The inclusion of all field names found in the data dictionary is optional.

\*\*\*\*\* **OPTION 4** \*\*\*\*\*

2.2 The field names with their corresponding data found in the data dictionary for the particular test being transmitted shall be included in the flat file if they either contain data or are blank. The inclusion of all field names found in the data dictionary is optional.

2.2.1 The total count of field name/data value lines shall be indicated in the TOTFLDS header field. This requirement enables the receiver of the data to verify that the entire report was received without any transmission errors.

Special Rules for header population:

2.8.5 TOTFLDS shall contain the total count of lines within the flat file following the header lines. The count for the header lines shall not be included.

*Note: Since header fields are all mandatory there will be a fix header line count.*

**ETRTM Section 2.2 optional changes**

**Option 1:** Remove exception totally.

**Option 2:** Add preliminary test data as second exception.

**Option 3:** Remove "All fields" term and make inclusion of all fields optional.

**Option 4:** Create a TOTFLDS header field for line count and make inclusion of all fields optional.

150 99 HDR TOTFLDS 6 0 Z TOTAL NUMBER OF FIELDS FOR THE FOLLOWING DATA DICTIONARY

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Reference	

## Online Viewing and Updating of Test Data <sup>1</sup>

- Use Adobe PDF Forms as a front end for accessing a database.
- Available anywhere there is a connection to the Internet.
- Requires the use of Adobe Acrobat (full version) and a web browser.
- Does not require any additional installation of software.

## Client Side Software <sup>2</sup>

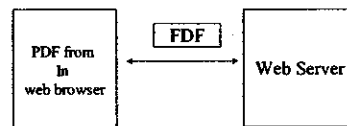
- Adobe Forms. Works as Plug in for Acrobat.
- Web Browser.

## Server Side <sup>3</sup>

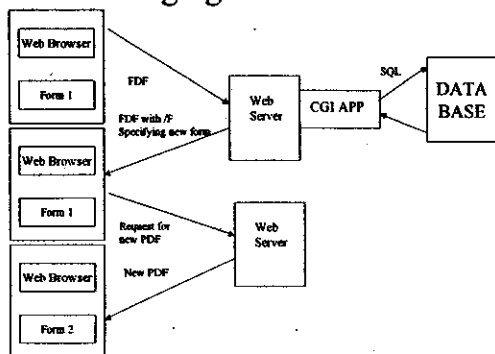
- Lots more work involved.
- Adobe FDF Toolkit to parse and create FDF. Used in the Adobe Forms.
- CGI programming with web server. Could use Apache or IIS.
- Embedded SQL to move data into and out of database.
- Adobe IAC for automating Adobe Acrobat.

## FDF <sup>4</sup>

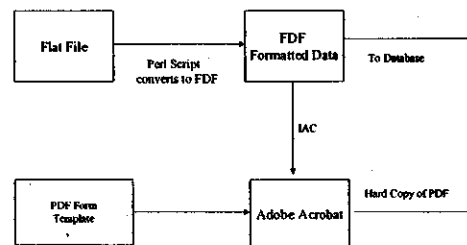
Similar to XML or HTML. Stores data used to modify a PDF file. Contains field, value pairs and data for buttons and widgets.



## Exchanging Data with FDF <sup>5</sup>



## Processing FlatFiles <sup>6</sup>





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Reference	

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TEST METHOD DS13  
Gelatine Index and Gelatin Temperature Test  
VERSION 2007/2/07/1

12345

CONDUCTED FOR

V = VALID  
I = INVALID

Test Number

Instrument ID: 06.26 Instrument Run Number: 045

Date Completed: 11/10 EOT Func: 11/08

OTI Code: 12345

Alternate Codes: A code Another c

In any opinion this test was conducted in a manner in accordance with Test Method DS13 and the

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### Capabilities of PDF forms

- JavaScript can be used for client based processing or calculation. Summation of numeric fields. Insertion of current date. Boolean choices; One field can determine behavior of another field.
- Built in validation. Can check for a range of values.
- Built in formatting. Can set number of decimal places.

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### Adobe Acrobat SDK

- FDFTK can used with Java, Perl, C.
- IAC can be used with Visual Basic, Perl and C or anything that supports the use of COM objects.
- High level functions to parse and generate FDF.
- Extensive Documentation.
- Free. Downloadable from <http://partners.adobe.com/asn/developer/acrosdk/>

**M11 EGR LUBRICANT PERFORMANCE TEST  
Test Results Summary  
Form 4**

Attachment	13
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Reference	

Laboratory: <i>LAB</i>	EOT Date: <i>DTCOMP</i>	EOT Time: <i>EOTTIME</i>
Stand: <i>STAND</i>	Engine: <i>ENGINE</i>	Engine Run No.: <i>ENRUN</i>
Formulation/Stand Code: <i>FORM</i>		
Oil Code: <i>OILCODE</i>	Engine Kit S/N: <i>ENKIT</i>	

DATE TEST STARTED	<i>DTSTRT</i>
START TIME	<i>STRTIME</i>
TEST LENGTH	<i>TESTLEN</i>
TMC OIL CODE <sup>A</sup>	<i>IND</i>
LABORATORY OIL CODE	<i>LABOCODE</i>
SAE VISCOSITY	<i>SAEVISC</i>
TGA SOOT % AT 50 h (2.8 minimum)	<i>TGA050</i>
TGA SOOT % AT 250 h (8.0 - 9.5)	<i>TGA250</i>
TOTAL OIL CONSUMPTION, kg	<i>TOTOCON</i>

	Adjusted Average Crosshead Mass Loss (mg)	Filter Plugging Delta P (kPa)	Average Sludge Rating (merits)	Avg. Top Ring Weight Loss (mg)
Original Result	<i>ACWL</i>	<i>OILDP</i>	<i>ASRT</i>	<i>ARWLT</i>
Transformed Result <sup>B</sup>	<i>TRNACWL</i>	<i>TRNODP</i>	<i>TRNASRT</i>	<i>TRNARWLT</i>
Correction Factor <sup>B</sup>	<i>ACWLCF</i>	<i>OILDPCF</i>	<i>ASRTCFCF</i>	<i>ARWLTCF</i>
Corrected Transformed Result <sup>B</sup>	<i>ACWLCOR</i>	<i>OILDPCOR</i>	<i>ASRTCOR</i>	<i>ARWLTCOR</i>
Severity Adjustment <sup>B</sup>	<i>ACWL_SA</i>	<i>OILDP_SA</i>	<i>ASRT_SA</i>	<i>ARWL_SA</i>
Final Transformed Result <sup>B</sup>	<i>TACWLFNL</i>	<i>TODPFNL</i>	<i>TASRTFNL</i>	<i>TARWLT</i>
Final Result	<i>ACWLFNL</i>	<i>OILDPFNL</i>	<i>ASRTFNL</i>	<i>ARWLTFNL</i>

**LAST STAND REFERENCE RESULTS**

TEST NUMBER: <i>STAND - ENGINE - RENRUN</i>
OILCODE <i>ROILCODE</i>
TEST LENGTH <i>RTESTLEN</i>
TMC OIL CODE <i>RIND</i>
EOT DATE <i>RDTCOMP</i>
EOT TIME <i>REOTTIME</i>
STAND CALIBRATION EXPIRATION DATE <i>DTCALEXP</i>
TGA SOOT % AT 50 h (2.8 minimum) <i>RTGA050</i>
TGA SOOT % AT 250 h (8.5 - 9.5) <i>RTGA250</i>
TOTAL OIL CONSUMPTION, kg <i>RTOTOCON</i>

	Adjusted Average Crosshead Mass Loss (mg)	Filter Plugging Delta P (kPa)	Average Sludge Rating (merits)	Avg. Top Ring Weight Loss (mg)
Original Result	<i>RACWL</i>	<i>ROILDPCF</i>	<i>RASRT</i>	<i>RARWLT</i>
Transformed Result <sup>B</sup>	<i>RTRNACWL</i>	<i>RTRNODP</i>	<i>RTRNASRT</i>	<i>RTRNARWLT</i>
Correction Factor <sup>B</sup>	<i>RACWLCF</i>	<i>ROILDPCF</i>	<i>RASRTCFCF</i>	<i>RARWLTCF</i>
Corrected Transformed Result <sup>B</sup>	<i>RACWLCOR</i>	<i>RTODPCOR</i>	<i>RASRTCOR</i>	<i>RARWTCOR</i>
Final Transformed Result <sup>B</sup>	<i>RTCWLFNL</i>	<i>RTODPFNL</i>	<i>RTSRTFNL</i>	<i>RTARWLT</i>
Final Result	<i>RACWLFNL</i>	<i>RFPDPFNL</i>	<i>RASRTFNL</i>	<i>RARWTFNL</i>

<sup>A</sup> Reference Tests Only

<sup>B</sup> Transformed Units

Frank Farber

From: MGriffin@swri.edu  
Sent: Monday, September 24, 2001 10:29 AM  
To: fmf@TMC6.astm.cmri.cmu.edu  
Subject: RE: m11egr report forms and data dictionary revisions

Attachment	13
Page	2/2
Reference	

Yes, Unless there is some strong reason not to, I believe that it would be appropriate to match the footnote. Mark

Mark J. Griffin  
SwRI - Automotive Products and Emissions Research Division  
Data Systems - Principal Analyst  
Tel: (210) 522-3502 Fax: (210) 684-7523 Internet: mgriffin@swri.edu  
6220 Culebra Road San Antonio, Texas 78238-5166

----- Original Text -----

From: "Frank Farber" <fmf@TMC6.astm.cmri.cmu.edu>, on 9/24/01 9:17 AM:

Mark:

This raises a question about the units definition for seq. nos. 360 to 505 and seq. nos. 680 to 795. The footnote B on form 4 indicates Transformed Units, but there is a mixture of units defined for this range of fields. Should all show 'TRANS UNITS' for the units definition?

Some parameters have transformations and some don't. What would your preference be if no transformation exists for a parameter? Stay with original units? I would prefer original units if there is no transformation applied to a parameter. It appears we have a mixed bag of solutions in production now.

Frank

-----Original Message-----

From: MGriffin@swri.edu [mailto:MGriffin@swri.edu]  
Sent: Friday, September 21, 2001 2:20 PM  
To: crichtberg@swri.edu; daho@chevron.com; dwsilver@ashland.com; cisco@txdirect.net; fmf@TMC6.astm.cmri.cmu.edu; GRLF@chevron.com; James.Gerry@cnacm.com; jjf@lubrizol.com; jwbeckrsi@home.com; jwwhite@swri.edu; Lika.Barnabishvili@Infineum.com; mgriffin@swri.edu; mgs@lubrizol.com; Maryse.Shull@Ethyl.com; michael.j.burk@exxonmobil.com; mjka@chevron.com; Patrick.Herbez@Ethyl.com; ralph.t.grace@esso.com; Renee.Hauserman@Infineum.com; Sally.Lloyd@PerkinElmer.com; sdp@TMC6.astm.cmri.cmu.edu; vmh@lubrizol.com  
Cc: jac@TMC6.astm.cmri.cmu.edu  
Subject: fwd: m11egr report forms and data dictionary revisions

Frank, Here's our IT group feedback for the M11EGR beta.

(1) Noticed in thw what changed that 'MERITS' is listed as units for two of the new field definitions added to form 4 (ind. correction factors), while all others for avg top ring weight loss fields added were defined with 'mg' units.

Was this a type-o?

	Address Date
Medium - Low Priority	<del>10-2001</del>
Electronic Data Transmission Methods	04-2002 <del>3</del>
Digitized Photographs	<del>10-2002</del>
Electronic Test Scheduling	<del>4</del> 2004
Extended Test Length Report Forms & Data Dictionary	4 2
ADobe Software Replacement	10-2002
Digitized Signatures	<del>12-2002</del>

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